„IULIU HAŢIEGANU" UNIVERISTY OF MEDICINE AND PHARMACY
CLUJ-NAPOCA

FACULTY OF DENTAL MEDICINE

ECTS GUIDE

2019 - 2020

ACADEMIC YEAR

Dean:

Assoc. Prof. Dr. Cristian Mihail Dinu

Vice-dean:

Assoc. Prof. Dr. Aranka Ilea

Assoc. Prof. Dr. Marius Manole

Assoc. Prof. Dr. Ondine Lucaciu

Secretary:

Nicoleta Stănculesc – chief secretary of the faculty

Delia Mois – secretary faculty

Casandra Pugna – secretary faculty

Silvana Rusan – secretary faculty

Alexandra Siladi – secretary faculty

Printed at:

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1. DEAN'S MESSAGE

Medical profession has always been an important option for the most valuable young people due to its primordial nobility and solid social recognition. Dentistry, probably the most liberal of all the medical specialties, offers the specific responsibility of the medical profession, but also gives a high degree of independence, offering for the one who practices it, the chance to be a dental practitioner and an entrepreneur at the same time. In 2020, dental medicine is in full technological advance, digital age being a certainty; the mobility of the labor force existing in the European and extra-European space, represents a good opportunity for the young graduates. In this context, the Faculty of Dental Medicine of the University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca offers the possibility to obtain one of the most appreciated medical degrees in the world; doctor of dental medicine.

Established in 1919, by Professor Gheorghe Bilascu, at the initiative of Professor Iuliu Hatieganu, the medical education in dentistry at the university was the first compulsory dental education in Romania. The Faculty of Dental Medicine of the University of Medicine and Pharmacy "Iuliu Hatieganu" in Cluj-Napoca, more than one hundred years after its establishment, is in the leading position in the national landscape of the faculties of profile and is a landmark in the European space through the tradition of training foreign students as professionals with recognized value in the countries of origin.

The human resource, represented by the educators, is the main factor that ensures the accomplishment of the mission of the Faculty and which, along with tradition, constitutes its most important values. The outstanding quality of the academic staff associated with a generous infrastructure and a modern material base creates the premises for optimal training for over 1200 students for the specialty of dental medicine with a duration of six years and for the specialization of dental technician with a duration of three years. The specialty of dental medicine benefits of three lines of study in the Romanian, French and English languages. Also, within the Faculty you can access postgraduate studies of masters, PhD and specialization.

Cluj-Napoca, the capital and heart of Transylvania, is a city with an ancient history, attested since the Roman Empire, a cradle of culture and civilization throughout the time.

At present, Cluj-Napoca is a modern, economical and dynamic city, a European city with six universities, a cosmopolitan, multicultural city that offers its students an intense and stimulating social and cultural experience.

Young people who want to study in a recognized and appreciated academic environment, to live and to study in a eminent university city, with a rich social and cultural life, will find the dream place in the medical university of Cluj-Napoca. The Faculty of Dental Medicine is waiting for you to come, to join the dental community of Cluj-Napoca and together, to increase the value and prestige of the Cluj-Napoca School of Dentistry! Vivat Academia!

Dean, Assoc. Prof. Dr. Cristian Mihail Dinu

2. HISTORY OF CLUJ DENTAL FACULTY

Having a tradition of almost 100 years, the academic Dentistry in Cluj-Napoca is the first teaching programme in Romanian dentistry.

1565 The Diet of Transylvania decided the creation of a College of Medicine in Cluj

1581 The foundation of the University of Cluj, managed and administered by the Order of the Jesuits

1775 The foundation of the Cluj School of Medicine and Surgery

1872 Incorporation of the School of Medicine and Surgery as a Faculty of Medicine within the Ferenc Iosef University (Hungarian medium of instruction)

1919 The University of Dacia Superior was founded. It comprised the Faculties of Sciences, Medicine, Law, Letters and Philosophy. Professor Iuliu Haţieganu was appointed dean of the new Faculty of Medicine while the courses taught in Romanian marked the beginning of higher medical education in the Romanian language in Cluj.

1919 Dentistry became a specialty within the Faculty of Medicine under the supervision of Professor Gheorghe Bilaşcu, who was trained at the University of Vienna.

1927 The University of Dacia Superior became Ferdinand I University.

1940-1945 The University took refuge in Sibiu during World War II.

1948 The Institute of Medicine and Pharmacy was created out of the University of Cluj. The foundation of the Faculty of Dental Medicine, with the first specialty courses: Orthopaedic Dentistry (Prof. Vasile Vasilescu), Dental Therapy (Prof. Iosif Baba) and Maxillofacial Surgery (Prof. Cornel Oprişiu).

1990 The Institute of Medicine and Pharmacy became the University of Medicine and Pharmacy.

1993 The University of Medicine and Pharmacy became "Iuliu Haţieganu" University of Medicine and Pharmacy.

1994 The foundation of the College of Dental Technology.

1997 The introduction of the Dental Assistant specialty.

2001 The introduction of the French section for Dentistry.

2007 The introduction of the English section for Dentistry.

3. ACADEMIC MANAGEMENT OF THE UNIVERSITY

The Senate

The Senate is the superior management forum of the entire academic community, in all fields of activity. The Senate consists of teaching staff and students. All members of the Senate are chosen by secret vote by and among the members of the faculties' Councils, according to the election regulations drafted and approved by the Senate, separately for the teaching staff and the students. All chosen members of the Senate (teaching staff and students) share equal rights and obligations

The Board of the University of Medicine and Pharmacy " Iuliu Haţieganu"

Rector	**Prof. Dr. Anca Dana Buzoianu**
President of the Senate	**Prof. Dr. Valentin Muntean**
Vice-Rector for Postgraduate studies and Residency	**Assoc. Prof. Dr. George Călin Dindelegan**
Vice-Rector for Didactic Activities	**Prof. Dr. Carmen Mihaela Mihu**
Vice-Rector for Academic development and University Administration	**Prof. Dr. Daniel Mureșan**
Vice-Rector for Research evaluation	**Prof. Dr. Mihaela Felicia Băciuț**
Vice-Rector for Quality management and Academic evaluation	**Prof. Dr. Radu Nicolae Oprean**

Doctoral studies Responsible	**Prof. Dr. Dana Pop**

4. ACADEMIC MANAGEMENT OF THE FACULTY OF DENTAL MEDICINE

The Council of the Faculty of Dental Medicine

The Council is the highest governing body from the Faculty of Medicine and consists of 15 academic members and 5 students. The representatives of international students and resident physicians are invited mandatory toparticipate in the Board meetings. The Dean of the Faculty chairs the Council.

Nr.crt.	Name	Position
1.	**Assoc. Prof. Dr. Cristian Mihail Dinu**	**dean**
2.	Assoc. Prof. Dr. Aranka Ilea	vice-dean
3.	Assoc. Prof. Dr. Marius Ciprian Manole	vice-dean
4.	Assoc. Prof. Dr. Ondine Patricia Lucaciu	vice-dean
5.	Prof. Dr. Diana Dudea	member
6.	Prof. Dr. Alexndra Roman	member
7.	Prof. Dr. Mîndra Badea	member
8.	Prof. Dr. Mihaela Băciuț	member
9.	Assoc. Prof. Dr. Simion Bran	member
10.	Assoc. Prof. Dr. Mariana Constantiniuc	member
11.	Assoc. Prof. Dr. Ada Delean	member
12.	Prof. Dr. Mihaela Hedeșiu	member
13.	Assoc. Prof. Dr. Horațiu Rotar	member

14.	Assoc. Prof. Dr. Smaranda Buduru	member
15.	Lecturer Dr. Sanda Cîmpean	member
16.	Lecturer Dr. Laurențiu Pascu	member
17.	Lecturer Dr. Cristian Olteanu	member
18.	Lecturer Dr. Marius Bud	member

The Council Board

The Board of the Council is in charge for the implementation of Council's decisions. As a rule, the Council meetings are held weekly. The Board of the Council consists of the Dean, vice-Deans, the Head of Faculty Administration and the student representatives. The Dean is esponsible for the entire activity in the Faculty, and represents the Faculty at University level and outside it, coordinates its activity and supervises the implementation of Faculty Council's decisions.

The activity of the academic management team of the Faculty is supported by an administrative team of technicians chaired by the Faculty Head Secretary.

Dean	**Assoc. Prof. Dr. Cristian Mihail Dinu**
Vice-Dean for Scientific Affairs	**Assoc. Prof. Dr. Aranka Ilea**
Vice-Dean for Educational Problems	**Assoc. Prof. Dr. Ondine Patricia Lucaciu**
Vice-Dean for Management and Academic Development	**Assoc. Prof. Dr. Marius Ciprian Manole**

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Faculty of Dental Medicine, Dean`s office
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Tel. +40-264-406844
Fax: +40264-597257

5. EDUCATIONAL OFFER IN THE FACULTY OF DENTAL MEDICINE

I. Undergraduate degree programmes:

Dental Medicine – a 6-year programme taught in Romanian, English and French. Graduates become dentists and have the right to practice in the field of general dentistry. (360 ECTS credits)

Dental Technology – a 3-year programme. Graduates become licensed dental technicians and have the right to practice as such. (180 ECTS credits)

II. Master's degree

Master in Judicial Dental Medicine

III. Postgraduate residency programmes (3-5 years) Training in seven specialties:

Prosthodontics – 3 years of residency training

Endodontics – 3 years of residency training

Periodontics – 3 years of residency training

Dento-alveolar surgery – 3 years of residency training

Orthodontics and Dentofacial Orthopaedics – 3 years of residency training

Pedodontics – 3 years of residency training

Stomatological and Maxillo Facial Surgery– 5 years of residency training

IV. Doctoral degree - PhD in Dental Medicine organized by the Doctoral School of the University

V. Postgraduate continuous medical training

6. DEPARTMENTS OF THE FACULTY OF DENTAL MEDICINE

DEPARTAMENT No. I. – Maxilo-Facial Surgery and Radiology

Head Departament – Prof. Dr. Mihaela Băciuț

1. **Maxillo-Facial Surgery and Implantology**
2. **Facial and Neck Surgery and Oto-Rhino-Laringology**
3. **Oral and Cranio-Maxillofacial Surgery**
4. **Dental Radiology**

DEPARTAMENT No. II. - Conservative Dentistry

Head of Departament - Assoc. Prof. Dr. Ada Delean

1. **Odontology, Endodontics, Cariology, Oral Pathology**
2. **Pedodontics**
3. **Orthodontics**

DEPARTAMENT No. III. – Oral Rehabilitation

Head of Departament - Prof. Dr. Alexandra Roman

1. **Prevention in Dental Medicine**
2. **Periodontology**
3. **Oral Rehabilitation**
4. **Oral Health**

DEPARTAMENT No. IV - Prosthetic Dentistry and Dental Materials

Head of Departament – Prof. Dr. Diana Dudea

1. **Dental Materials**
2. **Dental Propedeutics and Esthetics**
3. **Prosthetic Dentistry**

7. STRUCTURE OF THE ACADEMIC YEAR 2019-2020

The academic year consists of two 14-week terms, each followed by a 4-week exam session.

The study programmes are harmonised with the European regulations regarding mutual recognition of diplomas in the European Union, while the syllabuses are permanently updated and modernised.

Dental higher education is provided in a linear system over 6 years (12 terms).

Courses are grouped into the following categories: mandatory, elective and optional. Mandatory courses provide students with the fundamental concepts required by their future profession, while elective and optional courses facilitate the deeper understanding of specific knowledge in the field and personalised professional development, according to the student's skills and needs.

Studies and activities are quantified and validated on the basis of The European Credit Transfer and Accumulation System (ECTS). In the case of the programme studies taught in French and English, beginning with the fourth year of study, the theoretical classes are in English and French, whereas practical activities are in Romanian.

Undergraduate studies

Dental Medicine – 1st to 5th years

1st Semester

1	30 September 2019 – 20 December 2019	→	Classes (12 weeks)
2	23 December 2019 – 3 January 2020	→	Christmas holiday (2 weeks)
3	6 January 2020 – 17 January 2020	→	Classes (2 weeks)
4	20 January 2020 – 14 February 2020	→	Examination session (4 weeks)
5	17 February 2020 – 21 February 2020	→	Winter holiday (1 week)

2nd Semester

1	24 February 2020 – 5 June 2020	→	Classes (12 weeks) 1 week Easter holiday (20-24 April 2020)
2	8 June 2020 – 3 July 2020	→	Examination session (4 weeks)
3	13 July 2020 – 17 July 2020	→	Reexamination session 1
4	21 July 2020 – 24 July 2020	→	Reexamination session 2
5	6 July 2020 – 25 September 2020	→	Medical Practice and summer holiday

Medical practice- 4 weeks - the period in which they take place is different to each year and specialization

Undergraduate studies

Dental Medicine – 6th year

1st Semester

1	30 September 2019 – 20 December 2019	→	Classes (12 weeks)
2	23 December 2019 – 3 January 2020	→	Christmas holiday (2 weeks)
3	6 January 2020 – 17 January 2020	→	Classes (2 weeks)
4	20 January 2020 – 14 February 2020	→	Examination session (4 weeks)
5	17 February 2020 – 21 February 2020	→	Winter holiday (1 week)

2nd Semester

1	24 February 2020 – 5 June 2020	→	Classes (12 weeks) 1 week Easter holiday (20-24 April 2020)
2	8 June 2020 – 26 June 2020	→	Examination session (3 weeks)
3	13 July 2020 – 17 July 2020	→	Reexamination session 1
4	21 July 2020 – 24 July 2020	→	Reexamination session 2
5	27 July 2020 – 2 October 2020	→	Summer holiday
6	September 2020	→	Graduation Exam (1 week)

Postgraduate studies

DOCTORAL SCHOOL

THE STRUCTURE OF ACADEMIC YEAR 2019-2020

Principles:

- Classes: 28 weeks
- Research methodology is studied in a conventional (continuous) manner
- The other subjects are studied in modules

Admission to the doctoral school:

09-13 September 2020 – enrolment of candidates
18-26 September 2020 – admission exam
1st of October 2020 – registration of candidates

7 October 2020 – 26 of May 2020 → teaching activities organized for the year of advanced academic training, including:

Christmas holiday: 16.12.2020 - 5.01.2020
Easter holiday: 13.04.2020 – 26.04.2020
25 May 2020 -5 June 2020 → re-examination session (one session)

The schedule of the research projects presentations for the doctoral studies

- candidates who completed the advanced university training year:

04.06 – 11.06.2016 → submission of project titles and appointing the admission panel
15.06 – 25.06.2016 → presentation of research project.

8. ADMISSION FOR THE UNDERGRADUATE PROGRAM - FOREIGN STUDENTS

Application process

- Admission contest for state-subsidized or tuition fee places. The contest takes place in Romanian language, under the same conditions for all candidates. Applications are open to citizens of European Union countries, the EEA and the Swiss Confederation.

Evaluation of applicants' academic performance and personal achievements, according to the regulations available on the university website page – tuition fee places. Both citizens of the European Union (or of the EEA and the Swiss Confederation) and citizens of non EU.

International students International students are welcomed by both the academic and civic communities. Apart from medical education taught in Romanian language, our faculty has been offering, for more than ten years, medical education in English and French, which attracts more and more students from over 25 countries.

Currently, about 43.48% from the students enrolled in the Faculty of Dentistry are international students who study in English, in French or in Romanian language.

International students are enrolled following a selection procedure based on their record, according to criteria established by the Faculty Council Board. They do not need to pass and admission examination. The candidates must hold a baccalaureate or equivalent diploma and must obtain confirmation from the Ministry of Education. All the documents presented must be authenticated.

Information for international applicants

Educational offer of the "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca for 2019-2020

Specialties for professions under sectoral regulation in the European Union	Study program	Duration of	Number of credits
1	Medicine	6 years	360
2	Dental Medicine	6 years	360
3	Pharmacy	5 years	300
4	General Nursing	4 years	240

1. **The procedure for 1st year student's registration is the following:**

- Students' registration after passing admission examination is based on the matriculation decision issued by the Rector. Tuition fee-paying students will be registered after the payment of tuition fee and after signing the study agreement.
- In the case of international students admitted on Romanian state scholarship or on fee paying places (Romanian currency payment), registration is based on the decision of the Ministry of Education, Research, Youth and Sports, following the approval granted by the university management and the signing of Study Agreement.
- In the case of international students on fee paying places (foreign currency payment), registration is carried out on the basis of the provisional registration decision issued by the Vice-Rector's Office, the International Students Office and the final decision of registration issued by the Ministry of Education, Research, Youth and Sports, after the payment of tuition fee and after signing the Agreement of Study.
- The complete application file, endorsed by International Students Office, will be sent to Dean's Office only after the approval of Ministry of Education, Research, Youth and Sports, no later than the 1st of December for the current academic year.
- The candidates admitted in the first year and not registered within the period established by the decision of the Administration Council will lose their right to be enrolled.

- According to Ministry's decision, a student may be allowed to study at only one specialty financed by state budget. The student will pay a tuition fee to attend a second specialty.

2. Each student is enrolled in matriculation register under a unique number, which is valid for the entire duration of undergraduate studies.

3. In the moment of registration, a personal record is created for each student, consisting of:

- the original Baccalaureate diploma. Students who pay tuition fees to attend a second faculty must provide a copy of the Baccalaureate diploma authenticated by the public notary and a document that proves the fact that the student has the original Baccalaureate diploma in other university where the student benefit from a budgeted place.
- an authenticated copy of MD or BSc diploma in the case of students who graduated from a faculty where they had a state subsidized place and who have to pay the tuition fee in order to attend a second faculty,
- the enrolment form,
- an authenticated copy of the birth certificate,
- the medical tests required by the university,
- the written agreement proving the fact that the student knows and agrees
- to respect university's regulations concerning academic activity and
- examinations and of those of the Study Contract,
- four passport-size photographs.

4. The personal record of international students consists of:

- the original Baccalaureate diploma and its translation in an international language, authenticated and validated by the issuing country's embassy in Romania.
- the language test (Romanian, French, English), according to the teaching language of the section that the student applies for,
- a photocopy of their passport,
- an authenticated copy of their birth certificate,

- the decision of the Ministry of Education mentioning status: scholarship holder, tuition-fee paying student – Romanian currency, foreign currency
- the enrolment form,
- the medical tests required by the university,
- the written agreement proving the fact that the student knows and agrees to respect university's regulations concerning academic activity and examinations and of those of the Study Contract,
- four passport-size photographs.

The registration of international students takes place within maximum 15 days from the beginning of the academic year.

5. At the moment of student's enrolment at a faculty, the Dean's Office issues a "Student Report card" for each student. The student report card will contain all the marks obtained by the student at examinations or other assessment

forms. It will also include the marks for the failed exams. The examiner has the responsibility for filling in the marks and signing them. In the following cases - transfer, studies interruption or expulsion, the Dean's Office withdraws the student report card and the travel pass, where applicable.

6. Enrolment in the second year and in the following years as well as the signing of the Study Contract implies filling in an application form, within the first 15 days from the beginning of academic year. Enrolment is based upon academic results from the previous year and entails the achievement of the minimum number of credits (45 credits minimum) required to complete the requirement for a year of study.

Students in the supplementary year will be enrolled in the academic study year that they must repeat after paying all the financial dues for the supplementary year.

9. ECTS SYSTEM - ECTS STUDENTS

The European credit transfer and accumulation system (ECTS) was created to facilitate student mobility among universities. The European Union encourages study periods at partner universities and the Bologna and Berlin Declarations stipulate the need to

eliminate obstacles in the way of academic mobility. Student mobility within Socrates-Erasmus programmes offers students the possibility to study at another European university for a semester or a whole academic year. Then, they go back to home university, complete their studies and obtain a graduation diploma there. In this way, students benefit from continuity of studies and, at the same time, they have access to other educational perspective and to a new academic, cultural, social and linguistic environment.

The main purpose of developing this system was to support student mobility inenhancing their formation, in gathering the experience of other European universities in order to obtain full academic recognition for the period they have spent away from home university.

Full academic recognition means that the study period abroad replaces a similar period of study at home university without lengthening the duration of initial studies.

ECTS credits

ECTS credits represents values allocated to course units and practical activities in order to describe students workload required to complete them. They reflect the quantity of work each course requires in relation to the total quantity of work necessary to complete a full academic year of study at the university, which includes: courses, seminars, practical work and individual work in the laboratory, in the library or at home, examinations and other assessment activities.

In the ECTS system, 60 credits represent one year of study (in terms of workload); on average, 30 credits are allocated for each semester.

The ECTS credits are also allocated to practical training and to graduate thesis preparation when these activities are part of the regular curriculum at both home and host institutions.

ECTS credits are allocated to each course and are awarded only to the students who had completed successfully the courses by passing the examinations or other types of assessment.

For the acknowledgment of the Socrates-Erasmus mobility, the student must earn minimum 25 ECTS credits for a period of 4-5 months and minimum 50 ECTS credits for a period of 9 months spent in the host institution abroad. The credits obtained abroad must be obtained for disciplines that the student would have to study at UMF "Iuliu Haţieganu" Cluj-Napoca during the academic year that he is enrolled in when he takes the mobility. It is allowed to acknowledge no more than two exams from higher years (maximum 15 credits in advance).

The ECTS grading scale

Examination and assessment results are generally expressed in marks. There are various grading systems in Europe. Therefore, an ECTS grading system was developed in order to help institutions translate the marks awarded by host institutions to ECTS students. This procedure also offers other information regarding the activity of the student, but it does not replace the mark that the student will get at the home university.

How does it works?

The main ECTS instruments meant to facilitate academic recognition are:

- Information Package
- Learning Agreement
- Transcript of Records

The Information Package is offered by all institutions which use ECTS system and describes the courses available at the university. It also provides general information about the institution, its location, student accommodation, administrative procedures necessary for registration and the academic calendar. The Package is updated annually.

The Learning Agreement describes the abroad study programme and is completed by the individual student together with the two academic institutions involved, before the student arrives at the host institution.

The Transcript of Records details the student's academic achievements prior to and after the period of study abroad. It contains the ECTS credits, the mark awarded according to the local marking scale and the ECTS grading scale. The combination of local marks and ECTS credits represents quantitatively and qualitatively the student's performance at the host institution. These tools are then used by the institutional and departmental coordinators appointed by each institution to deal with the administrative and academic aspects of ECTS. The grade obtained by the student for a certain discipline, written in the transcript of records, is given by the Faculty academic coordinator for ECTS, considering the grade obtained by the student in the host institution, according to the ECTS grading scale.

The use of ECTS ensures the transparency of curricula and students' academic achievements, which leads to academic recognition throughout Europe.

How can ECTS students obtain mobility?

They should contact their home departmental coordinator and they must study the Information Package of other institutions in order to choose the best destination and plan their programme of study abroad.

How is academic recognition ensured?

An ECTS study programme must be approved by both home and host institutions before the student leaves for the study period abroad. If the programme of study described in the Learning Agreement is completed satisfactorily by the student, it is fully recognized by the home university. This means that the volume of study, measured in terms of numbers of achieved ECTS credits, will be the equivalent of the same volume of study which would otherwise have been undertaken at the home university.

How are ECTS credits transferred?

Institutions prepare and transfer transcripts of records for all students who benefit from ECTS mobilities. A copy of the transcript is given to the student and checked by both home and host universities, before and after the period of study abroad.

Are further studies abroad for ECTS students possible?

A student who had benefited from ECTS mobility may choose to remain at the host university to get a degree there or to move to a third institution. This is possible only if both institutions involved agree and that the student accepts the conditions to be fulfilled in order to get a diploma or transfer registration. By providing a history of the student's academic achievements, the transcript of records is the document which helps partner institutions make decisions regarding the continuation of studies abroad, thus further opening up Europe to academic mobility in general.

Student evaluation criteria and ECTS grading scale

Courses and study modules are evaluated through oral and written examinations, practical assignments, demonstrations and other applicable methods. Students receive information on the evaluation criteria at the beginning of the study module.

ECTS	Grade in România	Definition
A	**10**	Excellent = outstanding achievement with only minor errors
B	**9**	Very Good = above the average standard with some errors
C	**7 – 8**	Good = generally sound work with a number of notable errors
D	**6**	Satisfactory = average, with significant shortcomings
E	**5**	Sufficient = performance meets the minimum criteria
FX	**4**	Fail = some more work required before credit can be awarded
F	**3**	Fail = considerable further work is required

For further information on the ECTS system of credits and how it is applied in "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca, please access the regulations concerning the application of the European credit transfer and accumulation system (ECTS) on the university site: http://www.umfcluj.ro.

Language of instruction

The language of instruction at the "Iuliu Haţieganu" University of Medicine and Pharmacy is Romanian.

The Faculty of Dentistry at the University offers degree programmes in English and French within the English and French sections.

Foreign language learning opportunities

All students from our University have the possibility to learn a European language. The purpose of these courses is to provide our students with practical skills – reading, writing, listening and speaking. All the facilities at the Department of Modern Languages are available to all the students and academic staff of our University.

10.SCHOLARSHIPS, ORGANIZATION

Scholarships

Over 40% of our students benefit from study or social scholarships, which are offered by the Ministry of Education. These scholarships are granted to students with outstanding achievements and, under certain circumstances, to students with a special social situation. During the mobility period, students keep their right to scholarship, given in the national scholarship system. Students who have benefited from mobility, but could not earn the maximum number of credits to validate the year, are eligible for the scholarship

criteria, and for accommodation in the university campus, according to Senate Council's decision from 16.10.2007, and they are exonerated from paying remaining invalidated credits.

Meals and Accommodation

Our University owns a campus which includes 9 hostels where approximately 2700 students are accommodated. Students can be accommodated either in University hostels, or they can prefer rented accommodation. The University Restaurant, situated in the close proximity of the university campus, on no. 13 Victor Babeş Street, offers diversified menus and accommodates 150 students.

There are also many restaurants and caferetias in the city centre and close to the university premises. For students who do not live in hostels, the supermarkets and restaurants located in every district offer convenient food supply as prices are lower than in most European countries. The cost of food could range between 200-300 EUR a month.

Health

Student Health Centre is located in the centre of the city, close to the administrative building of the University, offering a wide range of free-ofcharge medical services to the students. The Student Pharmacy offers free medication on prescription issued by the Students Health Centre.

Sports

The University Sports Club, founded in 1966, has a sports area and a gym where students can practice sports such as basketball, volleyball, aerobics, tennis, etc.

11.THE CURRICULUM IN THE FACULTY OF DENTISTRY

STUDIES STRUCTURE

The structure of all University's educational programmes is based on the academic year system. One academic year consists of two semesters.

In Faculty of dentistry, the structure of studies is Conventional (continuous) studies, with 2 examination sessions, one at the end of each semester (winter and summer examinations)

The studies include theoretical courses, practical training, seminars and practical assignments, optional courses, complementary courses and the graduate degree examination.

The study programmes are harmonised with the European regulations regarding mutual recognition of diplomas in the European Union, while the syllabuses are permanently updated and modernised.

Dental higher education is provided in a linear system over 6 years (12 terms).

Courses are grouped into the following categories: mandatory, elective and optional. Mandatory courses provide students with the fundamental concepts required by their future profession, while elective and optional courses facilitate the deeper understanding of specific knowledge in the field and personalised professional development, according to the student's skills and needs.

Studies and activities are quantified and validated on the basis of The European Credit Transfer and Accumulation System (ECTS). In the case of the programme studies taught in French and English, beginning with the fourth year of study, the teaching activity is in Romanian.

Language studies are very important for Romanian students because achieving a good level of proficiency in a foreign language is essential for students' professional development, due to the increased mobility of EU citizens and non EU citizens. International students are

required to study Romanian as a foreign language because starting with the fourth year of studies practical training in clinics is conducted in Romanian.(the communication of the students from English and French sections with the patients is in Romanian language and with the teaching assistant in the section language)

Optional courses

Each year of study has a package of optional courses. Students may choose one of the optional courses offered; the chosen course then becomes compulsory. According to the university curriculum, 14 hours/ semester and 2 credits are assigned for each optional course.

Complementary courses

For each year of study there are several complementary courses beside the compulsory ones. Their role is to help students enhance the knowledge they acquired during the compulsory study programme. Choosing such courses, attending them and taking examinations in these subjects are not compulsory. No credits are allotted to complementary courses

The final examination

The final examination at the “Iuliu Haţieganu” University of Medicine and Pharmacy is the graduate degree examination.

For undergraduate studies, it includes:

- **Written test**
- **Practical test**
- ***The presentation of graduation thesis:***

The minimum average required to pass the graduate degree examination is 6 (six).

Graduate degree examination sessions: autumn (September) and winter (January-February).

12.ORGANIZING ACADEMIC ACTIVITIES. EXAMINATIONS. COMPLETING THE REQUIREMENTS OF A STUDY YEAR

1. Undergraduates' knowledge is tested through examinations. Students are assessed with marks from 1 to 10. The minimum mark to pass an exam is 5 and the highest mark is 10. The final forms of testing are theoretical written examinations as well as practical examinations. In case students' knowledge cannot be tested through practical examinations due to the specific features of a particular subject matter, an oral final evaluation will be organized. The examination can be passed only if students obtain a pass mark (minimum 5) for both the written and the practical examination. If the students are present to only one form of examinations, their final mark will be 4. On reexamination, these students would only take the examination which they had failed.

2. Students are allowed to participate to an examination only if they are listed in the official students' record issued by the Dean's Office. This official record certifies the students' status, including the fulfillment of their financial dues.

3. At the beginning of each academic year, the departments need to display the requirements for completing the study subject in order to pass the examinations and the percentage each exam component holds within the student's final mark. It is mandatory that the marks obtained at both theoretical and practical examinations are part of the student's final mark.

4. In order to complete the requirements for a study year, must be obtained at least 45 credit units out of the 60 credits allotted for a year. A total of 15 credits can be transferred to the following year of study. In order to fulfill the requirements of a study year, the credits transferred from the previous years must not exceed 15 ECTS. Within the respective year, the credit units transferred from a previous year will not be taken into account. At the same

time, students have to pay a fee for the transferred credits – see “Tuition Fees” Chapter in *Regulations Concerning Student Academic Activity.*

5. All missing credits must be obtained within maximum two years; otherwise, students will be enrolled in a supplementary year.

6. For Medicine study programme, at the end of the third year of study students have to obtain all 180 credits allocated for the first three years of study.

7. In an academic year, students can be present to an examination maximum three times. The curriculum includes four examination sessions (the winter session, the summer session and two autumn sessions in the continual system). The third time a student is presented to the examination must be paid according to “Tuition Fees” Chapter. Exams are organized only during examination sessions for the conventional system or at the end of modules for the modular system. Students must respect the examination dates as scheduled by departments, in agreement with students’ representatives. The absence to one scheduled exam is considered to be a failure of the exam.

8. Within the modular system, examinations must be taken at the end of each module, in the weeks allotted for organizing exams. During an academic year, a student has the right to be present to an exam only three times. Students are allowed be present to an exam only once during the October –July period (with their own series), whereas the second and third examination can only be organized during the autumn sessions.

9. In case of departments that are required to organize complex examinations resulting in one mark, the number of questions included in the written examination will be proportional to the number of hours allotted to each subject matter, there will be only one practical examination scheduled at the end of all teaching activities, and the final mark will reflect the proportional ratio according to the different subject matters and will consider an

algorithm accepted by all the departments involved. Students should be informed of this algorithm in due time.

10. The dates for written examinations will be scheduled in agreement with the students' representatives. Each department must schedule an examination on at least two different days for a series of students. If the theoretical examination takes place on the same day for the entire series of students, the practical examination should not take longer than three successive days.

11. Re-examination for a higher mark is allowed only following the approval of the Faculty Council Board as follows: a maximum of 6 times during the university studies and not more than twice in one academic year. The mark obtained after re-examination is final. A three-member board will re-examine the student applying for re-examination. *The new mark obtained is taken into account in the calculation of the average mark that ensures social rights to the student. The due fee for this type of examination is mentioned in the "Tuition Fees" Appendix. A student can only apply for re-examination for a higher score if the respective student has passed all examinations.*

12. Fraud within examinations will be punished. The penalties that the Faculty Council Board may propose are included in Chapter VIII of the Regulations concerning student academic activity.

13. REGULATION REGARDING THE EQUIVALENCE OF STUDIES

These regulations concern the courses undertaken at other higher education medical institutions by students applying to be enrolled in an academic year other than the 1st or 6th year.

These provisions apply both to international students who request enrollment and also to Romanian students who apply for transfer or equivalence and who have partially completed studies at similar institutions in Romania.

Equivalence is not granted for courses taught in the academic year that the student is enrolling on. Equivalence is not granted for courses of studies completed more than 6 years before the application date.

Requirements necessary for the studies to be eligible for equivalence:

- The content of the courses (certified by the syllabus) and their duration (certified by the curriculum) should be at least 70% similar to the equivalent curriculum of the "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca.
- The sum of the transferable credits corresponding to the subjects not studied but required by the syllabus of the "Iuliu Haţieganu" University of Medicine and Pharmacy faculties (compensatory examinations) may not exceed 15 credits (excluding Physical Education and Romanian as a Foreign Language).
- In the case of students who have completed studies at accredited universities in the EU, equivalence may be also granted to courses taught in the academic year that the student enrolls in, provided that the difference between the missing credits and the recognized extra credits does not exceed 15.
- Students must have an official certificate stating the marking system used by the institution where they studied and its equivalence to the ECTS system.
- Only those subjects in whom the students passed the examination required by the corresponding institution are eligible for equivalence.
- Practical training in a clinic that was not followed by the passing of the corresponding exam will not be eligible for equivalence.

Applicants seeking equivalence of studies will submit a file folder containing the following documents:

- a certificate of studies mentioning the marks obtained in examinations

- a curriculum
- a syllabus for each subject proposed for equivalence,
- an official statement explaining the marking system used by the institution where the applicant studied as well as its correspondence to the ECTS system
- an empty folder
- a written application mentioning the subjects for which the applicant is seeking equivalence
- a request for the equivalence of studies submitted by the Vice-Rector's Office for Teaching Activities.

All documents required for equivalence will be submitted **at the same time.** Further additions to the application pack will not be accepted. Only studies completed at higher education medical institutions leading to the awarding of a physician's diploma will be eligible for equivalence. Subjects studied at faculties of biology, veterinary medicine as well as nursing, medical college or master studies are not eligible.

These Regulations are appended to the Learning Agreement.

The applications files for equivalence and recognition will be submitted to the Dean's Office until the 21st of September for the current academic year or, pending on the approval of the Administration Council, until the deadline for enrolment of international students as set by the Administration Council according to the instructions of the Ministry of Education.

The review of the equivalence applications is carried out by a member assigned by the Faculty Council Board and is approved in the minutes signed by all the members of the Faculty Council Board. Applications are reviewed within 15 working days from their receipt by the Dean's Office.

The Faculty Council Board has the right to seek and take into consideration the opinion of the taught course leaders regarding those subjects for which the duration of the studies and / or the syllabus content do not coincide with those of the faculties that the applicant wants to enroll in. The decision of the Faculty Council Board may be contested

within 48 hours after the applicant has been informed on it. The contested decision is discussed by the contestant and an assessor designated by the Board. The decision adopted by the Board following this discussion is final and nonopposable.

14. ALLOCATION OF STUDENTS TO STATE SUBSIDIZED – FEE-PAYING PLACES

Starting with the 2009-2010 academic year, students are allocated state subsidized places yearly according to their academic achievements. The allocation is based on regulations available on the university website. Main criterion: academic achievements. The following are extracts from the regulations regarding the allocation of students to state subsidized – fee-paying places.

This methodology applies to all students who enrolled following a written entrance examination beginning with the 2005-2006 academic year. Students enrolled on special subsidized places, tuition fee-paying students (foreign or Romanian currency), students who pay a fee for the equivalence of studies and students who were enrolled by order of or acceptance letter from the Ministry of Education, Research, Youth and Sports are not subject to this decision and do not benefit from its provisions

1. Students' school performances at ***the end of the first autumn session of the previous academic year*** represent the standard used for the allocation of students to state-subsidized places.
2. The average grade taken into account for the allocation of students to state-subsidized places is the arithmetic mean between the weighted mean of a student's marks and their arithmetic mean, calculated for the closing academic year.
3. Failed examinations, regardless of the non-passing marks received, will be awarded a 0 (zero) for the calculation of both types of means (weighted mean and arithmetic mean of marks).

4. Summer medical practice is not taken into account for the allocation of state subsidized places. The total number of credits allotted to the summer practice is correspondingly subtracted when calculating the weighted mean.

5. Places are allotted in descending order of students' average grades.

6. In case more students have the same average grade, the following criteria are applied in this order:

a. weighted mean of marks

b. in case there are still students with the same grade, the course with the most credits will take precedence

c. in case there are still students with the same grade, the course with the next most credits will count (if this course is divided over two semesters, the arithmetic mean is calculated). This criterion will be applied until there are no more same average grades. If there are more courses with the same number of credits, they will be taken into consideration alphabetically.

7. Students' results are considered unitary, according to year of study and faculty, without any differences among student series.

8. Students who have all the required credits before the autumn examination session (students who passed all examinations in the summer session) may be re-examined for a higher mark in the first autumn examination session.

9. A student may apply for retesting for a higher mark only twice in an academic year.

10. Students' ranking for the allocation of state-subsidized places is carried out by the staff of each Dean's office, checked by the designated representatives of the student unions of each faculty and approved, by signature, by the dean of each faculty.

11. The ranking is announced and posted at the Dean's office of each faculty in 15 working days after the end of the first autumn examination session.

12. Students may contest the ranking within 2 calendar days after its announcement.

For further details, please visit the current regulations available on the university website: www.umfcluj.ro

15.THE DENTAL STUDENTS' ASSOCIATION (DSA)

DSA was established in 1995 as a result of the need of Dental Medicine students to be represented at university level. The structure of the organisation has changed overtime to enhance its effectiveness and ensure its development towards a highly beneficial entity from the point of view of interpersonal and professional exchange.

DSA covers such areas as the academic, the university representation and the NGO through its three departments (Technical – IT support, Scientific – coordination of scientific activities carried out through the organisation, International Students Department – facilitating the integration of French and English speaking students into the Cluj academic and social environment) and eight projects (DENTis - The International Congress of Dentistry for Students and Young Doctors, Give It with a Smile, Dental Caries Prophylactics, Open Doors Days, "Wis(e)dom Molar" Magazine, Support for 1st Year students, Milk Teeth Freshers' Ball, InterDentis, StomaFun).

16. THE DENTAL CURRRICULUM

1st Year 2019 – 2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	Anatomy and Embriology	42	42	6	I	E1
2	Head and Neck Anatomy	28	42	5	II	E2
3	Physics and Biophysics in Dentistry	14	28	4	II	E2
4	Cell Biology	28	28	2	II	E2
5	Biochemistry and Biochemistry of the Oral Cavity	28	42	5	I	E1
6	Physiology	28	42	5	I	E1
7	Physiology of the Oro-facial System	28	28	5	II	E2
8	Morphology and Function of the Oral System	28	56	6	II	E2
9	Romanian Language	-	112	2	I,II	E1/E2
10	Sports	-	42	2	I,II	E2
11	Medical First Aid	14	14	2	I	E1
12	History of Medicine	14	-	2	I	E1
13	Medical Informatics	14	28	2	II	E2
14	Histology of the Oral Cavity	28	42	5	II	E2
15	Behavioral Sciences and Communication	28	28	5	I	E1
16	Optional Lectures	14	-	2	I,II	E1 ,E2
17.	Medical Practice			2		E

***For years 1-5 Medical practice is extended over 4 weeks/ 8hours per day = 160 hours**

2nd Year 2019 - 2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	General and Oro-maxillo-facial Physiopathology	28	28	4	I	E1
2	Microbiology	14	28	4	I	E1
3	Microbiology of the Oral Cavity	14	14	3	II	E2
4	Genetics and Dento-Facial Embriology	14	14	2	I	E1
5	Semiology of the Oral Cavity	14	28	4	I	E1
6	Dental Technology 1	28	56	5	I	E1
7	Dental Technology 2	28	56	5	II	E2
8	Psychology	14	14	2	I	E1
9	Immunology	14	14	2	I	E1
10	Pharmacology	28	28	5	I	E1
11	Dental Materials	28	42	6	II	E2
12	Ergonomics	28	28	5	II	E2
13	Metodology of Scientific Research	14	28	2	II	E2
14	Romanian Language	-	112	3	I,II	E1/E2
15	Sports	-	28	2	I	E2
16	Concepts of periodontal semiology	14	14	3	II	E2
17	Ethics and academic integrity	14	-	1	II	E2
18	Optional Subjects		14	2	I,II	E1,E2
19	Medical Practice			2		E

3rd Year 2019 – 2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	Prevention in Dentistry 1	28	42	3	I	E1
2	Prevention in Dentistry 2	28	42	4	II	E2
3	Medical Semiology	28	28	3	I	E1
4	General Surgery	28	14	2	I	E1
5	Ginecology	14	14	2	I	E1
6	Anesthesiology in Dentistry	28	42	6	II	E2
7	Cariology I	28	56	5	I	E1
8	Endodontics I	28	56	5	II	E2
9	Prosthetic Dentistry – Single Unit Restorations	28	56	6	II	E2
10	Dental Materials	14	42	5	I	E1
11	General Radiology	14	28	4	II	E2
12	General and Oral Pathology	28	42	5	I	E1
13	Hygiene	14	14	2	II	E2
14	Internal Medicine	14	28	4	II	E2
15	Romanian language	-	112	1	I/II	E1/E2
16	Optional Subjects	14		2		E
17	Medical Practice			2		E

4th Year 2019 – 2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	Cariology II	28	56	5	I	E1
2	Endodontics II	28	56	5	II	E2
3	Prosthetic Dentistry – Fixed Partial Dentures I	14	42	4	I	E1
4	Prosthetic Dentistry – Fixed Partial Dentures II	14	56	4	II	E2
5	Pedodontics	28	56	5	I	E1
6	Oral Surgery	28	42	5	I	E1
7	Endocrinology	14	14	2	II	E2
8	Pneumology	14	14	2	II	E2
9	Pediatrics	14	28	3	II	E2
10	Neurology - Psychiatry	14	14	2	II	E2
12	Otorhinolaryngology	28	28	3	II	E2
13	Ophtalmology	14	14	2	II	E2
14	Infectious Diseases - Epidemiology	28	28	4	I	E1
15	Occlusion	28	42	4	II	E2
16	Oral Radilogy	28	28	4	I	E1
17	CAD/CAM Systems	14	14	2	I	E1
18	Optional Subjects	14		2		E
19	Medical Practice			2		E

5th Year 2019 -2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	Periodontology I	28	56	5	I	E1
2	Periodontology II	28	56	5	II	E2
3	Prosthetic Dentistry – Complete Dentures	28	56	6	II	E2
4	Dento-facial Aesthetics	14	14	2	I	E1
5	Forensic Medicine	14	14	1	I	E1
6	Oral Rehabilitation	28	56	6	I	E1
7	Management of the Dental Office	28	28	4	I	E1
8	Maxillo-facial Surgery	42	56	6	I	E1
9	Ortodontics	28	56	5	II	E2
10	Odontology	14	42	5	II	E2
11	General Anesthesiology and Emergencies in Dentistry	28	56	5	II	E2
12	Technology of Implant-supported dentures	14	28	4	I	E1
13	Primary care and occupational health	14	14	1	I	E1
14	Dermatology	14	14	1	II	E2
15	Optional Subjects	14		2		E
16	Medical Practice			2		E
17	Elaboration of Graduation Thesis		50	2		E

6th Year 2019 – 2020

Nr.crt.	Subject	Lecture Hours	Practical Activity Hours	Credits	Semester	Evaluation
1	Maxillo-facial Surgery	14	42	5	II	E2
2	Ortodontics	28	56	5	I	E1
3	Prosthetic Dentistry – Removable Partial Dentures	28	56	6	I	E1
4	Pedodontics	28	56	5	II	E2
5	Oral Rehabilitation	28	56	6	I	E1
6	Professional structure, Legislation and Malpraxis	28	28	5	II	E2
7	Medical Deontology and Bioethics	14	14	1	II	E2
8	Oral Pathology	28	28	4	I	E1
9	Gerontology	14	28	2	II	E2
10	Oral Implantology	28	42	5	I	E1
11	Cranio-maxillo-facial Surgery	14	42	5	II	E2
12	Physiotherapy	14	28	2	II	E2
13	Public Health in Dentistry	28	56	5	II	E2
14	Optional Subjects	14		2		E
15	Elaboration of Graduation Thesis *		100	2		E

***Credits for Elaboration of Graduation Thesis are in addition to the 60 credits**

17.OPTIONAL SUBJECTS

1st Year

1	Medical Bioethics
2	Risk of the drugs intake
	DISCIPLINE FACULTATIVE
1	Contemporary doctrines
2	Prevention of the Nosocomial Infections

2nd Year

1	Dental and Oral Biochemistry
2	Anthropology and Comparative Anatomy of the oral system
	DISCIPLINE FACULTATIVE
1	Sociology
2	Prevention of the Maxillo-facial anomalies
3	Physiology of normal and extreme conditions

3rd Year

1	Social aspects of odontology
2	Leadership in medicine
	DISCIPLINE FACULTATIVE
1	Modern Technologies in Prosthetic dentistry
2	The tegument: histological- clinical-therapeutic correlations
3	Use of the Stem Cells in the cell therapy and tissues engineering

4th Year

1	Integrity in scientific research
2	Innovative methods for tissue regeneration in dentistry
3	Biocompatibility of Dental materials - Prof.dr. Gottfried Schmaltz
	DISCIPLINE FACULTATIVE
1	Modern endodontic treatment for solving complex cases – Dr. Peter Kiefner
2	Management of the nosocomial infections with parenteral transmission
3	Pathologic dental wear : ethiopathogenic diagnostic and treatment
4	Romanian language- medical aspects for foreign students
5	Medical pedagogy
6	Educational Psychology
7	French language for Erasmus mobilities

5th Year

1	The applications of lasers in dentistry
2	Minimal Invasive Dentistry
	DISCIPLINE FACULTATIVE

1	Functional Orthodontic Appliances
2	Introduction to Sleep Science – Respiratory dysfunction during sleep
3	Industrial toxicology
4	Complex treatment of root canals
5	Complex removable dentures - Prof.dr.Pierre Santoni
6	Pedagogic practice

6th Year

1	Dental anomalies
2	Temporo-mandibular dysfunction
	DISCIPLINE FACULTATIVE
1	From idea to publication. The design of scientific papers and research studies - Prof.dr.Seong -Gon Kim
2	Surgical and orthodontic treatment of dento-facial anomalies - Prof.dr. Winfried Kretschmer
3	Immunomodulation

18.THE CURRICULA OF THE 1ST YEAR

ANATOMY AND EMBRIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Anatomy and Embriology
1.4. Domain of study	Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor - Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			GENERAL ANATOMY, HEAD AND NECK ANATOMY					
2.2. Responsible for lecture			Lecturer PhD Badea Alexandru Florin					
2.3. Responsible for practical activity			Lecturer PhD Badea Alexandru Florin Assistant Nichimis Radu Assitant Ignat Radu					
2.4. Year of study		2.5. Semester		2.6. Form of evaluation	Theoretical Exam+ Practical Exam+ Individual Portfolio	2.7. Course type	Contain	DS
							Attendance Necessity	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6_ sem I 5_ sem II	3.2. Course	3_sem I 2_ sem II	3.3. Practical Activity	3_semI 3_semII
3.4. Total hours in the curriculum	84 _sem I 70 _sem II	3.5. Course	42_sem I 28_sem II	3.6. Practical activity	42_sem I 42_Sem II
3.7. Distribution of time needed/week					Hours
a. Study using text books, lecture notes, references					30
b. Individual study using on-line platforms, field research					4
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
d. Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				66/55	
3.9. Total hours/semester				150/125	
3.10. Number of credits				6+5	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Students will not attend classes with open mobile phones. Also, telephone conversations will not be tolerated during the course, nor do students leave the classroom to take personal phone calls; Food and beverages are not allowed during the course. It is not allowed for students to be late at the course as this causes disruption of the educational process.
5.2. For practical activities	Students will not be present at the practical work with open mobile phones. Additionally, telephone conversations or students leaving the practice room to take over personal telephone calls will not be admitted during practical work; Food and beverages are not allowed during the course. It is not allowed for students to be late at the course as this causes disruption of the educational process. It is not allowed to leave the practice room while doing the didactic activity. Each student has the obligation to complete the workbook.

6. Acquired specific competences

Professional competences	Forming a three-dimensional spatial representation of the human body as a whole and on segments. Learning of equivalents between the contents of large body cavities and surface regions. Building ontogenetic representations in dynamics, useful for prenatal diagnosis. Learning manual skills.

Transversal competences	Demonstrate preoccupation for professional development by engaging critical thinking skills; Demonstrate involvement in research activities, such as the development of scientific articles. Demonstrate the ability to use digital media for medical information.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Basic knowledge of anatomy and embryology as the theoretical and practical basis of other clinical disciplines, basic knowledge for dental practitioner training.
7.2. Specific objectives	Knowledge of head and neck morphology as well as of limbs and body – functional and clinic correlations.

8. Content

a. Lecture	Teaching methods	Observations
Sem I 1. Anatomy study subject: the human body, introduction to the study of anatomy; definition and methodology for investigation; space orientation: anatomical terminology (axes, planes, positions, terminology); particularities of the orthostatic position; Age steps and their characteristics; Human morpho-types; races. Sexual differences after puberty. Dental - maxillary apparatus.	Academic lectures with PowerPoint presentations, lectures, conversation, and clinical images presentations.	
2. Loco-motor system generalities: bones, joints.		
3. Loco-motor system generalities: joints, muscles.		
4. General systematization of the circulatory system; heart, systemic circulation, pulmonary circulation, arteries, veins, lymphatic system.		
5. CNS, generalities. Peripheral nerves. Somatic and vegetative plexuses.		
6. Topographic regions of the upper limb. Innervation, vascularization.		
7. Topographic regions of the lower limb. Innervation, vascularization.		
8. General systematization of the respiratory system.		
9. Thoracic topography.		
10. General systematization of the digestive system.		
11. General systematization of the urinary system.		
12. Topographic anatomy of the abdomen.		
13. Genital system, general presentation.		
14. Topographic anatomy of pelvic cavity and perineum.		
Sem II 1. Development of the skeletal system. The skull. The base of the skull. The skull wholes. Cranial points, useful in dental medicine.		
2. Neural and visceral parts of the skull. Maxilla and mandible.		

Bony fossae: nasal, sub-temporal, and pterigopalatine. Paranasale sinuses.		
3. Head and neck development anatomy. Anomalies. Oral cavity and teeth development anatomy. Anomalies.		
4. Parietal and visceral topographic regions of the head and neck. Demonstrations of the: trigeminal nerve and its branches, facial nerve, facial artery, lingual artery and the superficial temporal artery.		
5. Blood supply of head and neck.		
6. Nerve supply of head and neck.		
7. Oral cavity. Annexes of the oral cavity. Salivary glands.		
8. Masticatory muscles and the temporo-mandibular joint.		
9. CNS, generalities, Spinal cord.		
10. The brain stem. Cerebellum.		
11. Diencephalon. Telencephalon (Cerebrum).		
12. The eye. The ear. (Sense organs).		
13. Development of the Central nervous system. Anomalies.		
14. Head and neck clinic and section details.		

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b. Practical Activities	Teaching Methods	Activity to be done by students
Sem I <u>OSTEOLOGY</u> WEEK 1 Axes, planes, anatomical terms. The vertebral column and its joints. The thorax and its joints. Clavicle and scapula. Joints of the scapular belt. Bones of the upper limb and its joints.	Dissections, demonstrations on anatomic body parts; suggestive diagrams; drawings	Recognizing and identifying the anatomical parts; to demonstrate the accumulated knowledge.
WEEK 2 The bony pelvis. The joints of the pelvic girdle. Bones of the lower limb and its joints.		
WEEK 3 4. Upper limb; topographic regions demonstration.		

WEEK 4 Lower limb topographic regions demonstration.		
WEEK 5 Seminar: Osteology, limbs.		
<u>THE THORAX</u> WEEK 6 The thorax wall. Intercostal muscles and bundle. Internal thoracic arteries. The thymus. The pleurae and the lungs. The lungs pedicle. The structure, nerves and blood supply of the lungs.		
WEEK 7 The pericardium and the heart. External aspect and heart relations. The vagus nerves. The main arteries and veins at the base of the heart. The aortic arch. The cardiac plexus. The heart sampling. Preparation of heart vessels. Internal aspect of the heart.		
WEEK 8 The topography of the mediastinum. The trachea; oesophagus; the thoracic lymph duct. The azygos veins system. The thoracic aorta. The thoracic sympathetic system.		
WEEK 9 Seminar: The thorax.		
<u>THE ABDOMEN</u> WEEK 10 The abdominal organs normal position. The peritoneal cavity topography. Omental Bursa (the Lesser sac). The liver; external aspect and the liver bundle. The bile ducts. The coeliac arterial duct. The small intestine. The large intestine. Mesenteric blood vessels.		
WEEK 11 The stomach. The spleen. The duodenum and the pancreas. The kidneys. The genitals and kidneys blood vessels. The abdominal ureters. The celiac plexus. External aspects of the kidneys; relations. The suprarenal glands. The portal vein system. The lumbar plexus. The inferior vena cava. The abdominal aorta.		
WEEK 12 Seminar: The abdomen.		
<u>PELVIS AND PERINEUM</u> WEEK 13 The female pelvis. The pelvian peritoneum. The urinary bladder and the rectum. The uterus. The uterine tubes and the ovaries. The broad ligaments. The pelvic ureters. The uterine and ovarian blood vessels. The pelvis sub-peritoneal space at female. The external genital organs. The topography of the female perineum.		

5. WEEK 14 The male pelvis. The pelvic ureters. The pelvis sub-peritoneal space at male. The vasdeference. The vesiculae seminales and ejaculatory ducts. The prostate. The iliac blood vessels. The hypo-gastric plexus. The posterior perineum at male and female. The scrotum, testes. The epididimis. The spermatic cord. The penis. Anterior perineum at male. The urogenital diaphragm. The ischioanal fossa at male.		
Sem II <u>OSTEOLOGY - BONES OF THE HEAD</u> WEEK 1 Skull bone demonstration: occipital frontal, parietal, ethmoid, sphenoid temporal, palatine, zygomatic, hyoid.		
WEEK 2 The neurocranium. The skull base. The viscerocranium. Mandible and maxilla study. Paranasal air sinuses.		
WEEK 3 The orbit. The nasal cavities. The infratemporal and pterygopalatin fossa.		
<u>DISSECTION OF THE HEAD AND NECK</u> WEEK 4 Dissection of the: platysma muscle, superficial cervical fascia. The superficial vessels and nerves. The sternocleidomastoid muscle.Ansa cervicalis. The middle cervical fascia. The subhyoid muscles.		
WEEK 5 The neck bundle.The thyroid and parathyroid glands. The thyroid vessels. The suprahyoidian region.		
WEEK 6 The submental gland. The supraclavicular region. The subclavian vessels. The suprascapular vessels. The cervical and brachial plexuses. The scalene muscles. The muscles of facial expression. The facial vessels and nerve. Distinguish of the facial nerve and artery. The superior and inferior facial regions.		
WEEK 7 The temporal lodge. The masseter and temporal muscles. The parotid gland. The parotidian region. The exopharynx. The mandibulo-vertebro-pharingeal space. Stilian diaphragm. The prestilian space. Pterygoidian muscles.		
WEEK 8 The trigeminal nerve, mandibular nerve and otic ganglion. Distinguish of the trigeminal nerve and its branches. The maxillary artery. Retrostilian space. The endopharynx. The structure of the pharynx. The oral vestible. The gingivae (gums) and teeth. The mandibular nerve.		

WEEK 9 The tongue. The lingual nerve, the lingual artery. Distinguish of the lingual artery. The sublingual gland, the sublingual gland space, the glossopharyngeal nerve. The larynx. The external nose. The nasal fossae. The paranasal sinuses. The ophthalmic nerve.		
WEEK 10 The maxillary nerve. Distinguish of the maxillary sinus. The temporo-mandibular joint.		
<u>CENTRAL NERVOUS SYSTEM</u> WEEK 11 The spinal meninges. External aspect and relations of the spinal cord. Spinal ganglia and nerve. Structure and blood vessels of the spinal cord. Encephalon I. The membranes of the brain. The subarachnoidian space. The venous sinuses of the duramater. The cranial nerves at the base of the skull. The hypophysis cerebri. External feature of brain stem. Apparent origin of the cranial nerves. The mid brain structure.		
WEEK 12 External aspect of the mid stem. The apparent origin of the cranial nerves. Cerebellum: external aspect, relations, structure. The fourth ventricle. The prosencephalon. External aspect of the cerebrum hemisphere. Corpus callosum and lateral ventricles. The fornix.		
<u>SENSE ORGANS</u> WEEK 13 The eye ball. The lacrymal apparatus. The optic nerve and the ophthalmic artery. The nerves: oculomotor , trochlear, ophthalmic and abducens.		
WEEK 14 The external middle and internal ear. The vestibulo-cochlear nerve.		

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- Sadler T.W., Langman's Medical Embryology, 6-th Edition; Williams & Wilkins, 1992
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- Williams P., Warwick R.& Co, Gray's Anatomy 38th Edition, Churchill Livingstone, 1995, ISBN 0-443-

04560-7

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

To determine the content, to choose the type of teaching / learning, the discipline holders discussed with the members of the anatomy disciplines of other faculties of dentistry in the country. Discussions focused on identifying the needs and expectations of employers in the field and coordinating with similar programs in other faculties of dentistry.

10. Evaluation

Activity type	10.1 . Evaluation criteria	10.2. Evaluation	10.3. Percent from the final grade
10.4. Lecture	Consistent with the educational goals	Written editorial exam	50%
10.5. Practical Activity	Consistent with the educational goals of practical activity	Oral exam; Practical exam on corp and body parts.	40%
10.6. Activity during semester	Lectures and labs frequency; class activity ; seminar grades	Individual portfolio	10%

BASIC CONCEPTS OF PHYSICS AND BIOPHYSICS FOR DENTAL MEDICINE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Pharmacy Department 1
1.4. Domain of study	Health
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			BASIC CONCEPTS OF PHYSICS AND BIOPHYSICS FOR DENTAL MEDICINE					
2.2. Responsible for lecture			Assoc. prof. dr. Nicoleta Simona Vedeanu					
2.3. Responsible for practical activity			Lecturer dr. Iacovita Cristian					
2.4. Year of study	1	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	FD
							Mandatory	CD

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
a. Study using text books, lecture notes, references					2
b. Individual study using on-line platforms, field research					1
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					1
d. Tutoring					0.5
Examination/ semester					6,5
Other activities					0,5
3.8. Total hours of individual study (a+b+c+d)				4,5	
3.9. Total hours/semester				105	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	Notions of physics at high school level with application of biophysics
4.2. Competences	Notions of physics at high school level

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre + blackboard and projection system
5.2. For practical activities	Laboratory room with specific instruments and devices

6. Acquired specific competences

Professional competences	• Ability to use properly and in the context the specialized terminology • Knowledge of physical models, the general principles of mechanics, thermodynamics, electromagnetism main laws, optics and structure of matter at atomic and subatomic level • Ability to explain and interpret the theoretical and practical contents of physics in an interdisciplinary approach with other fundamental biomedical as chemistry, mathematics, cellular biology, biochemistry • Understanding of peculiar aspects of pharmaceutical physicsf research • Training skills of using specific methodologies and laboratory techniques • Gaining experience and ability in handling laboratory equipment and techniques specific for the study of physics applied in life sciences: determination of properties and specific physical constants of materials: density of liquids and solids, specific heat, melting point, boiling temperature, surface tension coefficient, viscosity coefficient, refractive index, specific rotation angle etc. • Students necessity to acquire skills needed to use laboratory equipment: electrical equipment, spectroscopes, spectrophotometers, radiation detectors, pH meters, conductometers, oscilloscopes, polarimeters • Students ability for the determination of some simple medical tests: hematocrit, hemoglobin, serum protein electrophoresis, the isoelectric point of proteins • Students necessity to acquire specific skills for experimental measurements:

	errors calculation, graphics, linear interpolation
Transversal competences	• Using the concepts in new contexts • Using theoretical knowledge in solving problems • Optimal and creative use of individual potential in and scientific activities • Individual professional development

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Students must be able to explain based on the laws of physics the physical properties (mechanical, optical, thermal properties) of biological materials and dental materials, physiological and pathological processes occurring in biological systems; the relationships between physical and biological role of organic molecules, the effects of environmental factors on biological systems, the principles that underlie dental radiographic methods, applications of lasers in dentistry
7.2. Specific objectives	Students should be able to explain: The physical principles underlying the physical methods and equipment used in dental medicine and research, quantitative, qualitative and structural analysis of different molecules of biological interest The physical - chemical and biological role of organic macromolecules based on structural data Environmental effects on biological systems, mainly the effects of ionizing radiation.

8. Content

c. Lecture	Teaching methods	Observations
1. Thermal properties of dental materials First principle of thermodynamics. Work. Heat. Internal energy. Applications. Calorimetry. Conservation of energy in the biological systems Second principle of thermodynamics. Specific heat of solids. Vaporization and boiling. Distillation. Clausius Clapeyron equation. Melting and freezing. Eutectics. The triple point. The phases rule.	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
2. Transport Phenomena. Diffusion. Fick's equations. The transport of heat by conduction (Fourier), convection and radiation (radiation laws)	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
3. Basic notions of fluids Static fluid mechanics. Pascal's law Archimedes' law. Dynamics of fluids. Rheology. Notions of rheology for dental materials. Bernoulli law. Newton law. Newtonian liquid flow. Viscosity. Non-Newtonian fluids. Surface tension. Jurin's law. Surfactant.	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
4. Colligative properties of the solutions. Osmosis. Medical applications. Biophysics of blood circulation	Lecture, systematic exposition, conversation,	Oral exposition combined with Power Point

	questioning	presentation
5. Biomechanics. Mechanical properties of teeth and dental materials: elasticity modulus, fracture resistance, hardness	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
6. Sounds. Sensory biophysics. Infra- and ultra-sounds. Application in medicine. Weber Fechner law. Doppler effect. Human ear	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
7. Optical properties of the matter Light: nature and properties. The absorption of light. Spectrophotometric determination of solution concentrations. Fluorescence, Fluorescence of teeth and dental materials. Laser applications in dentistry. Lenses. Human eye. Microscopes and application in medicine	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
8. Elements of radiation physics. General notions of atomic physics. Photonic optics. Photoelectric effect. Compton effect. Pair formation Medical X-ray radiography, including CT).	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
9. Nuclear physics Atomic nucleus. Nuclear forces. Isobars. Isotopes Nuclear models. Natural and artificial radioactivity. Decay law. Irradiation doses. Biological dose. Protection against radiation. Medical applications (radiotherapy, scintigraphy, PET)	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
10. Bioelectricity Properties of organic molecules. Carbohydrates, proteins and fats. Cell membrane structure and properties, transport through biological membrane. Transmembrane potential generation. Nernst-Planck equation. Resting potential. Action potential. Propagation of action potential.	Lecture, systematic exposition, conversation, questioning	Oral exposition combined with Power Point presentation
Bibliography 1. Constantin Mihai Lucaciu “Transportul ionilor prin membranele biologice” Editura medicala Universitara “Iuliu Hatieganu” Cluj-Napoca, 2005 2. C. Codruta Nicola, Materiale dentare. Consideratii clinice si tehnologice. Editura Casa Cartii de Stiinta, Cluj-Napoca, 2009. 3. F. Gremy, Biophysique, Ed. Flammarion, Paris 1982 4. A. Bouyyssy, M. Davier, B. Gantz, Physique pour les sciences de la vie, Ed. Belin, Paris, 1988 5. D-G. Margineanu, Energetica lumii vii, Ed. Edimpex-Speranta, Bucuresti 1992 6. D.G Margineanu, M.I.Isac, C.Tarba, Biofizica, Ed. Didactica si Pedagogica, Bucuresti, 1980 7. Sears and Zemansky University Physics, H. Young, R. Freedman, l. Ford, 12 th Edition, Pearson Addison Wesley Publisher, 2007.		

8. Physics in Biology and Medicine, 3rd edition, P. Davidovits, Complementary Science Series Academic Press, 2007
9. A. Aurengo, T. Petitclerc, Biophysique 3rd edition, Medicine-Sciences Flammarion, 2006
10. Il mondo Fisico, V. Bacciarelli, P. A. Giustini, Trevisini Editore, Milano, 1989
11. Lecture notes in electronic format

d. Practical Activities	Teaching Methods	Activity to be done by students
1. Physical measures and units, errors calculation.	Lecture, systematic exposition, conversation, questioning, demonstration	Unit conversion, errors calculation
2. Densimeters. Liquids and solids density measurements by pycnometer. Hydrometers	Lecture, systematic exposition, conversation, questioning, demonstration	Determination of alcohols and metals density with the picnometre. Graphical representation
3. Viscometers. Ostwald and Hoppler viscometer.	Lecture, systematic exposition, conversation, questioning, demonstration	Calculation of viscosity coefficient for glycerin with two methods Graphical representation
4. Surface tension coefficient determination - Traube method	Lecture, systematic exposition, conversation, questioning, demonstration	Calculation of surface tension coefficient for alcohols with two methods Graphical representation
5. Calorimetry. Specific heat determination solids and liquids. The melting latent heat coefficient determination	Lecture, systematic exposition, conversation, questioning, demonstration	Calculation of specific heat of different metals an latent heat of ice
6. Electricity: electrolysis, conductometry, resistivity determination, variation of resistivity with the temperature, e.m.f. determination a galvanic element, galvanic cell, pH	Lecture, systematic exposition, conversation, questioning, demonstration	Graphical representation to extract pH based on potentiometric method. Calculation of electrochemical equivalent of different metals
7. Refractometry, polarimetry. Determination of solution concentration	Lecture, systematic exposition, conversation, questioning, demonstration	Reading polarization angle and refractive index to calculate the solutions concentration
8. Spectrophotometric determination of	Lecture, systematic	Determination of an

concentration for different solutions of biological interest	exposition, conversation, questioning, demonstration	organic solution concentration by spectrophotometry
9. Lenses. Optical microscope	Lecture, systematic exposition, conversation, questioning, demonstration	Individual work, calculation of sample dimension and power of lenses
Bibliography: 1. Laboratory reports (written or electronic materials) 2. C.M.Lucaciu, Physique et Biophysique expérimentales Editura Medicala Universitara "Iuliu Hatieganu" Cluj-Napoca, 2000		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

In order to provide the best content of the lecture and to choose the appropriate teaching / learning methods, discipline holders held meetings with other teachers in the field, from other higher education institutions and with teachers from other disciplines. The meeting aimed to identify the needs and expectations of employers in the industry and coordination with similar programs in other higher education institutions. The concepts studied are consistent with the internal rules and with ongoing activities on dental medicine segment at national level.

10. Evaluation

Activity type	Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (completeness and correctness of knowledge acquired, logical consistency, fluency of speech, the force of argument) Specific criteria: -criteria that enphasizes the attitude and the motivational aspects of student activities -the ability to understand the fundamental issues and to customise them	Written exam as multiple choice questions	75 %
10.5. Practical Activity	Evaluation of theoretical knowledge and practical skills	Practical exam	25 %
10.6. Activity during semester	Tests		
10.7. Minimum performance standard			
• Acquiring the fundamental concepts of physics and biophysics - to define Newtonian and non-Newtonian bodies • Defining methods for measuring the viscosity - to know the principles of thermodynamics. Applying the first principle in biological systems,			

living organisms. Energy balance. - to characterization of the wave properties of light: diffraction, interference. - to know the corpuscular aspect of light. Dualism wave-corpuscle - to know the main types of nuclear radiation. Decay law. Medical Applications of radioisotopes - to acquire notions of irradiation dosimetry. Irradiation protection. - Explanation of the osmotic flow mechanisms in biological cells. Explanation of - physiological and pathological phenomena based on the laws of osmosis - To know the main types of transmembrane transport. - To be able to calculate the equilibrium electric potentials for different transmembrane ion concentrations and how they can be modified due to transient changes of ionic permeability

CELL AND MOLECULAR BIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	"Iuliu Haţieganu" University of Medicine and Pharmacy in Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	3: Molecular Sciences
1.4. Domain of study	Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Cell and Molecular Biology					
2.2. Responsible for lecture			Adrian Florea, MS, PhD, Associate Professor					
2.3. Responsible for practical activity			Adrian Florea, MS, PhD, Associate Professor Cleopatra Romana Vulturar, MD, PhD, Associate Professor Adina Ancuţa Chiş, MS, PhD, Senior lecturer Lucian Frenţescu, MD, PhD, Senior lecturer Gheorghe Zsolt Nicula, MD, PhD, Senior lecturer					
2.4. Year of study	2019-2020, 1st Year Study	2.5. Semester	2	2.6. Form of evaluation	Written examination Practical examination Individual portfolio	2.7. Course type	Fundamental discipline	FD
							Mandatory	M

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
a. Study using text books, lecture notes, references					2
b. Individual study using on-line platforms, field research					2
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					

d. Tutoring	
Examination/ semester	
Other activities	
3.8. Total hours of individual study (a+b+c+d)	
3.9. Total hours/semester	60
3.10. Number of credits	2

4. Prerequisites (if needed)

4.1. Curriculum	Biology and Chemistry – high school level
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	• Students will have the phones turned off during the lectures and will not leave the classroom in order to retrieve personal phone calls; • Consumption of foods and beverages during the course is prohibited; • No delay will be tolerated as this affects the education process; • Students are required to attend at least 70% of the lectures (10 out of 14 two-hour lectures). Their presence will be documented by personal signatures on the presence sheet. • Lecture absences can be cancelled only if attending the same lecture in another day of that week with a different series.
5.2. For practical activities	• Students will have the phones turned off during the practical works and will not leave the classroom in order to retrieve personal phone calls; • Consumption of foods and beverages during the course is prohibited; • No delay will be tolerated as this affects the education process; • Students are required to attend all practical works in white labcoats with writing and drawing instruments (including colored pencils), guides for practical works and notebooks including an abstract of the practical work scheduled for that week; • Students could be examined orally or in writing in regard to theoretical and practical knowledge concerning the practical work scheduled for that week or about theoretical aspects of cell and molecular biology lectured in the previous week; • Presence in all practical works of cell and molecular biology (14 two-hour sessions) is compulsory. Absences need to be recovered according to regulations established by the university senate.

6. Acquired specific competences

Professional competences	- To understand the basic concepts of the cell organization and the organization and functioning of the genetic material; - To understand the medical applications of fundamental theoretical concepts of Cell and Molecular Biology needed for a physician; - To develop laboratory practical skills needed in subsequent years of medical practice (correct use of the light microscope, DNA isolation techniques); - To identify and describe morphological and ultrastructural aspects of cellular components as well as changes occurring during biological processes (mitosis) by

	optical microscope studies of biological preparations and transmitting/scanning electron microscopy images, respectively; - To use efficiently information resources in the field of cell and molecular biology; - To correctly understand and analyze results in scientific articles.
Transversal competences	- To demonstrate concerns for professional development through training of critical thinking abilities; - To demonstrate involvement in research, e.g. writing of scientific articles; - To demonstrate the ability to use digital techniques to gain information in the field of cell and molecular biology.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Students graduating this course will be able to understand the medical applications of fundamental theoretical concepts regarding cell and molecular biology needed for a physician and will develop some molecular medicine laboratory skills needed in the coming years of medical practice.
7.2. Specific objectives	Students graduating this course will be able to: - compare the general characteristics of prokaryotes and eukaryotes; - discuss the structure - function relationship of the most important types of molecules (nucleic acids, proteins, carbohydrates and fats) and know how to spot them in cellular structures; - argue the unity of the living matter's biochemical organization; - explain the structure, functions and cellular location of the cytoplasmic matrix components and the medical applications resulting from their study; - define biological membranes, classify the main types of cell membranes and describe their molecular organization; - define receptors and exemplify key mechanisms they are involved in; - classify membrane transport, explain the mechanisms by which the most important transport modalities occur and exemplify some pathological implications; - classify membranes' implications in pathology based on their molecular mechanism; - characterize morphologically and ultrastructurally the interphase nucleus, enumerate the chromosomes' functions and describe their morphological characters, characterize and present medical applications of the nuclear chromatin resulted from its study; - list and describe the stages of mitosis and meiosis; - describe the morphology, ultrastructure and chemical composition of cell organelles (endoplasmic reticulum, Golgi apparatus, lysosomes, peroxisomes, mitochondria), detail their functions and describe the medical applications resulting from their study; - define cellular necrosis and apoptosis and explain their occurrence; - explain the significance of the central dogma of molecular biology and summarize its schematic representation; - describe the mechanisms of DNA replication, transcription and translation of genetic information, present medical applications resulting from the study of these processes, explain the significance of the genetic code and detail amendments to the central dogma of molecular biology;

	- present the unifying theory of cancers and recognize the oncogenes' characteristics, exemplify carcinogens and detail the cellular mechanisms of cancers; - describe the light microscope components, explain how images are formed on the human retina, properly use laboratory microscopes; - describe the basic principles of some special light microscopy techniques, as well as transmission and scanning electron microscopy; - recognize the main chemical cellular components and pigment inclusions in permanent histochemically stained preparations; - recognize and describe mitosis stages in permanent histochemically stained preparations; - recognize and describe the ultrastructure of cellular components based on the study of transmission/scanning electron microscopy images; - perform various cell and molecular biology techniques like the subcellular fractioning by differential centrifugation, the separation of lipid fractions by thin layer chromatography, and the DNA isolation from animal liver cells; - explain the general concepts of some cytogenetics methods like the Barr test and the human karyotyping, as well as some molecular medicine techniques: the separation of DNA fragments by agarose gel electrophoresis and the Polymerase Chain Reaction technique.

8. Content

a. Lecture: 14 X 2 hours.	Teaching methods	Observations
Introduction to Cell and Molecular Biology. General information about the cells.	Academic lectures, interactive systematic presentation, and discussions.	Interactive oral, Power-Point and video presentation according to the schedule of educational objectives.
Molecular basis of chemical organization of the cell.		
Cytoplasmic matrix, cytoplasmic differentiations.		
Molecular basis of the cell motility.		
Molecular biology of the cell membranes.		
Nucleus. Eukaryotic chromosomes: cell and molecular biology aspects and medical applications.		
Cell reproduction and cell division.		
The endoplasmic reticulum.		
The Golgi apparatus. Cell secretion.		
Lysosomes. Peroxisomes.		
Mitochondria.		
Extracellular matrix and cell adhesion. Cellular recognition. Cell death.		
The central dogma of molecular biology and its medical applications.		
Malignant cells and oncogenes.		
Bibliography: 1. The courses presented to the students during the semester. 2. Gheorghe Benga, Introduction to Cell and Molecular Biology, „Iuliu Haţieganu" University Press, Cluj-Napoca, 2005 (in romanian language).		

<table>
<tr><td colspan="3">3. Alberts, B., Bray, D., Hopkin, K., Johnson, A., Lewis, J., Raff, M., Roberts, K. and Walter, P., Essential Cell Biology, second edition, Garland Publishing, Inc., New York, 2014.
4. Gheorghe Benga et al., Practical Works for Cell and Molecular Biology, Carpatica Publishing House, Cluj-Napoca, 1997.</td></tr>
<tr><td>b. Practical Activities: 14 X 2 hours.</td><td>Teaching Methods</td><td>Activity to be done by students</td></tr>
<tr><td>1. The light microscope. The study of cellular movements.</td><td rowspan="15">Interactive syste-matic presentation, discussions and demonstrations , individual exercises. Acquiring concepts related to the practical works through individual study based on the Practical works for cell and molecular biology guide.</td><td rowspan="2">Developing abilities to work with the optical microscope, recognition and description of cell components’ morphology.</td></tr>
<tr><td>2. Special techniques of light microscopy: immersion microscopy and dark field microscopy.</td></tr>
<tr><td>3. Special techniques of light microscopy: phase contrast microscopy and fluorescence microscopy.</td><td></td></tr>
<tr><td>4. The study of cell components on slides with specific hystochemical stainings. The study of cell inclusions.</td><td></td></tr>
<tr><td>5. The study of cell division.</td><td></td></tr>
<tr><td>6. The light microscopy study of the cell organelles.</td><td></td></tr>
<tr><td>7. The separation of cells and obtaining the isolated cells.</td><td rowspan="7">Performing cell and molecular biology tech-niques, learning general concepts related to different cyto-genetics and molecular medi-cine techniques.</td></tr>
<tr><td>8. Cell fractioning by differential centrifugation.</td></tr>
<tr><td>9. The study of deoxyribonucleic acid (DNA): extraction, ultraviolet spectrophotometry and concentration measurements.</td></tr>
<tr><td>10. DNA separation by agarose gel electrophoresis. General notions about the Polymerase Chain Reaction technique.</td></tr>
<tr><td>11. Study of mitochondria: determination of oxygen uptake and of oxidative phosphorylation.</td></tr>
<tr><td>12. Lipid extraction from cell membranes and separation of lipid fractions by thin layer chromatography.</td></tr>
<tr><td>13. Transmission electron microscopy applied in cellular studies.</td><td rowspan="2">Study of transmission and scanning electron microscopy images for recognizing the cellular ultra-structure, inclu-ding medical applications of the electron microscopy.</td></tr>
<tr><td>14. Scanning electron microscopy. Electron microscopy images (electron micrographs).</td></tr>
<tr><td colspan="3">Bibliography: Gheorghe Benga et al., Practical Works Guide for Cell and Molecular Biology, Carpatica Publishing House, Cluj-Napoca, 1997.</td></tr>
</table>

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

In selecting the content and teaching methods, the Discipline’s staff attended several meetings with members of the Romanian Society of Cell Biology and various specialists in laboratory medicine, genetics, biology or biochemistry, as well as with Cell and Molecular Biology representatives of other

universities. Discussions were focused on identifying the needs and expectations of Dentistry students and dental practitioners, aiming to develop skills and abilities useful in clinical practice and research.

10. Evaluation

Activity type	10.1. Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	- according to the educational objectives of the lectures.	Written examination (test) consisting in 25 multiple choice questions to be answered in 60 minutes.	Theoretical examination 70%
10.5. Practical activity	- according to the educational objectives of the practical works.	Practical (oral and written) examination: 1. Recognition of the cellular components based on their specific (histochemical) staining, identifi-cation of pigment inclusions, of the mitosis stages and of cellular organelles by light microscopy 2. Recognition and description of cellular components based on their ultrastructure highlighted in transmission/scanning electron microscopy images; 3. Evaluation of the theoretical knowledge gained during the practical works.	Practical examination 20%
10.6. Activity during semester	- according to the educational objectives of the practical works	- oral or written evaluation throughout the semester of the concepts taught during the lectures or related to the practical work in progress; - practical demonstrations.	Individual portfolio 10%
10.7. Minimum performance standard: - Answers to the questions formulated at the end of each chapter of the textbook; - Knowledge of practical examination requirements presented at 10.5.			

BIOCHEMISTRY AND BIOCHEMISTRY OF THE ORAL CAVITY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medicine 3
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Biochemistry and Oral Cavity Biochemistry				
2.2. Responsible for lecture			Lecturer Dr. Tiberiu Nistor				
2.3. Responsible for practical activity			Professor Dr. Lucia Procopciuc Lecturer Dr. Tiberiu Nistor				
2.4. Year of study	1	2.5. Semester	1	2.6. Form of evaluation	Written + Practical exam	2.7. Course type	Compulsory

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					15
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examination/ semester					5
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				55	
3.9. Total hours/semester				125	
3.10. Number of credits				5	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater
5.2. For practical activities	Laboratory

6. Acquired specific competences

Professional competences	Basic knowledge necessary for the understanding of the biochemical principles important in dental medicine: aminoacids, proteins, enzymes, vitamins and their coenzymes, nucleic acids, major metabolic pathways, biochemistry of the saliva, teeth, periodontium, dental plaque, dental caries, periodontal disease. Interpretation of the most sensitive biochemical parameters present in saliva and gingival fluid, which may be correlated with diseases of the oral cavity and with systemic diseases.
Transversal competences	Correlation of the theoretical knowledge with the practical activity. Interdisciplinary correlations.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The accumulation of basic knowledge necessary for the understanding of the structure of the macromolecular compounds and biochemical processes in the living organisms.

	The accumulation of basic knowledge of biochemical modifications in the oral cavity.
7.2. Specific objectives	The structure and function of amino acids and proteins important in the human body. Enzymes as catalysts of metabolic processes in living organisms and their medical implications. Vitamins and coenzymes: structure, role and deficiency. Nucleic acids: structure, role, transmission and expression of genetic information. Important metabolic pathways and deficiency of carbohydrates, lipids and amino acids. Saliva: composition, properties and roles. Biochemistry of the teeth. Bacteria and dental plaque. Biochemical aspects of dental caries. Biochemistry of the periodontal disease.

8. Content

a. Lecture	Teaching methods	Observations
1. Amino acids: structure, importance	Lecture, interactive conversation	Oral presentation, Power-Point presentation
2. Structure of proteins: primary, secondary, tertiary and quaternary structure	Lecture, interactive conversation	Oral presentation, Power-Point presentation
3. Types of proteins: myoglobin, hemoglobin, immunoglobulins, collagen	Lecture, interactive conversation	Oral presentation, Power-Point presentation
4. Enzymes: classification, structure, specificity, enzyme kinetics, types of enzyme inhibition, isoenzymes	Lecture, interactive conversation	Oral presentation, Power-Point presentation
5. Vitamins and coenzymes: water and fat soluble vitamins and their coenzymes	Lecture, interactive conversation	Oral presentation, Power-Point presentation
6. Nucleic acids: composition, structure of DNA and RNA	Lecture, interactive conversation	Oral presentation, Power-Point presentation
7. Important metabolic pathways of carbohydrates, lipids and amino acids	Lecture, interactive conversation	Oral presentation, Power-Point presentation
8. Oral cavity – a complex ecosystem	Lecture, interactive conversation	Oral presentation, Power-Point presentation
9. Biochemistry of the saliva: composition, properties and role	Lecture, interactive conversation	Oral presentation, Power-Point presentation
10. Biochemistry of the teeth: general aspects and chemical composition	Lecture, interactive conversation	Oral presentation, Power-Point presentation
11. Biochemistry of the periodontium: major chemical constituents and biochemical processes at the periodontium level	Lecture, interactive conversation	Oral presentation, Power-Point presentation
12. Biochemistry of the dental plaque: dental pellicle, definition and types of dental plaque, structure and composition of dental plaque, metabolism of dental plaque	Lecture, interactive conversation	Oral presentation, Power-Point presentation
13. Biochemistry of the dental caries: description of the caries processes, etiopathogenesis of	Lecture, interactive conversation	Oral presentation, Power-Point presentation

dental caries, resistance to caries		
14. Biochemistry of the periodontal disease: types, etiology and evolution of the periodontal disease	Lecture, interactive conversation	Oral presentation, Power-Point presentation

Bibliography:

a. Robert K. Murray, Daryl K. Granner, Peter A. Mayes, Victor W. Rodwell – Harper's Illustrated Biochemistry, twenty-sixth edition, 2003
b. Pamela C. Champe, Richard A. Harvey, Denise R. Ferrier – Biochemistry, 3rd edition, Lippincott's Illustrated Reviews, 2005
c. David L. Nelson, Michael M. Cox – Lehninger-Principles of Biochemistry, fourth edition, New York, 2005
d. Thomas M. Devlin – Textbook of Biochemistry with Clinical Correlations, sixth edition, 2006
e. Nistor Tiberiu – Basics in Biochemistry For Dentistry Students. Ed. Casa Cartii de Stiinta, Cluj-Napoca, 2010

Nistor Tiberiu – Biochemistry in Questions For Dentistry Students. Second Edition. Ed. Casa Cărții de Știință Cluj-Napoca, 2015

b. Practical Activities	Teaching Methods	Activity to be done by students
1. Solutions: definition and different ways of expressing the concentration of a solution	Interactive teaching Power-Point presentation	Determinatin of the concentration of solutions.
2. pH of acids and bases. Titration of HCl, CH_3 – COOH, H_3PO_4 and aminoacids	Interactive teaching Power-Point presentation	Calculation of pH for acids and bases Titration curves and determination of pKa and pH_i for aminoacids.
3. Principle of colorimetry. Determination of total serum proteins (Gornall method). Medical importance.	Interactive teaching Power-Point presentation	Standard curve and determination of total serum proteins. Interpretation of the results.
4. Principle of enzyme assays. Analysis of serum cholinesterase activity. Gamma-glutamyl transferase (γ-GT) determination. Medical importance.	Interactive teaching Power-Point presentation	Determination of serum enzymes activity (cholinesterase and γ-GT). Interpretation of the results.
5. Glucose determination in blood. Glucose tolerance test. Medical importance.	Interactive teaching Power-Point presentation	Serum glucose determination and oral glucose tolerance test. Interpretation of the results.
6. Plasma lipids and lipoproteins. Determination of cholesterol and triglycerides. Medical importance.	Interactive teaching Power-Point presentation	Determination of plasma total lipids, cholesterol and triglycerides. Interpretation of the results.
7. Determination of bilirubin. Medical importance	Interactive teaching Power-Point	Determination of conjugated, unconjugated and total billirubin. Types of jaundice.

	presentation	
8. Salivary transaminases activity (GOT and GPT). Medical importance	Interactive teaching Power-Point presentation	Determination of salivary transaminases (GOT, GPT). Interpretation of the results.
9. Salivary urea and uric acid determination. Medical importance.	Interactive teaching Power-Point presentation	Determination of salivary urea and uric acid. Interpretation of the results.
10. Salivary calcium and inorganic phosphate. Medical importance.	Interactive teaching Power-Point presentation	Determination of salivary calcium and inorganic phosphate. Interpretation of the results.
11. Salivary amylase determination. Alkaline and acid phosphatases determination. Medical importance.	Interactive teaching Power-Point presentation	Determination of amylase, acid and alkaline phosphatase. Interpretation of the results.
12. Salivary proteins determination. Medical importance.	Interactive teaching Power-Point presentation	Determination of salivary proteins. Interpretation of the results.
13. Normal and abnormal components in urine. Medical importance.	Interactive teaching Power-Point presentation	Determination of normal components in urine. Identification of abnormal components in urine. Interpretation of the results.
14. Practical exam		Practical exam

Bibliography:

1. Manta I, Cucuianu M, Benga G, Hodarnau A. Metode biochimice in laboratorul clinic. Cluj-Napoca: Editura Dacia; 1976.
2. Kaplan LA, Pesce AJ. Clinical chemistry: theory, analysis and correlation. St. Louis: The C. V. Mosby Company; 1984.
3. Bishop ML, Duben-Engelkirk JL, Fody EP. Clinical chemistry: principles, procedures, correlations. 2nd ed. Philadelphia: J.B. Lippincott Company; 1992.
4. Olteanu I, Dronca M et all. Biochimie medicala. Caiet de lucrari practice. Cluj-Napoca: Editura Casa Cartii de Stiinta; 2007.
5. Nistor Tiberiu. Biochemistry. Practical Labs in Dental Medicine. Cluj-Napoca: Editura Casa Cartii de Stiinta; 2010.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

A continous dialogue with the dental medicine community.
A constantly participation of the department to scientific manifestations.
To maintain contacts with other departments from the same field.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Evaluation of the knowledge and understanding accumulated by students during the semester	Multiple choice questions	75% (90% exam + 10% activity during the semester)
10.5. Practical Activity	Evaluation of the knowledge accumulated in the practical labs during the semester	Written and practical exam	25%
10.6. Activity during semester	Term Work	Tests during the semester	
10.7. Minimum performance standard			

The students have to know:

- The structure of the common amino acids
- The structure and importance of the major derived amino acids
- What is primary structure of a protein and which are the characteristics of a peptide bond
- Characteristics of α-helix structure of a protein
- Characteristics and types of β-sheet structure of a protein
- What represents and how are obtained the tertiary and quaternary structure of a protein
- The structure, importance and oxygen binding curve of myoglobin
- The structure, importance and oxygen binding curve of hemoglobin, types of normal hemoglobin and the most important hemoglobinopathies
- The classification of immunoglobulins and to describe the structure and characteristics of each class
- The structure and synthesis of collagen and the major collagen diseases
- Classification of the enzymes and type of reactions catalyzed by each class
- Types of enzyme specificity
- Characteristics of the active site of an enzyme
- Michaelis – Menten and Lineweaver – Burk equations
- Factors affecting reaction velocity
- Competitive, noncompetitive and uncompetitive inhibition
- The major isoenzymes and their importance in medical practice
- The biochemical role, deficiency, requirement and structure of the water soluble vitamins and their coenzymes
- The biochemical role, deficiency, requirement and structure of the fat soluble vitamins
- The structure of the major purine and pyrimidine nitrogenous bases
- What is a nucleoside and how is obtained
- Which are the components of a nucleotide
- Which are the major cyclic nucleotides, nucleoside polyphosphates and their role
- The structure of DNA with its characteristics
- The structure and types of RNA
- The structure of the most important carbohydrates and lipids
- Importance of carbohydrates and lipids for the human body
- The major metabolic pathways of carbohydrates, lipids, amino acids and their medical importance
- Generalities about oral cavity
- Specific factors of oral ecosystem and about bacterial adhesion
- Which are the organic and inorganic components of saliva and their role

- The properties of saliva
- The major roles of saliva
- The major components of the hard tissues (enamel, dentine, bone)
- Organic components of mature enamel
- Major and minor inorganic constituents of mature enamel
- Organic components of dentine and bone
- Importance of collagen in composition of dentine and bone
- Major and minor inorganic constituents of dentine and bone
- Composition of cementum
- Composition of dental pulp
- Major biochemical processes in dental pulp
- What is periodontium and which is the tissue composition of periodontium
- Major chemical constituents of periodontium
- Major biochemical processes which take place at periodontium level
- Composition and importance of gingival fluid
- What is a dental plaque and types of dental plaque
- Clinical appearance of supragingival plaque
- Detection of supragingival plaque
- Composition o dental plaque
- Metabolism of dental plaque
- Role of dental plaque
- General aspects about dental caries
- Stephan's curve
- The role of bacteria in caries and which are the major bacteria involved in etiology of dental cavities
- The role of diet in dental caries
- Demineralization process in dental caries
- The role of fluoride in prevention of dental caries
- The classification and description of the major types of periodontal diseases
- The etiology of periodontal disease
- The evolution of periodontal disease

PHYSIOLOGY

1. Program information

1.1. Higher Education Institution	"Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Department 2- Functional Sciences
1.4. Study domain	Medicine
1.5. Study cycle	Licence
1.6. Study program	Dental Medicine -English Section
1.6. Competence	Doctor -Physician Dental Medicine (Dentistry)
1.7. Education system	Full-time learning

2. Discipline information

2.1. Discipline name	Physiology

2.2. Lecture titular					Associate Professor Dr. Teodora Mocan		
2.3. Practical activity titular					Associate Professor Dr. Teodora Mocan Lecturer Dr. Alexandra Sevastre-Berghian Assistant Professor. Dr. Cristina Olănescu-Vaida-Voevod Assistant Professor. Dr. Teodora-Larisa Florian		
2.4. Year of study	I	2.5. Semester	I	2.6. Evaluation type	CE (cumulative evaluation) Theoretical examination+ Practical examination	2.7. Discipline regime	FD MD

3. Total time estimation (didactic activity in hours per semester)

3.1. Number of hours per week	4	From which: 3.2 lecture	2	3.3. practical workings	3
3.4. Total hours per semester	70	From which: 3.5 lecture	28	3.6. practical workings	42

Time distribution	hours
3.4.1. Learning using books, lecture support, references and notes	40
3.4.2. Supplementary documentation in library, on electronic platforms	18
3.4.3. Training for seminars/laboratory activities/projects/tasks/essays/portfolios	20
3.4.4. Tutor	2
3.4.5. Examinations	2
3.4.6. Other activities	-

3.7. Total number of hours for individual study	80
3.8. Total number of hours per semester	150
3.9. Credits number	5

4. Preconditions:

4.1. curriculum	-
4.2. competence	-

5. Conditions:

5.1. lecture	• In amphitheatre, with video projection • The students are not allowed to enter the amphitheatre with turned on mobile phones. The discussions among the students that can disturb the educational process are not allowed. The students are not allowed to leave the room to talk at the phone. • Eating, drinking of any king of food and fluids are forbidden • The students' delays are not tolerated because they disturb the educational process
5.2. practical workings	• In laboratory rooms with, the specific material • The students have to wear white coats • An individual portfolio must be completed by each student • The laboratory tests' results must be noted in the students notebook, that will be signed by the teacher of the students group

6. Specific cumulated competences:

Professional competences	• Ability in adequate utilization of the medical terminology • Acquire of the practical experience necessary for utilization of the laboratory instruments, to investigate some fundamental physiological mechanisms, and to test the studied clinical parameters • Ability to interpret the laboratory tests • Ability to correctly interpret the results of scientific studies • Ability to efficiently use the medical sources
Transversal competences	• Ability to use the studied notions in new conditions • Ability to make correlations among the studied notions at different disciplines • Ability to efficiently communicate in a team • Concern for professional mastery through training of the critical thinking abilities • Ability to use digital resources for medical data • Acquire the interest for the own professional development

7. Disciplines objectives (resulted from the specific cumulated competences)

7.1. General objectives	• Clarification and understanding of the difficult and complex biological mechanisms • Exploring the various systems (excitable tissue, blood, cardiovascular system, respiration, excretion and digestion) • Developing the spirit of observation and of the critical thinking, skills which are essential for the future doctors
7.2. Specific objectives	▪ Learning of the medical terminology, acquisition of the needed knowledge for the integration of functions at the molecular, cellular, tissue and systemic level, in order to understand the functioning of the different organs, systems and the interactions between them. ▪ Use of the equipment and of the laboratory instruments in order to learn the physiological mechanisms. ▪ Interpret of the bibliographical documentation.

8. Contents

8.1. Lecture	Teaching methods	Observations
1. Water and fluid compartments of the body. Ion distribution in the body fluids. Homeostasis. Transport across the plasma membrane: passive, active, vesicular.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
2. The physiology of excitable tissues. The axoplasmic transport. The physiology of the neuron: resting membrane potential, action potential, conductivity. Synapse. Structure. Functioning. Postsynaptic potentials. The characteristics of synaptic transmission	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
3. The neuromuscular junction. The physiology of skeletal muscle: the functional	Lecture, Systematic Speech, Conversation,	Oral and Power Point Presentations

structure of the striated muscular fiber; the excitation-contraction coupling; muscle relaxation. Muscle fatigue.	Problem solving	
4. Smooth muscle physiology: structure (multiunit, single-unit) the excitation-contraction coupling; the contraction and relaxation mechanism. The reflex activity. The vegetative reflex arc. The autonomic nervous system.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
5. Blood: composition; hematocrit; blood volume; mechanisms of blood volume regulation; acido- base balance of the blood. Blood properties. Plasma: composition; plasma proteins.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
6. Erythrocytes: structure, number, variations. Hemoglobin: structure, role, combinations. Iron metabolism. Erythropoiesis.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
7.The properties of erythrocytes. Red blood cell antigens. Blood typing ABO and Rh. Transfusions	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
8.Leukocytes: structure, number, variations; leukocyte formula. The properties of granulocytes. The formation of leukocytes. Immunity. The innate and adaptive immunity. Immunoglobulins	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
9.Platelets: structure, number, variations. Hemostasis. Blood clotting. Factors that inhibit clotting. Dissolution of clots.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
10.The properties of the cardiac muscle. The electrical activity of the heart. The cardiac output. Nervous and humoral regulation of cardiac activity. The baroreceptor reflex.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
11. Blood pressure. The physiology of the microcirculation. Capillary fluid exchange. The regulation of microcirculation.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
12. The physiology of the respiratory system: Lung ventilation; Gas exchange in the lungs; Oxygen and carbon dioxide transport; the regulation of respiration.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
13. The physiology of excretion: structure and function of the kidneys; Glomerular filtration. Tubular reabsorption and secretion. Micturition.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations

14. Introduction into the physiology of the digestive tract. Gastric secretion, pancreatic secretion, biliary secretion and intestinal secretion. The regulation of gastric secretion. Motility of the gastrointestinal tract. Intestinal absorption.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
Bibliography: • Marieb EN, Hoehn K, Anatomy and physiology, Pearson, 2013. Despopoulos A, Silbernagl S. Color atlas of physiology, Thieme, 2003. • Widmaier EP, Raff H, Strang KT, Vander's Human physiology The mechanisms of body function, McGraw-Hill, 2014. • Fox I, Human physiology, McGraw-Hill, 2011. • Tortora G, Derrikson B, Principles of anatomy and physiology, John Wiley&Sons Inc, 2009. • Dee Unglaub Silverthorn, Human physiology: An integrated approach, Pearson, 2013. Guyton AC, Hall JE, Textbook of medical physiology, Elsevier, 2006. • Escot-Stump S, Mahan LK, Krause's Food nutrition and therapy, Elsevier, 2007		
8.2. Practical workings	Teaching-Learning Methods	Observations
1. Hematocrit or packed cell volume. Osmosis. The influence of the osmotic pressure on the erythrocyte volume. RBC osmotic resistance.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
. Hemoglobin's combinations. Identification of hemoglobin. Total hemoglobin content in the blood. The dosage of the bicarbonate.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
3. Red blood cells count. Reticulocytes count. Erythrocytes parameters	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
4. Erythrocyte sedimentation rate. Blood and plasma density. Electrophoresis of plasma proteins.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
5.Blood typing: ABO, Rh. Transfusions.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
6. White blood cell count. White blood cell differential.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
7. Platelet count. Bleeding time. Rumple-Leeds compression test.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical	Performing of Laboratory Tests, Data Interpretation, Problem Solving

	Activity	
8. Coagulation time. Quick time. Howell time.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
9.Neuron physiology (simulations): excitability, conductibility, threshold, summation.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
10. Muscle physiology (simulations): role of the motor end plaque in the muscle fatigue. Muscle contractions.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
. The electrocardiogram.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
12. Blood pressure monitoring.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
. Urine analysis.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
14. Spirometry: lung volumes and capacities	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
Reference: Mitrea D.R. Human Physiology -Laboratory tests. Sibiu, Techno Media, 2006. ISBN (10) 973-7865-24-3. ISBN (13) 978-973-7865-24-3		

9. Discipline's content corroboration with the expectations of the epistemic community representatives, of the professional associations and of the representative employers that are related to the program

In order to systematize the course content and to optimize the education process, the officials of the discipline discussed with the members of the Romanian Society of Physiology and of the Dentists College. Also, officials have carried professional discussions exchange with specialists, with members of other dental schools, and with management of the faculty. The meetings have tried to identify the needs and expectations of future employers and to coordinate with similar programs that exist in other dental schools. The studied concepts comply with regulations and are consistent with the national curriculum for preclinical dentistry.

10. Evaluation

Activity type	10.1. Evaluation criteria	10.2. Evaluation methods	10.3. Percentage from final mark
10.4. lecture	- in accordance with the educational objectives	multiple choice questions open questions	80 %
10.5. practical workings	- in accordance with the educational objectives of practical workings	Practical examination	10%
10.6 activity during the semester	**A.** -constant preparation during the semester -correlation between the theoretical concepts and clinical applications	Weekly tests Seminars	5% 5%
10.7. Minimum standard of performance			
The students who do not pass the practical exam are not allowed to perform the theoretic exam. To pass the practical exam, the students have to know at least the normal values of the physiological constant parameters and to perform the laboratory tests. To pass the theoretical exam, the students have to know the basic notions of the mechanisms presented during lectures and to speak an adequate medical language.			

PHYSIOLOGY OF THE ORO-FACIAL SYSTEM

1. Program information

1.1. Higher Education Institution	"Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Department 2- Functional Sciences
1.4. Study domain	Medicine
1.5. Study cycle	Licence
1.6. Study program	Dental Medicine -English Section
1.6. Competence	Doctor -Physician Dental Medicine (Dentistry)
1.7. Education system	Full-time learning

2. Discipline information

2.1. Discipline name	Physiology of the Oro-Facial System						
2.2. Lecture titular	Associate Professor Dr. Teodora Mocan						
2.3. Practical activity titular	Associate Professor Dr. Teodora Mocan Lecturer. Dr. Alexandra Sevastre-Berghian Assistant Professor.. Dr. Cristina Olănescu-Vaida-Voevod Assistant Professor.. Dr. Teodora-Larisa Florian						
2.4. Year of study	I	2.5. Semester	II	2.6. Evaluation type	CE (cumulative evaluation) Theoretical examination+ Practical examination	2.7. Discipline regime	FD MD

3. Total time estimation (didactic activity in hours per semester)

3.1. Number of hours per week	4	From which: 3.2 lecture	4	3.3. practical workings	2
3.4. Total hours per semester	56	From which: 3.5 lecture	28	3.6. practical workings	28
Time distribution					hours
3.4.1. Learning using books, lecture support, references and notes					30
3.4.2. Supplementary documentation in library, on electronic platforms					14
3.4.3. Training for seminars/laboratory activities/projects/tasks/essays/portfolios					18
3.4.4. Tutor					2
3.4.5. Examinations					2
3.4.6. Other activities					-
3.7. Total number of hours for individual study	64				
3.8. Total number of hours per semester	120				
3.9. Credits number	4				

4. Preconditions:

4.1. curriculum	-
4.2. competence	-

5. Conditions:

5.1. lecture	• In amphitheatre, with video projection • The students are not allowed to enter the amphitheatre with turned on mobile phones. The discussions among the students that can disturb the educational process, are not allowed. The students are not allowed to leave the room to talk at the phone. • Eating, drinking of any king of food and fluids are forbidden • The students' delays are not tolerated because they disturb the educational process
5.2. practical workings	• In laboratory rooms with, the specific material • The students have to wear white coats • An individual portfolio must be completed by each student • The laboratory tests' results must be noted in the students notebook, that will be signed by the teacher of the students group

6. Specific cumulated competences:

Professional competences	• Ability in adequate utilization of the medical terminology • Acquire of the practical experience necessary for utilization of the laboratory instruments, to investigate some fundamental physiological mechanisms, and to test the studied clinical parameters • Ability to interpret the laboratory tests • Ability to correctly interpret the results of scientific studies • Ability to efficiently use the medical sources
Transversal competences	• Ability to use the studied notions in new conditions • Ability to make correlations among the studied notions at different disciplines • Ability to efficiently communicate in a team • Concern for professional mastery through training of the critical thinking abilities • Ability to use digital resources for medical data • Acquire the interest for the own professional development

7. Disciplines objectives (resulted from the specific cumulated competences)

7.1. General objectives	• Clearing up and understanding of some biological mechanisms of high complexity and difficulty • Functional exploration of body's systems • Development of observation sense and of the critical thinking, that are essential for the future's medic

7.2. Specific objectives	• The course aims the study of the orofacial system physiology and the structures with which this system is connected. It is focused on the physiology of salivary secretion, of chewing, swallowing, phonation and of the temporomandibular joint. Also, the defense mechanisms of the oral cavity will be explained. Furthermore, topics that are related and influence the physiology of the orofacial system such as phosphate and glucose homeostasis, growth physiology, somesthesia and orofacial pain are to be detailed. Finally, during the course the students will explore other related topics: the sense of taste and smell and peripheral segments of other sensory systems at the level of the cephalic end. • Seminars and practical activities have the objective to deepen the concepts presented during the lectures and to study the most important evaluation tests involved in the physiology and pathology of the orofacial system. • Another aim is to use the equipment and the laboratory instruments in order to learn the physiological mechanisms. • To analyze the bibliographic data

8. Contents

8.1. Lecture	Teaching methods	Observations
1. Oro-facial system: structure and physiology. Physiology of the oral cavity. Saliva: physical and chemical properties,composition. Salivary pH. Salivary buffer systems.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
2. The mechanism of saliva secretion. Principles of enzymes, ions and waters secretion. The regulation of saliva secretion.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
3. The functions of saliva. Hormones secreted by the digestive system: salivary hormones. Defense reactions in the oral cavity. Salivary immunoglobulins.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
4 Teeth physiology. Temporo-mandibular joint physiology.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
5. Phonation	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
6. Mastication. General principles of digestive motility. The physiology of the mastication. The regulation of mastication. Stretch reflex in the masticatory muscles.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations

7. Swallowing. The regulation of swallowing.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
8. The roles of the cephalic phase in the regulation of the digestive system. Regulation of food and water intake. Hunger and thirst. Dietary balance.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
9. Vomiting. The reflex of cough and sneezing.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
10. The sense of taste. The sense of smell.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
11. Growth physiology. Growth hormone. The effects of thyroid hormones. The effects of the sexual hormones.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
12. The effects of insulin. The homeostasis of glycaemia. Glucocorticoid hormones.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
13. Calcium and phosphate equilibrium. The roles of the calcium. Calcium absorption. Vitamin D and its metabolism products. Parathormon. Calcitonin	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
14. Pain. Algoreceptors. Visceral pain. Referred pain. Dental pain. Pain inhibition and modulation.	Lecture, Systematic Speech, Conversation, Problem solving	Oral and Power Point Presentations
References: Bibliography: Marieb EN, Hoehn K, Anatomy and physiology, Pearson, 2013. Despopoulos A, Silbernagl S. Color atlas of physiology, Thieme, 2003. Widmaier EP, Raff H, Strang KT, Vander's Human physiology The mechanisms of body function, McGraw-Hill, 2014. Fox I, Human physiology, McGraw-Hill, 2011. Tortora G, Derrikson B, Principles of anatomy and physiology, John Wiley&Sons Inc, 2009. Dee Unglaub Silverthorn, Human physiology: An integrated approach, Pearson, 2013. Guyton AC, Hall JE, Textbook of medical physiology, Elsevier, 2006. Escot-Stump S, Mahan LK, Krause's Food nutrition and therapy, Elsevier, 2007. Suciu S. Physiology of the Orofacial System, Clusium, 2017.		
8.2. Practical workings	Teaching-Learning Methods	Observations
1. Salivary pH. Salivary buffer systems.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving

2. Microscopic examination of the saliva.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
3. Identification of mucus and salivary electrolytes (phosphates, thiocyanate).	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
4. Calcium identification in saliva. The roles of the calcium in the oral cavity.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
5. Ptyalin dosage.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
6. Effect of high temperature on ptyalin. The influence of salivary pH on amylase activity.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
7. Gastric acidity measuring	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
8. Dietary balances. Applications. Basal metabolism evaluation.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
9. Miotatic reflexes. The mastication reflex.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
10. EMG. Study of the skeletal muscle contraction.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
11. Reflex areas. The ocular-cardiac reflex.	Interactive Systematic	Performing of

	Speech, Problem Solving, Demo, Individual Practical Activity	Laboratory Tests, Data Interpretation, Problem Solving
12 The oral glucose tolerance test.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
13. Hypocalcemia tetany.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
14. The exploration of the sensitivity: pain, touch and temperature.	Interactive Systematic Speech, Problem Solving, Demo, Individual Practical Activity	Performing of Laboratory Tests, Data Interpretation, Problem Solving
Reference: Mitrea D.R. Human Physiology -Laboratory tests. Sibiu, Techno Media, 2006. ISBN (10) 973-7865-24-3. ISBN (13) 978-973-7865-24-3		

9. Discipline's content corroboration with the expectations of the epistemic community representatives, of the professional associations and of the representative employers that are related to the program

In order to systematize the course content and to optimize the education process, the officials of the discipline discussed with the members of the Romanian Society of Physiology and of the Dentists College. Also, officials have carried professional discussions exchange with specialists, with members of other dental schools, and with management of the faculty. The meetings have tried to identify the needs and expectations of future employers and to coordinate with similar programs that exist in other dental schools. The studied concepts comply with regulations and are consistent with the national curriculum for preclinical dentistry.

10. Evaluation

Activity type	10.1. Evaluation criteria	10.2. Evaluation methods	10.3. Percentage from final mark
10.4. lecture	- in accordance with the educational objectives	multiple choice questions open questions	80 %
10.5. practical workings	- in accordance with the educational objectives of practical workings	practical examination	10%
10.6. activity during the	**B.** -constant preparation	Weekly tests	5%

semester	during the semester -correlation between the theoretical concepts and clinical applications	Seminars	5%
10.7. Minimum standard of performance			
The students who do not pass the practical exam are not allowed to perform the theoretic exam. To pass the practical exam, the students have to know at least the normal values of the physiological constant parameters and to perform the laboratory tests. To pass the theoretical exam, the students have to know the basic notions of the mechanisms presented during lectures and to speak an adequate medical language.			

MORPHOLOGY AND FUNCTION OF THE ORAL SYSTEM

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Morphology and function of the oral system					
2.2. Responsible for lecture			Prof dr. Diana Dudea					
2.3. Responsible for practical activity			Associate Prof dr Alexandra Aghiorghiesei Lecturer dr. Alexandra Botos Asist Prof drd Ioana Vlas					
2.4. Year of study	1	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	3.2. Course	2	3.3. Practical Activity	4
3.4. Total hours in the curriculum	84	3.5. Course	28	3.6. Practical activity	56
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					30
Individual study using on-line platforms, field research					12
Preparing seminars/Laboratory activities, homework, projects,					10

portfolios, essays	
Tutoring	4
Examination/ semester	10
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	66
3.9. Total hours/semester	150
3.10. Number of credits	6

4. Prerequisites (if needed)

4.1. Curriculum	Head and Neck Anatomy and Phisiology
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Attendance 70% Amphitheater with projection system
5.2. For practical activities	Compulsory attendance of 100% Appropriate gown - protective gown Required items at the beginning of the semester Completion by the student of the drawing portfolio and practical modeling activities, according to the theme Laboratories with facilities specific to practical activities

6. Acquired specific competences

Professional competences	The ability to use the appropriate terminology appropriately and in the context • Knowledge of morphology notions of permanent human teeth and structure of odonto-periodontal unit; • Knowledge of the morphology of the temporary and permanent dental arcades, appreciated according to the developmental periods; • Getting the notion of normal dental occlusion, for temporary and permanent arches; • Acquiring general information about mandibular-maxillary reference positions: centric relationship, posture position, maximum intercuspation; • Development of interdisciplinary synthesis capacity of the notions of anatomy, physiology, histology in order to know and understand the main functions of the dento-maxillary system: mastication, swallowing, phonation, physiognomic function. -Improving the rendering capacity, through modeling, of the theoretical knowledge of morphology of teeth and dental arches; • Acquiring the necessary practical experience for the use of specialized instruments for the execution of dental morphology modeling steps using different materials as a substrate.
Transversal competences	Using assimilated notions in new contexts; • Applying the theoretical notions in the practical activity; • Establishing interdisciplinary correlations within the studied domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Providing information on the morphology and normal functionality of teeth, dental arches, oral cavity and dento-maxillary system.
7.2. Specific objectives	Acquiring the notions of morphology of the permanent human teeth and the structure of the odonto-periodontal unit. • Introduction of the morphology notions of temporary and permanent dental arches, according to developmental periods. • Acquiring of the notion of normal dental occlusion, both at the temporary and permanent arches, as well as mandibular-maxillary reference positions: the centric relationship, posture position, maximum intercuspation. In the second part of the course • Theoretical study of the main functions of the dento-maxillary system: mastication, phonation, physiognomic function. • Detailed study of morphology of temporary and permanent human teeth by: assimilation of theoretical notions, drawing of the surfaces of permanent human teeth, modeling of representative teeth within each dental group, direct observation on extracted teeth, study of real and virtual models Modeling in wax of the functional occlusal contacts, aiming to develop the practical skills and to apply practically the theoretical information • Model studies to analyze the characteristics of temporary and permanent dental arches. • Improving the ability to reproduce, through modeling, the theoretical knowledge of morphology of teeth and dental arches • Exercise of synthesis and bibliographic documentation

8. Content

a.Lecture	Teaching methods	Observations
1. Dento-maxillary system - definition, components. Dental arches - generalities, tooth notation systems.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
2. Dental unit - general notions of tooth morphology. The crown and the root from the clinical and anatomical point of view. Dental surfaces, dental surface division. Common morphological features of permanent teeth.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
3.Incisors and canines. Similarities and differences in the anatomy of the teeth from the frontal group.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
4.Similarities and differences in the anatomy of the premolars.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
5.Common and differential morphological features of teeth in the posterior group. Molars	Lecture, interactive exposure	Oral exposures, Power-Point presentations

6. The odonton – histological components – the odontium (enamel, dentin, dental pulp). Overview with clinical applications.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
7. The periodontium (gingival fibromucosa, periodontal space, alveolar bone, cementum).The function of the dental organ – forces acting upon the odonton. Mechanisms for receiving and neutralization the forces. Overview with clinical applications.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
8. Primary dental arches. Stages of evolution, Functions of temporary arcades. Morphological particularities of primary teeth compared to permanent teeth	Lecture, interactive exposure	Oral exposures, Power-Point presentations
9. Mixed Dentition. Permanent Dentition. Permanent dental arches features: shape, contact areas, teeth inclination, occlusion curves.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
10. Normal static occlusion relationship. Supporting cusps.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
11. Morphology of the endodontic space. Pulp cavity and pulp channels. Overview with clinical applications.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
12. Muscles of the dento-maxillary system (Individual study). Temporo-mandibular Joint (individual study). Mandibulo-maxillary reference positions: postural position, centric relation, maximum intercuspation.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
13. Mandibular movements. Classification of mandibular movements. Analysis of the mandibular movements. Functions of the dento-maxillary system.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
14. Classification of the functions. Mastication. Stages of mastication. Masticatory cycle. Masticatory stereotype. Masticatory efficiency. The phonetic function. The Physionomic function	Lecture, interactive exposure	Oral exposures, Power-Point presentations
8.2 Practical activity		
1.Introduction, generalities. Types of dentitions, dental arches and teeth. Dental surfaces, description plane of a tooth. Carving plane of a tooth	Power-Point presentations	Exercises to recognize and describe teeth on real and virtual support (software dedicated to the learning of dental morphology)
2.Maxillary incisors. Description, design. Carving of the upper	Exercises to	Exercises on

central incisor	recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	drawing and carving
3. Maxillary incisors. Carving of the upper central incisor- part II	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and carving
4.Mandibular incisors- model in wax	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and waxing
5.Canines –carving of the maxillary canine	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and carving

6. Revision of the frontal teeth group	Synthesis on anterior teeth morphology-. Notes on extracted teeth of individual and dental group characteristics	Test
7.Maxillary premolars-carving in plaster	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and carving
8.Mandibular premolars- modelling in wax	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and waxing
9.Revision of premolars	Synthesis on premolars morphology-. Notes on extracted teeth of individual and dental group characteristics	Exercises on drawing and waxing
10, 11, 12- Functional waxing of the occlusal surface- Maxillary molars 11.Occlusion	Exercises to recognize and describe teeth on real and virtual support (computerized techniques)	Exercises on drawing and waxing in the simulation lab

	Modeling demonstrations transmitted via multi-media system	
13. Mandibular molars	Exercises to recognize and describe teeth on real and virtual support (computerized techniques) Modeling demonstrations transmitted via multi-media system	Exercises on drawing and waxing
14. General revision	Synthesis on lateral teeth morphology-. Discussions on extracted teeth of individual and dental group characteristics	Teste

References

Scheid RC, Weiss G. Woelfel`s Dental Anatomy. Eight ed, Wolters Kluwer (Lippicott Williams @Wilkins, Philadelphia 2012

Scheid R.C, Weiss G,- Woelfel`s Dental anatomy, 9th Edition, Williams & Wilkins, 2017

Brandt R.W., Isselhard D.E.- Anatomy of Orofacial Structures – Enhanced Seventh edition. Mosby, St.Loius, 2013

Okeson J.P.- Management of Temporomandibular Disorders and Occlusion. 7th edition. Mosby, St. Louis, 2013

Nelson SJ, Ash M.M. Wheeler's dental anatomy, Physiology and occlusion, 9th Edition, Philadelphia, W.B.Sanders, Elsevier 2010

Nelson SJ, Ash M.M. Wheeler's dental anatomy, Physiology and occlusion, 10th Edition, Philadelphia, W.B.Sanders, Elsevier 2015

Diana Dudea, Dorin Borzea- Morfologia dinţilor şi a arcadelor dentare. Casa Cărţii de ştiinţă, Cluj, 2001.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work;

• Permanent participation of the members of the chair at scientific events, forms of continuous

medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to keep the theoretical and practical information introduced in the structure of the discipline at a high level of actuality. • Maintaining contacts with other teachers in the field, titled in other universities, to coordinate the content taught with other similar programs within other universities. • The studied concepts are in line with the actual regulations and are compatible with the activities carried out at national level in the preclinical dentistry segment.

10.Evaluation

Activity type	10.2Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization	Exam with multiple choice questions and essays	50%
10.5. Practical Activity	Examination of the theoretical knowledge and practical abilities	Practical exam	25%
10.6. Activity during semester	Continuity of preparation during semester	Tests	25%
10.7. Minimum performance standard			
Acquiring the main notions of Morphology and the normal function of ADM • Morphology of permanent human teeth, common and differential features of dental groups • Morphological features of temporary and permanent dental arches • Static occlusion relations • Mandibulo-maxillary reference positions • Notions on the structure of dento-periodontal unit • The main functions of oral system			

MODERN LANGUAGES

1. **Information about the study program**

1.1. Institution for graduate and postgraduate studies: ,,Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty: Dental Medicine
1.3. Academic Department: Medical Education -Modern Languages
1.4. Field of study: Medicine
1.5. Academic degree: Undergraduate studies
1.6. Program of study: Dental Medicine in English
1.7. Qualification: Doctor -Dentist
1.8. Mode of study: Full-time

2. **Information about the course**

2.1. Course: ROMANIAN LANGUAGE
2.2. Course instructor: -
2.3. Laboratory instructor: Assistant Professor Cristina Gogâţă
2.4. Year: 1; *2.5. Semester:* I / II; *2.6. Evaluation type:* exam; *2.7. Course type:* Specialty discipline; Compulsory discipline

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week: 4h; *3.2. Lecture:* 0h; *3.3. Laboratory activity:* 4h;
3.4. Total hours in the curriculum: 112h; *3.5. Lecture:* 0h; *3.6. Laboratory activity:* 112h;
3.4. Distribution of time needed (semester I and II)
a. Study using text books, lecture notes, bibliography: 4h;
b. Individual library study, on-line platforms, field research: 2h;
c. Preparing seminars/Laboratory activities, homework, projects, portfolios and essays: 3h;
d. Tutoring: 1h
e. Examination/semester: 4h;
f. Other activities: 5h;
3.7. Total hours of individual study (a+b+c+d): 19h
3.8. Total hours/semester: 131;
3.9. Number of credits: 2

4. Prerequisites (if needed)

4.1. Curriculum: -
4.2. Competences: -

5. Requisites (if applicable)

5.1. For lectures: -
5.2. For laboratory sessions: To respect the rules and regulations for practical activities

6. Acquired specific competences

6.1. Professional competences
- The ability to properly employ Romanian (listening, reading, speaking, writing) in order to communicate in general contexts, both academic and medical
- The ability to use medical terms specific to various fields

6.2. Transversal competences
- The ability to employ prior knowledge of Romanian in medical and academic activities in order to communicate adequately in Romanian
- The ability to make interdisciplinary connections in the fields of study

7. Course objectives (derived from the acquired specific competences)

7.1. General objectives:
- Development of competences general Romanian and academic medical language

7.2. Specific objectives: At the end of the seminar, the learner is capable:
- To introduce himself/ herself and to speak about himself/ herself
- To ask and to offer information in familiar contexts
- To describe a person or an object using adjectives
- To express preference, agreement and disagreement
- To speak about daily activities

- To name the parts of the human body
- To express pain
- To speak about his/ her family

8. Content

a. Lecture

Teaching methods: Interactive teaching and multimedia support; Specific exercises and activities (individual, pairs or groups) aiming to develop the main competences in Romanian (speaking, listening, reading, and writing)

Content

1. I am a student at the University of Medicine and Pharmacy in Cluj-Napoca! Romania - general presentation (neighbors, main cities, landscapes). The alphabet. Specific sounds and sound groups. Nationalities, greetings and introducing oneself. The verbs to be and to have (affirmative and negative).
2. The time. Expressing the date and the hour. Days of the week, months of the year, seasons. The weather forecast. The cardinal numbers.
3. What are you doing today? Daily activities. Verb groups (I-IV).
4. What are you doing this week? The weekly schedule. Means of transport. Frequency adverbs. Irregular verbs. 2nd conjugation verbs.
5. Practical Romanian. At the bank. Filling a form. Reading/ understanding a bill (gas, electricity, internet etc.).
6. What is your career choice? Professions. Activities. Specific goals. The noun (gender, number).
7. Let's go to the market! Food produce (fruit, vegetables, dairy products, etc.). The definite article.
8. Let's go to the restaurant! Orientation. In the cab. At the restaurant. The menu. The indefinite article.
9. Where do you live? The house. Objects in the house. Inside orientation -prepositions.
10. What do you like to wear? Clothes. The adjective. Colors.
11. How was your holiday? The past tense simple. Expressions with the past tense simple. The verb to like (present, past). Writing a postcard.
12. What are you doing today? How was your day? The daily schedule. Reflexive verbs with pronouns in the Accusative case. Writing a letter.
13. The human body (external parts). Giving a physical and moral description of a person. The adjective - revision.
14. At the hospital. The medical and auxiliary personnel. The subjunctive mood.
15. What do I have to do, doctor? Giving advice. Impersonal verb expressions that require the subjunctive.
16. My family. Presentation. Family members and relatives. The possessive adjective. The personal pronoun in the Genitive case.

Bibliography:

1. Bejan, D. Gramatica limbii romane. IIIeme Edition, Cluj, Ed. Echinox, 2001.
2. Brancu, G. Ionescu A., Saramandu M., Limba Romana. Manual pentru studentii straini. IVeme Edition, Ed. Universitatii din Bucuresti, 1996.
3. Dorobat, A., Fotea, M. Limba romana de baza. Iasi, Ed. Institutul European, 1999
4. Platon, E., Sonea, I., Vilcu, D. Manual de limba romana ca limba straina (RLS). A 1-A2. Cluj-Napoca, Casa Cartii de Stiinta, 2012.
5. Pop, L. Romana cu sau fara profesor. Verne Edition, Cluj-Napoca, Ed. Echinox, 2003

9. Connecting the course content with the demands of the epistemic community, profession al associations, and representative employers in the field

Collaboration with teachers specialized in medical disciplines in order to identify students' needs and to adjust the contents of the seminar. Teachers' participation at scientific manifestations and professional formation classes in order to adjust teaching methods to the actual communication needs in the academic medical field.

10. Evaluation

Activity type	*10.1. Evaluation criteria*	*10.2. Evaluation methods*	*10.3. Percent of final grade*
10.4.Lectures	-	-	-
10.5. Laboratory/ Seminar	Evaluation of written communication abilities Evaluation of oral communication skills	Written test Oral test	33% 33%
10.6. Activity during 2nd semester	Active participation in seminars, portfolio for the seminar	Evaluation of the activity during seminars and of the individual portfolio	33%
10.7.Minimum performance standard			
Competences in Romanian and competences in general and medical communication allowing general, academic and medical communication at the A 1 level according to the Common European Framework of Reference for Languages.			

SPORTS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medical Education
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Physical Education and Sport					
2.2. Responsible for lecture								
2.3. Responsible for practical activity			Conf. Dr. Mihai Ludovic Kiss Şef Lucr. Dr. Suciu Cornelia					
2.4. Year of study	1	2.5. Semester	1-2	2.6. Form of evaluation	ES (summative evaluation) + test	2.7. Course type	Content	DC
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	2+1	3.2. Course		3.3. Practical Activity	2+1
3.4. Total hours in the curriculum	42	3.5. Course		3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					
Individual study using on-line platforms, field research					
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					
Tutoring					
Examination/ semester					2
Other activities					
3.8. Total hours of individual study (a+b+c+d)					
3.9. Total hours/semester					42
3.10. Number of credits					2

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Physical and motor skills acquired in high school

5. Requisites (if applicable)

5.1. For lectures	The use of mobile phone is not allowed and the consumption of food and beverages is forbidden
5.2. For practical activities	Each student must have specific equipment for the activity

6. Acquired specific competences

Professional competences	- Modern design training on lifestyle optimization based on the systematic practice of physical exercise

Transversal competences	- Strengthening systematic practice of physical exercise capacity ("Mens sana in corpore sano") - Knowledge of issues on the prevention and correction of deficient body attitude and traumatic recovery - Knowledge about the specific terminology of sport - Development and deepening of artistic sense

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Maintaining a better form of health used to practice systematic physical exercise
7.2. Specific objectives	After the course students will be able to apply the skills

8. Content

Lecture	Teaching methods	Observations
Bibliography		

Practical Activities	Teaching Methods	Activity to be done by students
1. Physical Education and Sport	Lecture, explanation, demonstration	
2. Other sports (basketball, volleyball, volleyball, football, ballroom dancing, aerobics, bodybuilding fitness-, tennis, karate, skiing, chess, badminton)	Lecture, explanation, demonstration	
3. Medical Gymnastics Elements	Lecture, explanation, demonstration	
Bibliography: - M. Kiss, Caiet de lucrări practice: Dans de societate, 2012 - M. Kiss, Caiet de lucrări practice: Baschet, 2012 - M. Kiss, Caiet de lucrări practice: Culturism - Fitness, 2013 - C. Suciu, Îndreptar de lucrări practico-metodice, 2013		

- Bocu T. Activitatea fizică în viaţa omului contemporan. Editura Casa Cărţii de Ştiinţă 2007 - Regulamentele ramurilor de sport practicate

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Discussions with other teachers in other universities on new methodologies	

10. Evaluation

Activity type	10.3 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture			
10.5. Practical Activity	according to specific objectives	Practical test	80% (20% practical test, 10% summative evaluation)
10.6. Activity during semester			
10.7. Minimum performance standard			
Key messages at the end of the course			

MEDICAL FIRST AID

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Radiology
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English

1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**First Aid**					
2.2. Responsible for lecture			**Şef de lucrări Dr. Claudiu Zdrehuş**					
2.3. Responsible for practical activity			**Şef de lucrări Dr. Claudiu Zdrehuş** **Asist Univ Dr. Caius Breazu**					
2.4. Year of study	1	2.5. Semester	1,2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content **Mandatory**	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**3**	3.2. Course	**1**	3.3. Practical Activity	2
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					12
Individual study using on-line platforms, field research					6
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					3
Tutoring					1
Examination/ semester					2
Other activities					1
3.8. Total hours of individual study (a+b+c+d)				22	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Biology, Anatomy and physiology
4.2. Competences	Knowledges of human biology, anatomy and physiology

5. Requisites (if applicable)

5.1. For lectures	
5.2. For practical activities	

6. Acquired specific competences

Professional competences	First Aid and medical assistance in emergency medicine
Transversal competences	Knowledge's and practical skills which are necessary for the management of emergencies

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Introducing the concept of emergency medicine and medical assistance
7.2. Specific objectives	Introducing theoretical knowledge's and practical skills which are necessary for the management of emergencies

8. Content

Lecture	Teaching methods	Observations
1. Protection measures in case of emergencies. Call for help and inform about the possible danger.	Oral presentation power point, video presentation	
2. First aid for a patient who is unconscious but is breathing spontaneously	Oral presentation power point, video presentation	
3. Cardio-pulmonary resuscitation (BLS) I **4. Cardio-pulmonary resuscitation (CPR) in children** **5. Paediatric foreign body airway obstruction** **6. First aid in special situations** **Bleeding, Shock, Heat stroke, Seizures (convulsions), Open wounds** **7. First aid in the case of burned patient** **8. First aid in the case of hypothermia** **9. First aid in case of aspiration and drowning**	Oral presentation power point, video presentation Oral presentation power point, video presentation Oral presentation power point, video	

10. Hanging Injuries and Strangulation **11. First aid in the case of animal bites** **First aid in case of insect bites and stings** **12. First aid in case of trauma patient** **13. First aid in a road traffic accident** **14. First aid in the case of overdose and poisoning**	presentation Oral presentation power point, video presentation	

Bibliography

1. Nolan J. European Resuscitation Council Guidelines for Resuscitation 2015
2. Irwin RS. Rippe J M Manual of intensive care medicine, 5th Edition, Lippincott Williams & Wilkins, 2016
3. www.emedicine.com/emerg/index.shtml
4. E-support of lectures

Practical Activities	Teaching Methods	Activity to be done by students
1. **Clearing and maintaining the airway. Airway Management:** clearing of the upper airways, head extension, anterior subluxation of the mandible, triple Safar manouver, Oro and nasopharyngean tubes, Heimlich manouver	Practical lessons, virtual simulations, case discussions, practice on manikines	Extension of the head, Esmach maneuver, Saffar maneuver, use of naso and oropharyngean airway on manikin, Heimlich maneuver
2. **Ventilation (Mouth to mouth, mouth to nose, AMBU bag and mask ventilation),** indications, technique, complications	Practical lessons, virtual simulations, case discussions, practice on manikines	Mouth to mouth, mouth to nose, AMBU bag and mask ventilation on manikin
3. **External cardiac massage** parameters, technique, complications	Practical lessons, virtual simulations,	External cardiac massage on

	case discussions, practice on manikines	manikin
4. **Rautek manouver (first aid for road traffic accident) immobilisation of the cervical spine:** indications, cautions, technique, material	Practical lessons, virtual simulations, case discussions, practice on manikines	Rautek maneuver, use of a collar for imobilisation of the cervical spine
5. **Positioning the comatose patient :** waiting and transport position, indications and technique	Practical lessons, virtual simulations, case discussions, practice on manikines	Positioning the comatose patient, safety position
6. **Peripheral venous access and establishing an infusion set:** indications, material, technique, complications. **Intramuscular and subcutaneous injections**	Practical lessons, virtual simulations, case discussions, practice on manikines	Peripheral venous access, IM, SC injections and establishing an infusion set
7. **Recapitulation. Team work for CPR scenario**	Practical lessons, virtual simulations, case discussions, practice on manikines	Recapitulation of practical techniques and skills, team work scenario

Bibliography:

1. Nolan J. European Resuscitation Council Guidelines for Resuscitation 2015
2. Irwin RS. Rippe J M Manual of intensive care medicine, 5th Edition, Lippincott Williams & Wilkins, 2016
3. www.emedicine.com/emerg/index.shtml
4. E-support of lectures

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Disscutions with team members of SMURD, ambulance services and UPU members

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Knowledge's of lectures content	Theory exam – written, multiple choice questions	**50%**
10.5. Practical Activity	Capability of performing techniques from practical lessons		**50%**
10.6. Activity during semester			
10.7. Minimum performance standard mark 5			

HISTORY OF MEDICINE

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medical Education
1.4. Domain of study	Health
1.5. Level of course	License (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title	History of Medicine
2.2. Responsible for lecture	Prof. Dr. Cristian Bârsu

2.3. Responsible for practical activity			---					
2.4. Year of study	1	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	1	3.2. Course	1	3.3. Practical Activity	_
3.4. Total hours in the curriculum	14	3.5. Course	14	3.6. Practical activity	_
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					0,50
Individual study using on-line platforms, field research					0,50
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					0,50
Tutoring					0,50
Examination/ semester					0,50
Other activities					
3.8. Total hours of individual study (a+b+c+d)					2,50
3.9. Total hours/semester					50
3.10. Number of credits					2

4. Prerequisites (if needed)

4.1. Curriculum	Basic knowledge of general history, learned during pre-university studies.
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Students are not allowed to use mobile phones during lectures. Also, students are not allowed to consume food or juices / coffee during lectures. Students must not delay the course so they do not disturb the course.
5.2. For practical activities	_

6. Acquired specific competences

Professional competences	- To understand the current level of dental medicine, based on the secular evolution of this field. - To gain a proper use of the fundamental concepts of Medical History in

	communications. - To be able to use informative sources effectively and to distinguish official information from other sources of information online. - Identifying medical errors caused by missing notions in the History of Dental Medicine.
Transversal competences	- Understanding the notions of dentistry taught in different subjects through the integrative perspective of the History of Medicine. - Instrumental - applicative competences: the correct application of some fundamental concepts of the History of Medicine in medical communication.

7. Course objectives (derived from the acquired specific competences)

7.1. General objectives	∗ To know the most important achievements in the history of dental medicine and the personalities that marked its evolution. ∗ To know the basic terminology of the History of Medicine, especially of dental medicine. ∗ To obtain the correct understanding of the correlations between dental medicine and different sciences and arts. ∗ To acquire the correct information on medical culture, especially in the field of dental medicine.
7.2. Specific objectives	• To create the notional basis needed to understand the different aspects of the current stage of dentistry, based on its evolution of the past centuries. • To get the possibility for having the overall assessment of the evolution of dental techniques in the following decades.

8. Content

Lecture	Teaching methods	Observations
1.The Educational Objectives of the History of Medicine. Connections of dental medicine with different sciences and arts.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
2. Romanian Medicine – European Medicine.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
3. Medicine in primitive commune. First empirical	Course, systematic	Oral presentation,

attempts to treat dental diseases.	presentation, conversation	associated with presentation in PowerPoint.
4. Medicine and dental practices in ancient Egypt and in Mesopotamia.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
5. Medicine and dentistry in ancient Greece. Greek-Roman medicine. Celsus's buco-maxillo-facial surgical techniques.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
6. Byzantine, Arabic and Western Europe in the early Middle Ages. Medieval dental instruments.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
7. Medicine in the Middle Ages and in the Renaissance. The guilds of the barber surgeons. Dentistry – part of medieval surgery. Ambroise Paré – his contribution in conservative and surgical dentistry.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
8. Dentistry in the 18th Century. Pierre Fauchard and the training of modern dentistry. Dental schools in France, Germany and England in the 18th century.	Course, systematic presentation, conversation	Oral presentation, associated with presentation in PowerPoint.
9. The foundation of dental prosthetics in the 19th century.	Course, systematic presentation, conversation	Oral presentation associated with presentation in PowerPoint.
10.The progress of dentistry in the first half of the 20th century.	Course, systematic presentation, conversation	Oral presentation associated with

		presentation in PowerPoint.
11. The first Romanian dentists. The Romanian dental school. Dr. Gheorghe Bilaşcu and his role in the creation of the first department of dentistry in Romania.	Course, systematic presentation, conversation	Oral presentation associated with presentation in PowerPoint.

Bibliography

1. Barnett R, Kneebone R. L. Crucial Interventions : An Illustrated Treatise on the Principles & Practice of Nineteenth-Century Surgery. Thames & Huston Ltd. [Publ.], London, 2015.

2. Brkić Z, Pavlić V. Periodontology – the historical outline from ancient times until the 20th century. https://pdfs.semanticscholar.org/b033/e1024bb35814e1ed0c085a0e96353d876b38.pdf

3. Morris T. The Mystery of the Exploding Teeth and Other Curiosities from the History of Medicine, Bantam Press, London, 2019.

4. Mount T. Medieval Medicine: Its Mysteries and Science, Amberley Publishing, Chalford, 2016.

5. Taylor J. A. History of Dentistry: A Practical Treatise for the Use of Students and Practitioners, Nabu Press, Charleston, 2013.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

The topics of the courses were chosen according to their importance and after their discussion with the members of the Teaching Council of the Faculty of Dental Medicine in Cluj-Napoca and with the representatives of the College of Dentists in Romania. The recommendations of the Romanian Society for the History of Medicine and of the International Society of Medicine History were also taken into account.

10. Evaluation

Activity type	10.4Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade

10.4. Lecture	According to the course theme.	Written exam.	95 %
10.5. Practical activity	--	--	--
10.6. Activity during semester	Student reports on themes in the course curriculum.		5%
10.7. Minimum performance standard			
- Dental medicine in ancient Greece. - The most important buco-maxillo-facial surgical techniques in Celsus's writings. - The contribution of Ambroise Paré in conservative and surgical dentistry. - Pierre Fauchard's role in modern dentistry.			

MEDICAL INFORMATICS

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medicine – 12th Department – Medical Education
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title	Medical Informatics – Informatics Systems in Stomatology
2.2. Responsible for lecture	Șef Lucr. Dr. Cosmina Ioana Bondor
2.3. Responsible for practical	Șef Lucr. Dr. Cosmina Ioana Bondor

activity			Șef Lucr. Dr. Tudor Călinici					
2.4. Year of study	1	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DC
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					19
Individual study using on-line platforms, field research					9
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					8
Tutoring					-
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				38	
3.9. Total hours/semester				80	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Using PC: internet browsing and editing text-based documents

5. Requisites (if applicable)

5.1. For lectures	Students will not attend classes / practical work with mobile phones open. Also, telephone calls will not be tolerated during the course or practical activities, nor students leaving the classroom to retrieve personal phone calls; It is prohibited consumption of foods and beverages during the course / practical activities No delay for the classroom will be tolerated during the course and practical activities as it proves disruptive to the educational process
5.2. For practical activities	Students will scan the keycard for the access to the discipline IT resources using the computing system specially designed. They will

	use their data authentication (username, password) to log in the discipline network. Students shall comply to the Regulations of the Discipline of Medical Informatics and Biostatistics

6. Acquired specific competences

Professional competences	To know the most common applications of medical informatics and highlight their current impact on health care and medical research. To record medical data using computer To perform descriptive statistics on medical data using computers To perform inference statistics on medical data using computers
Transversal competences	To use computers for communication with patients, colleagues and administrative staff. To use computers for making specific medical presentations: presentation of clinical cases, presenting research results, etc. To use computers for research and continuing medical education.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The aim of the course is to help students to gain basic information about information technologies with applications in dentistry and medicine (birotics, databases, working in networks, storing data, searching information) as well as basic methods of statistics. In addition, students will learn about current technologies and methods in computer science and biostatistics and their impacts on health care practice and research.
7.2. Specific objectives	At the end of the course, students will be able to: • Search medical information in databases such as PubMed, Cohrane etc. • Do paper sheets specific medical field by using the Microsoft Word • To identify the correct type of variables involved in the process of collecting health data • Collecting medical data using Microsoft Excel application • Identify appropriate descriptive measures to present medical data based on the variables type, and present data using Microsoft Excel and Epi Info • Identify in a clinical scenario events and establish their correct theoretical probability • To accurately estimate population parameters different from a sample • Correctly identify the inferential statistical methods and apply them using Microsoft Excel and Epi Info

	• To correctly interpret the results of statistical analyzes and apply them in clinical decisions • To present results using Microsoft Office

8. Content

Lecture	Teaching methods	Observations
Introduction to Medical Informatics. Objectives. Applications. Requirements. Regulations. Applications of Medical Informatics. Medical expert systems. Medical documentation	Lectures, systematic presentation, demonstration	
Introduction in Statistics. Statistical population. Samples. Samples methods. Variables and data. Methods of presentation and representation of statistical data (tables and charts)	Lectures, systematic presentation, demonstration	
Descriptive Statistics. Calculation and interpretation of descriptive parameters	Lectures, systematic presentation, demonstration	
Probabilities. Conditional probability. Random variables. Main probability distributions	Lectures, systematic presentation, demonstration	
Estimators and Confidence Intervals. Estimation of statistical parameters. Estimators and confidence intervals	Lectures, systematic presentation, demonstration	
Statistical Tests. Comparing averages. Chi-Square Test. Analysis of variance ANOVA test. Errors in statistical hypothesis testing.	Lectures, systematic presentation, demonstration	
Correlation and Regression. Correlation coefficients: Scatter diagrams. Ecart product sum. Covariance. Pearson correlation coefficient, Spearman correlation coefficient. Coefficient of determination. Significance tests for Pearson and Spearman coefficients	Lectures, systematic presentation, demonstration	
Information systems in dentistry. Data Security. Security policies and standards	Lectures, systematic presentation,	

	demonstration	
Knowledge Management. Online medical knowledge searching. Journals. Pubmed	Lectures, systematic presentation, demonstration	
Knowledge communication: resources, technology, copyright, presentations, materials for patient information	Lectures, systematic presentation, demonstration	
Data bases. Conceptual models at individual and meta-level. Solutions for informatic systems. Aplications in stomatology	Lectures, systematic presentation, demonstration	
Data complex structures. Image processing. Dicom standard. Applications for image processing in stomatology.	Lectures, systematic presentation, demonstration	
eHealth. Informatics methods and techonologies used in dentistry. Computer applications in dentistry. Telemedicine.	Lectures, systematic presentation, demonstration	
mHealth. Concepts, mobility, data sharing. Medical file for dentistry. Data reports.	Lectures, systematic presentation, demonstration	

Bibliography:

1. Sorana BOLBOACĂ, Horaţiu COLOSI, Tudor DRUGAN, Andrei ACHIMAŞ, Ştefan ŢIGAN, Elements of Medical Informatics and Biostatistics, SRIMA Publishing House, Cluj-Napoca, Romania, 211 pages, 2003, ISBN 973-85285-0-X.
2. Bernard ROSNER, Fundamentals of Biostatistics, any edition.
3. Robert H. RIFFENBURGH, Statistics in Medicine, any edition.

Online course resources:

- Lectures: http://sorana.academicdirect.ro/students.php - English Section

Winter A, Haux R, Ammenwerth E, Brigl B, Hellrung N, Jahn F. Health Information System, Architectures and Strategies. 2nd ed. London: Springer; 2011.

Practical Activities	Teaching Methods	Activity to be done by students
Introduction. Didactical and internal rules and regulations, IDs cards and intranet login, Good practices for the use of the computer network.	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Medical data collection. Working with tables in Excel, Managing data with Microsoft Excel, Working with predefines and user-defined formulas	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Representation of medical data using Excel. Working with Excel graphical representations, Represent medical data using Microsoft Excel charts	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Descriptive statistics. Summarizing data with Microsoft Excel, Using descriptive statistics to summarize medical data	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Descriptive statistical analysis. Making frequency tables using advanced analysis tools, Contingency table analysis. Conducting a descriptive statistical analysis in Microsoft Excel.	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Statistical Inference for quantitative variables. Applying t-test, Chi-square test on contingency tables, Interpretation of results	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Correlation and regression analysis. Recapitulation. Graphical representation of correlation with scatter chart, Interpretation of results	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Internet resources for stomatology. Internet resources evaluation. Patient handouts in Word and in Power Point.	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Google calendar. Qustionnaires with Google Forms. Working in teams of 3-4 students	Systematic presentation, conversation	Working in teams of 3-4 students using dedicated computer software
Databases in Microsoft Access. Applications in	Systematic	Each student completes a

stomatology	presentation, conversation	portfolio of practical works using dedicated computer software
Project (Medical research from protocol, data analysis to results report)	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Project (Medical research from protocol, data analysis to results report)	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Recapitulation	Systematic presentation, conversation	Each student completes a portfolio of practical works using dedicated computer software
Practical exam		

Bibliography:

Practical activities of Medical Informatics – Informatics Systems in Stomatology [online] 2002-2019. Available from URL: https://www.info.umfcluj.ro/ro/did-ro/biostat-ro/md2ro

https://web.umfcluj.ro/moodle/

http://www.info.umfcluj.ro/en/educatie-uk/infomed-uk/md1uk/itemlist/category/226-lab-md-en
http://sorana.academicdirect.ro/students.php

Kim JS, Dailey R. Biostatistics for oral healthcare. Ames, Iowa: Blackwell Munksgaard; 2008.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

In order to update the educational content and choice of teaching / learning, the instructors of the Discipline had meetings with specialists, researchers, PhD students, and representatives of organizations involved in promoting various techniques of medical education (AMEE, Prime Fundation). Were discussed these issues with other teachers in the field, instructors in other medical schools in the country and abroad as well. Material taught is consistent with the needs of substantiating of the Medical Scientific Research Methodology Discipline and specific requirements of the Doctoral School of Pharmacy Cluj Napoca

10.Evaluation

Activity type	10.5Evaluation criteria	10.2. Evaluation	10.3 Percent

			from the final grade
10.4. Lecture	consistent with the educational goals	Exam with 35 multiple response questions	70%
10.5. Practical Activity	consistent with the educational goals	Solving scenario consisting in data processing and presentation of the results	30%
10.6. Activity during semester			
10.7. Minimum performance standard			
Key messages from the end of each course			

HISTOLOGY OF ORAL CAVITY

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Histology
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title	Histology of Oral Cavity and Histology of the Systems

2.2. Responsible for lecture			Associate Professor Boşca Adina Bianca DMD, PhD					
2.3. Responsible for practical activity			Associate Professor Boşca Adina Bianca DMD, PhD Lecturer Constantin Anne Marie MD, PhD Assistant Professor Coneac Andrei MD, PhD					
2.4. Year of study	I	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam+ individual portfolios	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					20
Individual study using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					3
Tutoring					-
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				30	
3.9. Total hours/semester				100	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	➢ Attendance to lectures is mandatory 70%, equivalent to 10 attendances during the semester. ➢ Students are required to turn off their mobile phones and other electronic devices during the lectures, the practical works/labs and the exams. ➢ The access with food or beverages in the classroom is forbidden. ➢ Damaging the furniture, the microscopes or breaking the

	histological slides bring the penalty consisting in the payment of damages. Smoking inside the building is forbidden.
5.2. For practical activities	➢ Attendance to practical works/laboratories is compulsory 100%. ➢ Absences due to medical reasons will be excused based upon the certificate signed by the Dean no later than 7 days. ➢ Unexcused absences must be paid at the UMF cashier based upon the payment order issued by the Histology Department no later than 7 days. ➢ Both excused and unexcused absences must be recovered. Students must negotiate with the professors the make-up of the missed labs. ➢ Recovery of absences can be done during the semester (in labs when revision is planned) or in extra labs (organized for this purpose at the end of the semester). ➢ Students who have unrecovered absences will not be allowed to sit the final exams. ➢ The maximum number of absences (both excused and unexcused but paid, and recovered), is no more than 3 per semester. ➢ Absences above 3 (20% of 14 - the total practical works/labs during the semester) cannot be recovered. ➢ Therefore, students who have more than 3 absences will not be allowed to sit the final exam. ➢ Students will wear medical white laboratory coats, will examine the histological slides under the light microscope and will complete their portfolios.

6. Acquired specific competences

Professional competences	• Ability to properly use the special histology terminology • Ability to correctly use the light microscope • Ability to encompass, to render accurate histological diagnosis based on tissue examination • A fundamental knowledge of the histological structure of the tissues and organs in the human body • Ability to analyze and interpret the microscopic structure of the human tissues and organs • Ability to systematically identify and range the criteria for the histological diagnoses. • Ability to render histological differential diagnoses for the tissues and organs.
Transversal competences	• To demonstrate the interest for the professional performance by the acquirement of a critical reasoning. • To prove the ability to use the digital devices for medical research

	• To achieve communicating abilities

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Students will be able to use their theoretical knowledge in Histology in a clinical context, in order to acquire a proper integrated medical reasoning.
7.2. Specific objectives	Students will be able to: • Use a light microscope • Analyze and interpret a histological section under the light microscope • Identify and differentiate the histological staining procedures • Render accurate histological diagnoses for the human tissues and organs • Render accurate differential diagnoses for the human tissues and organs based on histological diagnoses • Integrate the histological information into the fundamental and clinical subjects.

8. Content

Lecture	Teaching methods	Observations
EPITHELIAL TISSUES. Overview. Classification. Covering epithelia. Glandular epithelia.	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
CONNECTIVE TISSUES Part one: General considerations. Cells. Ground Substance. Fibers. Classification.	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
CONNECTIVE TISSUES Part two. Embryonic connective tissues Proper connective tissues: loose, dense irregular, dense regular,	Conferences, systematic and interactive presentations, clinical	Oral and Power Point presentations, animations, problem-based

elastic. Specialized connective tisssues; adipose tissue, cartilage: hyaline, elastic, bone tissue	correlations	learning
MUSCLE TISSUES Overview. Classification. Skeletal muscle. Cardiac muscle. Smooth muscle NERVOUS TISSUE. Neurons and glial cells. Nerve fibers. Nerve as an organ CARDIOVASCULAR SYSTEM Overview. Classification. Arteries. Veins. Capillaries.	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
HEMOIMMUNE SYSTEM General considerations. Hemopoietic bone marrow. Lymph node. SKIN	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
ORAL CAVITY Overview Lip Tongue Taste buds	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
ADULT TOOTH: Pulp Dentine	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
ADULT TOOTH: Enamel.	Conferences, systematic and interactive	Oral and Power Point presentations,

PERIODONTIUM: Gingiva	presentations, clinical correlations	animations, problem-based learning
PERIODONTIUM Cementum Periodontal ligament Alveolar bone	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
ODONTOGENESIS	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
DIGESTIVE SYSTEM: Salivary glands Pancreas Liver	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
DIGESTIVE SYSTEM: General organization of the gastro-intestinal tract Esophagus Small intestine Large intestine	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning
RESPIRATORY SYSTEM: Trachea Lung	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning

URINARY SYSTEM Kidney Ureter	Conferences, systematic and interactive presentations, clinical correlations	Oral and Power Point presentations, animations, problem-based learning

Bibliography:

Mescher A.L. Junqueira's Basic Histology. Text and Atlas, 12th edition. Lange Medical Books;Mc. Graw-Hill Medical Publishing Division; 2010.

Pawlina W. Histology a Text and Atlas, 7th edition, Lipincott Williams & Wilkins. 2016.

Kumar G.S. Orban's Oral Histology and Embryology, 13th Edition, 2011

Hand A.R., Frank M.E. Fundamentals of Oral Histology and Physiology, Wiley Blackwell, 2014

Berkovitz BKB, HollandGR, Moxham BJ. Oral Anatomy, Histology and Embryology 5th Edition Elsevier2017

Nanci A (editor).Ten Cate's Oral Histology Development, Structure, and Function.9th Edition. Elsevier, 2017. eBook

Practical Activities	Teaching Methods	Activity to be done by students
Histological section.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Epithelial tissues. Covering epithelial tissues. Simple columnar, simple squamous, keratinised/non-keratinised stratified squamous, pseudostratified ciliated columnar	Systematic and interactive presentations, demonstrations, exercises, case	Practical works

	reports	
Epithelial tissues. Glandular epithelial tissues: simple alveolar gland, compound tubulo-alveolar gland: serous acinus, mucous acinus, mixed acinus. Revision: epithelial tissues.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Connective tissues: mucous connective tissue, loose connective tissue dense irregular, dense regular, elastic. Specialized connective tissues: adipose, reticular	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Connective tissues: cartilage: hyaline, elastic; compact bone, spongy bone. Revision CT.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Muscle tissue: Skeletal striated muscle tissue, muscle as an organ. Nervous tissue: myelinated nerve fibers. Artery-vein-nerve complex.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Hemopoietic bone marrow. Lymph node.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Skin: thin and thick skin.	Systematic and interactive	Practical works

Revision.	presentations, demonstrations, exercises, case reports	
Oral cavity: lips, tongue, taste bud Revision	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Adult tooth: dentine and pulp. Periodontium.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Odontogenesis: early and late bell stage. Revision: oral cavity and tooth.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Digestive system: salivary glands: serous and mixed salivary glands, liver, pancreas.	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Digestive system: Gastro-intestinal tract: esophagus, small intestine: jejunum, colon. Revision	Systematic and interactive presentations, demonstrations, exercises, case reports	Practical works
Respiratory system: trachea, lung	Systematic and interactive	Practical works

Urinary system: kidney, ureter Revision	presentations, demonstrations, exercises, case reports	

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General Histology. Evaluation exercises. Editors: Constantin Anne-Marie, Boşca Adina Bianca. Authors: Constantin Anne-Marie, Boşca Adina Bianca, Mihu Carmen, Crişan Maria, Şuşman Sergiu, Şovrea Alina, Mărginean Mariana, Melincovici Carmen, Jianu Mihaela, Moldovan Ioana, Coneac Andrei. Contributors: Lavinia Mocan Rada Sufleţel Editura Medicală Universitaă "Iuliu Haţieganu" Cluj-Napoca 2018

Special Histology. Evaluation exercises. Editors: Boşca Adina Bianca, Constantin Anne-Marie. Authors: Boşca Adina Bianca, Constantin Anne-Marie, Mihu Carmen, Crişan Maria, Şuşman Sergiu, Şovrea Alina, Mărginean Mariana, Melincovici Carmen, Jianu Mihaela, Moldovan Ioana, Coneac Andrei. Contributors: Lavinia Mocan Rada Sufleţel "Iuliu Hatieganu" Publishing House, Cluj-Napoca, 2018

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

In order to integrate the content and the teaching methods, the professors have attended several meetings with the members of the Romanian Society for Morphology and Embryology and with medical doctors specialized in various medical fields.	

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade

10.4. Lecture	Theoretical exam according to the educational objectives for the lectures.	Multiple choice questions	50%
10.5. Practical Activity	Practical exam according to the educational objectives for the practical works	• Identifying and describing a histological section • Presenting the criteria for the histological diagnosis • Explaining the criteria for the differential diagnosis • Answering questions related to the topic • Answering general questions	40%
10.6. Activity during semester	Oral seminars Individual portfolios	The mean of the grades obtained at the seminars The evaluation of the individual portfolios	10%
10.7. Minimum performance standard			
At the end of each lecture, there is a synthesis of the general and specific objectives on the topic that has been presented. The lowest passing grade is 5 for each evaluation item. The theoretical exam is eliminatory. Students who have failed the theoretical exam must retake both the theoretical and the practical exam in the next session. Students who failed only the practical exam can choose to validate the grade for the theoretical exam for the retake examination.			

BEHAVIORAL SCIENCES AND COMMUNICATION

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I– Maxillofacial Surgery and Radiology
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)

1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			BEHAVIORAL SCIENCES AND COMMUNICATION YEAR I					
2.2. Responsible for lecture			Lecturer Armencea Gabriel MD, PhD					
2.3. Responsible for practical activity			Lecturer Armencea Gabriel MD, PhD					
2.4. Year of study	I	2.5. Semester	I	2.6. Form of evaluation	ES- Theoretical examination + practical examination	2.7. Course type	content	CD
							mandatory	DO

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					10
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					2
Tutoring					2
Examination/ semester					-
Other activities					2
3.8. Total hours of individual study (a+b+c+d)			44		
3.9. Total hours/semester			100		
3.10. Number of credits			4		

4. Prerequisites (if needed)

4.1. Curriculum	Not required	
4.2. Competences	Not required	

5. Requisites (if applicable)

5.1. For lectures	- lectures will be held in a projection system – equipped amphitheater - students will shut down their mobile phones prior to the beginning of the lecture. Phone calls during lectures will not be tolerated, nor will leaving the lecture hall in order to take phone calls. - The consumption of food or beverages during lectures will not be allowed - tardiness will also not be tolerated as it is disruptive for the educational process
5.2. For practical activities	- seminars will be held in a projection system – equipped amphitheater - students are required to shut down their mobile phone prior to the

	beginning of the seminar. Phone calls during lectures will not be tolerated, nor will leaving the lecture hall in order to take phone calls - The consumption of food or beverages during lectures will not be allowed - tardiness will also not be tolerated as it is disruptive for the educational process - ethical behavior towards the teaching staff

6. Acquired specific competences

Professional competences	The ability to utilize specialized terminology appropriately and in context Gaining cognitive abilities in the field of behavioral sciences Further understanding of health psychology, Gaining knowledge about the principles of medical ethics and deontology as well as medical responsibility, Obtaining knowledge that will serve as basis for comprehensive doctor-patient relationships, and for social and professional integration as a future doctor.
Transversal competences	Utilizing the assimilated notions in new contexts Applying theoretical notions in practical activities Establishing interdisciplinary correlations within the studied fields Obtaining the ability to efficiently communicate with the patient Expanding their pursuit of professional improvement by training their analytical and sythetical thinking Demonstrating their involvement in research activities, for instance scientific research.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The course offers Ist year Dental Medicine students the chance to assimilate knowledge necessary for social and professional integration as future doctors; acquiring cognitive abilities in the field of behavioral sciences and further understanding of health psychology, studying ethical and deontological principles as well as medical responsibility and obtaining knowledge that will serve as basis for comprehensive doctor-patient relationships. The seminars have the purpose of acquiring and evaluating the necessary knowledge for social and professional integration as a future doctor; obtaining cognitive abilities in the field of behavioral sciences; further understanding of the concepts of health psychology, studying ethical and deontological principles as well as issues of medical responsibility and obtaining knowledge which will serve as basis for comprehensive future doctor-patient relationships.
7.2. Specific objectives	Obtaining the necessary knowledge for social and professional integration as a future doctor. Acquiring cognitive abilities in the field of behavioral sciences. Further understanding of the concepts of health psychology.

	Studying ethical and deontological principles as well as medical responsibility and obtaining knowledge that will serve as basis for comprehensive doctor-patient relationships. Exercising one's synthesising and bibliographic documentation ability.

8. Content

Lecture	Teaching methods	Observations
1. Introduction to behavioral sciences – the importance and purpose of behavioral sciences in the formation of the doctor and their social and professional integration..	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
2. Health psychology. The social perception of the medical profession.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
3. Ethics, morals and medical deontology. Medical duty.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
4. Diagnostic and therapeutic risks. The principles of the therapeutic relationship.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
5. Medical responsibility. Interpersonal communication in medicine.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
6. Psychological types of healthcare practitioners. Psychological profiles of patients. Psychosomatic medicine.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
7. Ethical principles in human research. Ethical principles in the application of genetic discoveries. Assisted human reproduction.	Lecture, systematic, interactive	Oral presentations, Power-Point

	presentation	presentations
8. Stress in the spirit of behavioral sciences.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
9. Social behavior. Alimentation behavior. Sexual behavior.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
10 The doctor and the quality of life.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
11. Team work: doctor – assistant – psychologist – psychiatrist – priest – social worker – patient. Organ transplant ethics.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
12. Assistance in chronic and terminal illnesses. Medicine and religion	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
13. Medical bioethics and Christian morality. The ethics of preventive medicine and health promotion.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
14. Preventive medicine and health promotion programs. Continual medical learning.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
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- Popescu G, Radulescu S – Medicina si colectivitatile umane, Edit. Medicala, Bucuresti, 1981
- Stoudemire A – Human Behavior: An introduction for medical students, Edit. JB Lippincott, Philadelphia, 1991

Practical Activities	Teaching Methods	Activity to be done by students
1. Introduction to behavioral sciences. Importance and purpose in the formation of the doctor and their socio-professional insertion.	Power--Point presentations, interactive teaching	Scheduled interactive learning
2. Health psychology. The social perception of the medical profession.	Power-Point presentations, interactive teaching	Scheduled interactive learning
3. Ethics, morality and medical deontology. The medical duty.	Power-Point presentations, interactive teaching.	Scheduled interactive learning
4. Diagnostic and therapeutic risks. The principles of the therapeutic relationship.	Power-Point presentations, interactive teaching	Scheduled interactive learning
5. Medical responsibility. Interpersonal communication in medicine.	Power-Point presentations, interactive teaching.	Scheduled interactive learning
6. Psychological types of healthcare practitioners. Psychological profiles of patients. Psychosomatic medicine.	Power-Point presentations, interactive teaching.	Scheduled interactive learning
7. Ethical principles in human research. Ethical principles in the application of genetic discoveries. Assisted human reproduction.	Power-Point presentations, interactive teaching	Scheduled interactive learning
8. Stress in the spirit of behavioral sciences.	Power-Point presentations, interactive teaching	Scheduled interactive learning
9. Social behavior. Alimentation behavior. Sexual behavior.	Power-Point presentations, interactive teaching	Scheduled interactive learning
10. The doctor and the quality of life.	Power-Point presentations, interactive teaching.	Scheduled interactive learning
11. Team work: doctor – assistant – psychologist – psychiatrist – priest – social worker – patient. Organ transplant ethics.	Power-Point presentations, interactive teaching	Scheduled interactive learning
12. Assistance in chronic and terminal illnesses. Medicine and religion	Power-Point presentations, interactive teaching	Scheduled interactive learning

13. Medical bioethics and Christian morality. The ethics of preventive medicine and health promotion.	Power-Point presentations, interactive teaching	Scheduled interactive learning
14. Preventive medicine and health promotion programs. Continual medical education.	Power-Point presentations, interactive teaching	Scheduled interactive learning

Bibliography:

- Miu N - Stiintele comportamentului, Edit. Medicala Universitara "Iuliu Hatieganu" Cluj-Napoca, 2004
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- Stoudemire A – Human Behavior: An introduction for medical students, Edit. JB Lippincott, Philadelphia, 1991

9. **Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field**

- Permanent and constructive dialogue with representatives from the dental medicine community – in view of the identification of the needs and expectations of employers from the field and the adaptation of the analytical curriculum to the necessities of current practical activities.
- Permanent participation of the department members in scientific manifestations, various forms of continual medical education, equipment and medical material exhibitions dedicated to dental medicine activities – in view of maintaining the theoretical and practical information constantly being introduced in the course structure at a high level of quality.
- Maintaining contact with other department chairs from the field, in order to coordinate the teaching material with other similar programs from within other similar institutions of superior education.

The studied notions are in accordance to the current regulations and are compatible with activities taking place on a national level in the segment of pre-clinical dental medicine.

10.Evaluation

Activity type	10.6Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Evaluation criteria (the width and corectness of acquired knowledge, logical coherence) Ability to undderstand fundamental problems and to customize them.	Written examination	50%
10.5. Practical Activity	Evaluation of the assimilated theoretical knowledge	Oral examination	50%

10.6. Activity during semester			
10.7. Minimum performance standard The ability to utilize the specialized terminology appropriately and in context Aquiring cognitive abilities in the field of behavioral sciences Acquiring the necessary knowledge to be able to form comprehensive doctor-patient relationships Obtaining the necessary knowledge for the socio-professional integration as a future doctor			

SUMMER MEDICAL PRACTICE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine IV
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Summer Medical Practice					
2.2. Responsible for lecture			Sef. Lucr. Dr. Alexandra Botos					
2.3. Responsible for practical activity								
2.4. Year of study	1	2.5. Semester	2	2.6. Form of evaluation	Theoretical Exam	2.7. Course type	SD	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	40	3.2. Course	0	3.3. Practical Activity	40
3.4. Total hours in the curriculum	160	3.5. Course	0	3.6. Practical activity	160
3.7. Distribution of time needed/week					Hours

Study using text books, lecture notes, references	
Individual study using on-line platforms, field research	
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	
Tutoring	
Examination/ semester	
Other activities	
3.8. Total hours of individual study (a+b+c+d)	
3.9. Total hours/semester	
3.10. Number of credits	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	
5.2. For practical activities	• Attendance is mandatory in a proportion of 100%. • Adequate dress code – lab coat • Filling in the summer medical practice notebook, in accordance with the curriculum

6. Acquired specific competences

Professional competences	Medical practice activities in general medicine units Medical practice activities in dental medicine units
Transversal competences	Ability to work in a team during therapeutic procedures

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Acquiring the knowledge of the working of general medicine units and dental medicine units
7.2. Specific objectives	• Knowledge of the working of general medicine units and dental medicine units, the patients' and dental instruments' circuits • Learning and exercising the examination of patients, elaboration of the patient chart. • Learning notions regarding preparation of the instruments for disinfection and sterilization and regarding instrument sterilization. • Knowledge of the specific instruments used in the medical unit where the student goes for summer medical practice.

8. Content

Lecture	Teaching methods	Observations
Practical Activities	Teaching Methods	Activity to be done by students
Common subjects 1. Knowledge of the structure and functioning of the medical unit 2. Knowledge of the medical records and documents used in the medical unit 3. Knowing and applying the medical attributes of the nurses regarding receiving, registering and preparing the patients for the clinical examination 4. Development of communication skills with the patient: patient history, informing and educating the patient. Development of special communication skills according to: sex, age, childhood, incurable, terminally ill or non-cooperating patient. Communicating with the patient's family. 5. The preparation of medical instruments: washing, degreasing, syringe and needle control, sterilization, the maintenance and route of sterile materials 6. Knowing and applying the attributes of the nurse regarding the maintenance of hygiene norms in the medical unit 7. Elementary sterilization practices: chemical sterilization, steam sterilization, modern techniques of sterilization. 8. Development of clinical examination skills: physical examination, palpation, auscultation, percussion and special examination techniques: (measuring blood pressure, temperature, pulse) Specific subjects for general medicine practice 1. Prelevation, conservation and transport of biologic products (blood prelevation, pharyngeal secretion, urine, stool) 2. The practice of first aid (according to the content of	40 hours	

the red cross manual): dressing, bandages, haemostasis, immobilization, medical emergency Specific subjects for dental medicine practice 1. Recognizing the specific instruments for oral examination 2. Recognizing the specific instruments for dental treatments performed in the dental office 3. Basic knowledge on the dental unit: components, action, and accurate position of the patient and of the physician. 4. The desinfection of the dental office. 5. Knowledge of the protection methods against infectious diseases in the dental office. 6. Basic patient care procedures 7. The knowledge of notions regarding the dental instruments' preparation for disinfection and sterilization.	120 hours	

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

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10. Evaluation

Activity type	1.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture			
10.5. Practical Activity	Theoretical written exam		100%
10.6. Activity during semester			
10.7. Minimum performance standard			
Knowledge of prevention methods against contamination of the dental office and transmission of infectious diseases Knowledge of the protection methods against infectious diseases in the dental office. Basic patient care knowledge Recognizing the specific instruments for oral examination of the patient			

MEDICAL BIOETHICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Reabilitation
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Medical Bioethics**					
2.2. Responsible for lecture			Maria Aluaș					
2.3. Responsible for practical activity			-					
2.4. Year of study	1	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DO

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	-
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**-**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					8
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2

Examination/ semester	2
Other activities	2
3.8. Total hours of individual study (a+b+c+d)	38
3.9. Total hours/semester	52
3.10. Number of credits	2

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Adequate level of understanding, conversation, speaking, and writing in English

5. Requisites (if applicable)

5.1. For lectures	• Students will keep them off phones and other devices During the course, talking on phone is not allowed. Students cannot leave the amphitheater to the reason of personal phone calls; It is not allowed to eat during class sessions; consumption of food and drinks is prohibited; • Students are obliged to respect timetables; the late arrival to activities is prohibited, as this will disturb the working sessions.
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	•Being able to use correctly in the context of specific terminology •Being able to frame an ethical problem in the medical context •Identify the negative consequences that can derive from the application of an erroneous or superficial solution • Being able to use efficient sources of information and distinguish official information other information found on the internet
Transversal competences	•Having the ability to use the concepts learned in new contexts; •Prove to have the ability and the actual concern for a collegial communication, as well as professional; •Show concern for the teamwork, having as final result the realization of a common project; •Show concern for professional development with the permanent exercise of clinical reasoning skills; •Show constant involvement in research and specialty scientific publishing activities; •Show the ability to use electronic means to the documentation in the field of bioethics.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the semester, students must be able to identify ethical issues

	in medicine and the health system.
7.2. Specific objectives	At the end of the semester, students will be able to: - Distinguish between describe and evaluate a concrete situation and delineate the ethical issues. - Justify the ethical decisions we make in such situations. - Apply the ethical principles of reference documents of bioethics literature (Oviedo Convention (1997) and the Universal Declaration on Bioethics and Human Rights (2005)). - Problematizing the situation presented. - Assimilate the main approaches in bioethics.

8. Content

Lecture	Teaching methods	Observations
1. Introductory notions: definitions, history and foundations of Bioethics	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
2. Causes and cases that raised Bioethics as new discipline in the universities curricula: Baby Doe Case (US 1982)	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
3. Quality of Life: Leonard Arthur Case (UK 1983)	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)

	use of multimedia;	
4. The concept of „person”: Gauvin Case (US 2010)	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
5. Disability Meanings: Perruche Case (France 2005)	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
6. Confidentiality and legal derogations	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
7. Truth Telling Issues	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of 5multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
8. Consent in Research and Clinical Trials	Exhibition of	Oral

	knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
9. Consent in Clinical Practice	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
10. Surrogate Consent	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
11. Advance Directives	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
12. Euthanasia. End of Life Decisions	Exhibition of knowledge	Oral presentation

	according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	(lecture), with multimedia support (Powerpoint, doubled images / movies)
13.Organ Transplantation	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
14. Assisted Reproductive Medicine	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)

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Europe Council, *Convention on Human Rights and Biomedicine* Oviedo, 1997 and additional protocols.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

To structuring the content, the choice of teaching / learning methods, the responsible of this discipline has: Held working meetings with doctors, lawyers, and other professionals in the dental medical field. These meetings had the objective to identify problems and appropriate solutions as well as coordination with other similar programs of some faculties of dental medicine from Romania and abroad.

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	In accordance with the educational objectives (theoretical examination)	Presentation of an ethical clinical scenario, group work, followed by analysis of the criteria used in the analyses, the peculiarities and ethical approach adapted to a scenario.	**100%**
10.5. Practical Activity	-	-	**-**
10.6. Activity	-	-	**-**

during semester			
10.7. Minimum performance standard			

19.THE CURRICULA OF THE 2ND YEAR

GENERAL AND ORO-MAXILLO-FACIAL PHYSIOPATHOLOGY

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	2/ Functional sciences

1.4. Domain of study	Dental Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			General and oro-maxillofacial pathology					
2.2. Responsible for lecture			Assist. Prof. Dr. Camelia Manuela Mîrza					
2.3. Responsible for practical activity			Assist. Prof. Dr. Camelia Manuela Mîrza Phd. student Paul-Mihai Boarescu Phd. student Elisabeta-Ioana Chera Phd. Student Teodora-Irina Bonci					
2.4. Year of study	2	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam + portfolio of activity	2.7. Course type	Content	DF
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					14
Tutoring					-
Examination/ semester					3
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				50	
3.9. Total hours/semester				103	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	• Mandatory presence at 70% of the courses • Delay of students to the course will not be tolerated
5.2. For practical activities	• Mandatory presence at 100% of practical laboratories • Delay of students to practical laboratories will not be tolerated • Each student must complete the individual portfolio of activity with 14 laboratories

6. Acquired specific competences

Professional competences	- To analyze the data and select the necessary tests for the diagnosis of patients with oro-maxillofacial and general disorders - To be able to interpret the results of the evaluation tests of patients with oro-maxillofacial and general disorders - To create the pathophysiological map of patients with oro-maxillofacial and general disorders
Transversal competences	- To acquire the ability to use digital media for medical information - To acquire the ability to present complex topics - To demonstrate the involvement in the research projects of the Pathophysiology Discipline

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	- At the end of the semester the students will be able to correctly complete the pathophysiological map of the patients with oro-maxillofacial and general disorders
7.2. Specific objectives	- Identification of the basic pathophysiological mechanisms of patients with oro-maxillofacial and general disorders - Development of a plan for the evaluation of patients with oro-maxillofacial and general disorders based on the pathophysiological mechanisms - Correct interpretation of the tests to evaluate the pathophysiological mechanisms of patients with oro-maxillofacial and general disorders

8. Content

Lecture	Teaching methods	Observations
Fundamentals theories: disease, pathogenesis	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations

The pathophysiology of inflammatory response	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of intermediate metabolisms	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of the red blood cells disorders	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of haemostasis disorders	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of cardiovascular disorders	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of respiratory disorders	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of the oral cavity	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of the digestive tract	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The endocrine pathophysiology	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The phosphorus and calcium pathophysiology	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of the excretory system	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations
The pathophysiology of pain	Lecture, systematic	Oral and PowerPoint

	presentation, conversation	presentations
The pathophysiology of dento-maxillary changes in systemic diseases	Lecture, systematic presentation, conversation	Oral and PowerPoint presentations

Bibliography

1. Brad W. Neville, Douglas D. Damm, Carl M. Allen, Jerry Bouquot, Oral and Maxillofacial Pathology - Pageburst E-Book on VitalSource, 4th Edition, 2015.
2. De Karin C, VanMeter, Robert J Hubert, Pathophysiology for the Health Professions - E- Book, 2014.
3. Joseph A. Regezi, DDS, Oral Pathology - E-Book, 6th Edition, 2013.
4. Stefan Silbernagl, Florian Lang. Fiziopatologie. Atlas color. Ed. Medicală Callisto, Ediţia a II-a, 2011.
5. Bulboacă Adriana, Pârvu Alina Elena, Pathophysiology for Dental Medicine, Ed Echinox, Cluj-Napoca, 2009.

Practical Activities	Teaching Methods	Activity to be done by students
Introduction to experimental pathophysiology	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
The effect of chemical and physical etiological factors	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm in inflammatory diseases. Experimental fever	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for disorders of intermediate metabolisms	Experimental demonstrations, clinical scenarios, interpretation of	Most use of the video projector

	analysis reports, laboratory determinations	
Diagnostic algorithm for red blood cells disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for haemostasis disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for cardiovascular disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for respiratory disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for oral cavity dysfunctions	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for digestive tract dysfunction	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for endocrine disorders	Experimental	Most use of the

	demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	video projector
Diagnostic algorithm for excretion disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for nervous system disorders	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector
Diagnostic algorithm for dentomaxillary disorders in systemic diseases	Experimental demonstrations, clinical scenarios, interpretation of analysis reports, laboratory determinations	Most use of the video projector

Bibliography:

Camelia Manuela Mîrza, Laboratory Book for Dental Medicine Students, Ed Risoprint, Cluj-Napoca, 2008.
Camelia Manuela Mîrza, Alina Elena Pârvu, Adriana Elena Bulboacă, Mihai Blidaru, Florinela Adriana Cătoi, Ramona-Niculina Jurcău, Meda Sandra Orăsan, Iulia Ioana Morar, Andra-Diana Andreicuț, Iulia Olimpia Pfingstgraf, Paul Mihai Boarescu, Teodora-Irina Bonci, Elisabeta Ioana Chera - Laboratory study guide for general and oro-maxillo-facial pathophysiology. Editura Medicală Universitară "Iuliu Haţieganu", 2019 (being published).

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- The holders of the discipline organized meetings with members of the Romanian Society of Pathophysiology and with specialists from different fields of dental medicine to coordinate the programs of the dental medicine faculties and to adapt them to the needs of the practice of dental medicine.

10. Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	conform to professional competences	Written: multiple choice questions	60%
10.5. Practical Activity	in line with the educational objectives of the practical works	- short clinical scenario regarding the pathogenetic interrelation: oral cavity - systemic disorder - laboratory bulletins interpretation	30%
10.6. Activity during semester		- interpretation of clinical cases - effective determination of a laboratory parameters (blood, urine, saliva, gastric juice, etc.)	10%
10.7. Minimum performance standard			
Obtaining the minimum passing grade through: – recognition of the fundamental pathogenetic mechanisms of systemic and oro-maxillofacial disorders – selecting the minimum tests necessary to confirm the pathogenetic mechanisms			

MICROBIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Molecular sciences
1.4. Domain of study	Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English

1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Microbiology**					
2.2. Responsible for lecture			Senior lecturer Dr. Carmen Costache, MD, PhD					
2.3. Responsible for practical activity			Senior lecturer Dr. Carmen Costache, MD, PhD Senior lecturer Dr. Ioana Alina Colosi, MD, PhD					
2.4. Year of study	2	2.5. Semester	3	2.6. Form of evaluation	Theoretical (written) and practical (oral) examination	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**3**	3.2. Course	**1**	3.3. Practical Activity	2
3.4. Total hours in the curriculum	**42**	**3.5. Course**	**14**	**3.6. Practical activity**	**28**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					2
Individual study using on-line platforms, field research					1.5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					1
Tutoring					1
Examination/ semester					6
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				5.5	
3.9. Total hours/semester				**120**	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	Basic biology
4.2. Competences	Working with the light microscope

5. Requisites (if applicable)

5.1. For lectures	Respecting the academic rules for the participation to lectures
5.2. For practical activities	Respecting the rules for a microbiology laboratory (wearing a white robe, protective gloves when necessary, etc.)

6. Acquired specific competences

Professional competences	• Involvement in educating the population on the impact of micro-organisms (including human microbiocenosis) on health • Basic knowledge about microorganisms (bacteria, viruses), disease that are caused by them. • Knowledge of medical terminology • Understand the relationship between microorganisms and the human body, ways of transmission and production of infectious diseases to participate in prevention of pathology associated with dental practice • Understand and apply the necessary measures to prevent nosocomial infections
Transversal competences	• Developing complex professional tasks • Identify objectives to be achieved, the resources available, the conditions for completion of their work progress, working time, deadlines and risks related to the execution of professional duties. • Identify roles and responsibilities in a multidisciplinary team of networking and application techniques. • Effective work and longitudinal feedback within a team. • Effective use of information sources and communication resources (Internet portals , specialized software applications , databases , online courses etc.) to ensure continuous personal and professional development

7. Course objectives (derived from the acquired specific competences)

7.1. General objectives	• Acquiring the basics of general microbiology. • Study of the microorganisms (bacteria, viruses, parasites, fungi). • Knowledge and correct use of microbiology concepts related to contamination with infectious agents and their transmission to humans to initiate an infectious process. • Properties of the different groups of microorganisms, relationship with humans and their environment. • The importance of microorganisms as etiologic agents of various infectious clinical entities: respiratory tract infections, genitourinary tract infections, skin and CNS infections (meningitis, encephalitis). • Knowledge of the bacterial, viral, parasitic and fungal virulence factors to understand their role in human pathology.
7.2. Specific objectives	• Acquisition of theoretical and practical knowledge on infectious agents and their possibilities of human contamination. • Knowledge of an infectious process and how it is diagnosed. Interpretation of microbiological analysis bulletins. • Preparing students to perform minimum laboratory techniques needed for a medical dentist. • Understand the reasons and mechanisms underlying the choice of a particular protocol work. • Familiarization with the directions of research in microbiology. Exercise synthesis and bibliographic documentation capacity.

8. Content

Lecture	Teaching methods	Observations
1. Microorganisms world: definition, properties.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
2. Classification of medical important bacteria (phylogenetic, biohazard groups)	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
3. Bacterial morphology and function.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
4. Importance of morphology for differentiation and identification of the bacteria.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
5. Bacterial metabolism: effect of environmental factors on bacteria, development curve.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
6. Bacteria nutritional and energetic requirements	Lectures, systematic exposure , conversation	Oral exposure coupled with PPP
7. Bacterial genetics (evolution and adaptation in the bacterial world).	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
8. Microbial world and the human host. Normal flora and microbiota. Commensalism, Opportunism, Pathogenicity.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
9. Infection and pathogenicity; determinants of pathogenicity.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
10. Exotoxins and endotoxins, adhesion factors. Examples from oral pathology.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
11. Main bacteria producing human disease	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
12. Defense mechanisms against microbial infections	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
13. The microbiology of antibacterial chemotherapy. Definition, Antibacterial spectrum, resistance phenotype, S I R concept. Antibiotic families, mechanisms of action.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
14. Spreading of antibiotic resistance and pathogenic genes in the bacterial world. Natural/chromosomal resistance. Acquired resistance. Multiple resistance, selection of hospital strains.	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP

Bibliography

1. George F. Brooks, Janet S. Butel, Stephen A. Morse, Joseph L. Melnick, Ernest Jawetz, Edward A. Adelberg- Jawetz, Melnik Adelberg's Medical Microbiology – 26-th edition, McGraw-Hill Professional Ed., 2013
2. Monica Junie, Carmen Costache. Basic Bacteriology and Virology. Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2011

3. Carmen Costache, Lia Monica Junie. **Medical bacteriology and medical virology.** Editura Medicală Universitară "Iuliu Haţieganu", Cluj Napoca, 2011		
Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Sterilization and disinfection	conversation, „demonstration, performing	Sterilization methods
2. Sample collection.	conversation, demonstration, performing	Collection of pharyngeal swab
3. Microscopic preparation (wet smear, stained smear): principles, techniques, information) Stainings: Gram	conversation, demonstration, performing	Gram stained smear
4. Stainings: Ziehl-Nielsen (principle, techniques), special stainings (enumeration-examples)	conversation, demonstration, performing	Gram stained smear
5. Culture media (definition, classification, examples). Inoculation techniques. Cultural characteristics used in identification	conversation, demonstration, performing	Inoculation of culture media
6. Laboratory diagnostic scheme for the infection disease	conversation, demonstration, performing	Seminar - Test
7. Antigen antibody reaction (principles, examples, interpretation)	conversation, demonstration, performing	TPHA
8. Antibiotic susceptibility testing and interpretation	conversation, demonstration, performing	Disk diffusion susceptibility testing
9. Infections produced by Gram positive cocci (streptococci, staphylococci) – laboratory diagnosis	conversation, demonstration, performing	Interpretation of laboratory assays
10. Infections produced by Gram negative cocci and cocobacilli (Neisseria, hemophylus, Bordetella	conversation, demonstration, performing	Interpretation of laboratory assays
11. Infections produced by Gram positive bacilli (Bacillus, Clostridium) and Mycobacterium	conversation, demonstration, performing	Interpretation of laboratory assays
12. Infections produced by Gram negative bacilli (enterics, Pseudomonas, H.pylori)	conversation, demonstration, performing	Interpretation of laboratory assays
13. Infections produced by spirochetes	conversation, demonstration, performing	Material review
14. Practical examination	Oral examination	Oral examination
Bibliography: 1. George F. Brooks, Janet S. Butel, Stephen A. Morse, Joseph L. Melnick, Ernest Jawetz, Edward A. Adelberg- Jawetz, Melnik Adelberg's Medical Microbiology – 26-th edition, McGraw-Hill Professional Ed., 2013 2. Monica Junie, Carmen Costache. Basic Bacteriology and Virology. Editura Medicală Universitară. „Iuliu Haţieganu" Cluj-Napoca, 2011		

3. Carmen Costache, Lia Monica Junie. Medical bacteriology and medical virology**.** Editura Medicală Universitară "Iuliu Haţieganu", Cluj Napoca, 2011

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- In order to create curricula and choose teaching methods, lecture titular studied similar programs and tried to coordinate the content of curricula with those from other institutions of education.
- The concepts studied are consistent with the regulations and compatible with ongoing activities on health at national level.

10.Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (knowledge, logical consistency, the force of argument) Specific criteria discipline That envisage attitudinal and motivational aspects of student activities The ability to understand the fundamental issues and customization	Written exam with multiple choice and short opened questions	**70 %**
10.5. Practical Activity	Evaluation of practical skills and theoretical notions (acquired during practical work)	Oral examination	**15%**
10.6. Activity during semester	Assessment of theoretical notions from the lectures and practical work during the semester	Seminars/test	**15%**

10.7. Minimum performance standard

Learning the main concepts of microbiology:
• What are microorganisms (bacteria, viruses, parasites, fungi)
• The main features of microorganisms (morphological characters, culture, metabolism, genetics) useful for the laboratory diagnosis of infectious diseases
• Human contamination with bacteria, viruses
• Sterilization and disinfection
• Infections caused by bacteria: method of laboratory diagnosis, treatment and prevention.
• Infectious agents involved in producing medical staff infection and nosocomial infections
• Formation of an active attitude in educating people to prevent contamination with microorganisms and knowledge of infectious agents.

MICROBIOLOGY OF THE ORAL CAVITY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Molecular sciences
1.4. Domain of study	Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor - Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Microbiology**					
2.2. Responsible for lecture			Senior lecturer Dr. Carmen Costache, MD, PhD					
2.3. Responsible for practical activity			Senior lecturer Dr. Carmen Costache, MD, PhD Senior lecturer Dr. Ioana Alina Colosi, MD, PhD					
2.4. Year of study	2	2.5. Semester	4	2.6. Form of evaluation	Theoretical (written) and practical (oral) examination	2.7. Course type	compulsory	DS
							fundamental	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					1
Individual study using on-line platforms, field research					1
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					1
Tutoring					1

Examination/ semester	6
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	4
3.9. Total hours/semester	90
3.10. Number of credits	3

4. Prerequisites (if needed)

4.1. Curriculum	Basic biology
4.2. Competences	Working with the light microscope

5. Requisites (if applicable)

5.1. For lectures	Respecting the academic rules for the participation to lectures
5.2. For practical activities	Respecting the rules for a microbiology laboratory (wearing a white robe, protective gloves when necessary, etc.)

6. Acquired specific competences

Professional competences	• Involvement in educating the population on the impact of micro-organisms (including human microbiocenosis) on health • Knowledge about microorganisms: bacteria, viruses, parasites and fungi producing human pathology particularly in oral cavity and sinuses. • Knowledge of medical terminology • Understand the relationship between microorganisms and the human body, ways of transmission and production of infectious diseases to participate in prevention of pathology associated with dental practice • Understand and apply the necessary measures to prevent nosocomial infections
Transversal competences	• Developing complex professional tasks • Identify objectives to be achieved, the resources available, the conditions for completion of their work progress, working time, deadlines and risks related to the execution of professional duties. • Identify roles and responsibilities in a multidisciplinary team of networking and application techniques. • Effective work and longitudinal feedback within a team. • Effective use of information sources and communication resources (Internet portals, specialized software applications, databases , online courses etc.) to ensure continuous personal and professional development

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Acquiring the basics of medical microbiology: oral cavity microbiology • Study of the microorganisms (bacteria, viruses, parasites, fungi) . • Knowledge and correct use of microbiology concepts related to contamination with infectious agents and their transmission to humans to initiate an infectious

	process. • Properties of the microorganisms in oral cavity and sinuses, relationship with humans and their environment. • The importance of microorganisms as etiologic agents of various infectious clinical entities: oral cavity infections, infections with oral cavity as an entrance point.
7.2. Specific objectives	• Acquisition of theoretical and practical knowledge on infectious agents and their possibilities of human contamination. • Knowledge of an infectious process in the oral cavity and sinuses and how it is diagnosed. Interpretation of microbiological analysis bulletins. • Preparing students to perform minimum laboratory techniques needed for a medical dentist. • Understand the reasons and mechanisms underlying the choice of a particular protocol work. • Familiarization with the directions of research in microbiology. Exercise synthesis and bibliographic documentation capacity.

8. Content

Lecture	Teaching methods	Observations
1. Virology General properties, classification, structure, viral multiplication	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
2. Viral pathogenicity and antiviral chemotherapy	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
3. Virology: Orthomyxoviridae-influenza	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
4. Viral hepatitis, HIV infection	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
5. Parasitology: generalities	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
6. Most important human parasitic diseases: giardiasis, oxiurasis, ascaridosis si trichinelosis	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
7. Oral cavity microbiota: species, evolution with age	Lectures, systematic exposure , conversation	Oral exposure coupled with PPP
8. Phisical and chemical factors influencing oral microflora	Lectures, systematic exposure , conversation	Oral exposure coupled with PPP
9. Agents producing infectious pathology of oral cavity: streptococci	Lectures, systematic exposure , conversation	Oral exposure coupled with PPP
10. Agents producing infectious pathology of oral cavity: anaerobic bacteria	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP

11. Agents producing infectious pathology of oral cavity: viruses	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
12. Agents producing infectious pathology of oral cavity: parasites	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
13. Agent producing infectious pathology of the sinusis: fungi/yeasts	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP
14. Agent producing infectious pathology of the sinusis: filamentous fungi	Lectures, systematic exposure, conversation	Oral exposure coupled with PPP

Bibliography:

1. George F. Brooks, Janet S. Butel, Stephen A. Morse, Joseph L. Melnick, Ernest Jawetz, Edward A. Adelberg - Jawetz, Melnik Adelberg's Medical Microbiology – 26-th edition, McGraw-Hill Professional Ed., 2013
2. Carmen Costache, Monica Junie, Ioana Colosi. Medical bacteriology and medical virology. Editura Medicală Universitară "Iuliu Haţieganu", Cluj Napoca, 2017
3. Monica Junie, Carmen Costache (Trad). Basic Bacteriology and Virology. Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2011

Practical Activities	**Teaching Methods**	**Activity to be done by students**
15. Laboratory diagnosis in viral infections	Conversation, demonstration, performing	Interpretation of assays in virology
16. Laboratory diagnosis in hepatitis, influenza and HIV infection	Conversation, demonstration, performing	Students perform an antigen-antibody reaction for hepatitis Interpretation of assays in virology
17. Laboratory diagnosis in giardiasis, oxiurasis, ascaridosis and trichinelosis	Conversation, demonstration, performing	Students perform O & P analysis
18. Laboratory diagnosis in anaerobic infections	Conversation, demonstration, performing	Students see and discuss results of bacterial identification for anaerobic bacteria
19. Laboratory diagnosis in aerobic infections	Conversation, demonstration, performing	Students see and discuss results of bacterial identification for a aerobic bacteria
20. Lab.diagnosis in infections of the sinusis	Conversation, demonstration, performing	Students see and discuss results of fungi identification
21. Practical examination	Oral examination	Oral examination

Bibliography:
1. George F. Brooks, Janet S. Butel, Stephen A. Morse, Joseph L. Melnick, Ernest Jawetz, Edward A. Adelberg- Jawetz, Melnik Adelberg's Medical Microbiology – 26-th edition, McGraw-Hill Professional Ed., 2013
2. Carmen Costache, Monica Junie,Ioana Colosi. Medical bacteriology and medical virology. Editura Medicală Universitară "Iuliu Haţieganu", Cluj Napoca, 2017
3. Monica Junie, Carmen Costache (Trad). Basic Bacteriology and Virology. Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2011

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- In order to create curricula and choose teaching methods, lecture titular studied similar programs and tried to coordinate the content of curricula with those from other institutions of education.
- The concepts studied are consistent with the regulations and compatible with ongoing activities on health at national level.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (knowledge, logical consistency, the force of argument) Specific criteria discipline That envisage attitudinal and motivational aspects of student activities The ability to understand the fundamental issues and customization	Written exam with multiple choice and short opened questions	**70 %**
10.5. Practical Activity	Evaluation of practical skills and theoretical notions (acquired during practical work)	Oral examination	**15%**
10.6. Activity during semester	Assessment of theoretical notions from the lectures and practical work during the semester	Seminars/test	**15%**
10.7. Minimum performance standard			
Learning the main concepts of microbiology: • What are microorganisms (bacteria, viruses, parasites, fungi) • The main features of microorganisms (morphological characters, culture, metabolism, genetics) useful for the laboratory diagnosis of infectious diseases • Human contamination with bacteria, viruses, parasites and fungi • Infections caused by viruses and fungi: method of laboratory diagnosis, treatment and prevention. • Formation of an active attitude in educating people to prevent contamination with microorganisms and knowledge of infectious agents.			

GENETICS AND DENTO-FACIAL EMBRIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Molecular Sciences
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Genetics and Embriology of Dental and Facial anomalies					
2.2. Responsible for lecture			Lecturer Catana Andreea					
2.3. Responsible for practical activity			Lecturer Catana Andreea, MD, PhD Lecturer Cornean Rodica, MD, PhD Lecturer Dronca Eleonora, MD, PhD					
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	2	3.2. Course	1	3.3. Practical Activity	1
3.4. Total hours in the curriculum	28	3.5. Course	14	3.6. Practical activity	14
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					7
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					3

Tutoring	2
Examination/ semester	2
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	28
3.9. Total hours/semester	56
3.10. Number of credits	2

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system and internet access.
5.2. For practical activities	Laboratory practice rooms with computer system and Internet access. Laboratories with specific facilities for practical activities of cytogenetics and molecular genetics

6. Acquired specific competences

Professional competences	✓ The ability to use the terminology as appropriate and in the context. ✓ Ability to understand and operate with notions of structural and functional genetics and genomics. ✓ The use of fundamental concepts of genetics as the basis for the specific approach of genetic pathology in current medical activity. ✓ The ability to adequately recognize and use the phenotypic elements of genetic diseases to achieve correct diagnosis and prophylaxis. ✓ Ability to know and use correctly the necessary genetic tests in the context of genetic pathology. ✓ The ability to use and develop appropriate elements of individual and family genetic counseling and counseling in the context of congenital anomalies or dental / dental / disease syndromes. ✓ The ability to understand and use appropriate pharmacogenetics and access to pharmacogenetics databases. ✓ Ability to recognize and use the basic principles of ethics in relation to genetic pathology.
Transversal	Using assimilated notions in new contexts.

competences	Applying the theoretical notions of genetics and genomics to practical medical practice. Establishing interdisciplinary correlations within studied domains.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of the structure and function of the elements that make up the normal and pathological human genome and the development of skills that offer the ability to use this knowledge in current medical practice in the field of dental medicine in the context of genetic pathology or genetic conditioning.
7.2. Specific objectives	✓ Acquisition of fundamental genetics notions regarding the structure and functioning of the normal human genome (chromosomal structure, gene, storage and transmission of hereditary information), then useful in clinical practice. ✓ Study and understanding of the mechanisms governing the va Understanding the mechanisms underlying chromosomal, gene and mitochondrial pathology. ✓ Acquiring elements that allow understanding of the etiology of multifactorial pathology, genetically conditioned and the notion of susceptibility to disease. ✓ Understanding genetic or multifactorial mechanisms that can underpin developmental abnormalities especially in the buco-maxilo-facial sphere. ✓ Acquiring and developing the ability to understand and use basic knowledge of pharmacogenetics in current medical practice. Understanding the mechanisms governing drug-genome interaction. ✓ Development of synthesis capacity, based on theoretical knowledge, by analyzing cases from genetic pathology or genetic conditioning and congenital anomalies. ✓ Developing minimum capabilities to operate with advice, counseling and risk assessment in genetically or genetically conditioned pathology.

	✓ Acquiring basics of current therapy, therapeutic trends and prophylaxis of genetic diseases and developmental anomalies. ✓ Knowledge of some basic ethics in clinical genetics or research in genetics. ✓ Exercise of synthesis and bibliographic documentation. ✓ Variability of normal human and pathological traits.

8. Content

Lecture	Teaching methods	Observations
1. Introduction in Human Genetics. The Human genome	Lecture, systematic, interactive exposure	Oral presentation PPT presentation
2. The structure and function of the gene.	Lecture, systematic, interactive exposure	Oral presentation
3. Transmission of Hereditary information. Autosomal dominant and recessive patterns of inheritance.	Lecture, systematic, interactive exposure	PPT presentation
4. Transmission of Hereditary information Gonosomal dominant and recessive patterns of inheritance	Lecture, systematic, interactive exposure	Oral presentation
5. The variability of genetic information. Mutations. Genotype to phenotype associations	Lecture, systematic, interactive exposure	PPT presentation
6. Chromosome anomalies. Aneuploidies.	Lecture, systematic, interactive exposure	Oral presentation
7. Chromosome anomalies. Structural anomalies.	Lecture, systematic, interactive exposure	PPT presentation
8. Mitochondrial heredity.	Lecture, systematic, interactive	Oral presentation

	exposure	
9. Developmental genetics. Fundamental notes.	Lecture, systematic, interactive exposure	PPT presentation
10. Developmental genetics. Syndromes.	Lecture, systematic, interactive exposure	Oral presentation
11. Congenital anomalies. Etiology. Fundamental notes.	Lecture, systematic, interactive exposure	PPT presentation
12. Congenital anomalies. Teratology.	Lecture, systematic, interactive exposure	Oral presentation
13. Prophylaxis and screening of Genetic disorders.	Lecture, systematic, interactive exposure	PPT presentation
14. Treatment of Genetic disorders.	Lecture, systematic, interactive exposure	Oral presentation

Bibliography

1. Genetics and Embriology of Dento-Facial Development Coordonator conf. Dr. Popp Radu Anghel, 2014.
2Medical genetics. Laboratory practice for second year students, 2012.
3. Genetica Umană, Bazele mendeliene şi moleculare ale eredităţii, Vol. I, Ioan Victor Pop, Dina Coprean, Ed. Risoprint, 2002.
4. Genetica medicală, Mircea Covic, Dragoş Ştefănescu, Ionel Sandovici, Polirom, 2004 (2011).
5. Pop Ioan Victor: Genetica şi eredopatologia oro-facială, Editura Risoprint, Cluj-Napoca, 1998.
6. www.orphanet.com
7. www.omim.com
8. www.pharmgkb.com
9. www.ensembl.org

Practical Activities	Teaching Methods	Activity to be done by students
1. Introduction, chromosomal morphology, international classification of human chromosomes, criteria for classification of human chromosomes, chromosomal heteromorphisms.	Power-point presentations, interactive teaching.	PPT presentations Case report

2. Indications for prenatal genetic diagnosis.	Power-point presentations, interactive teaching.	PPT presentations
3. Indications for post-natal genetic diagnosis.	Power-point presentations, interactive teaching.	PPT presentation Case report
4. Numeric chromosome anomalies and associated syndromes. Genotype and phenotype in Trisomy 21.	Power-point presentations, interactive teaching.	PPT presentations
5. Numeric chromosome anomalies and associated syndromes. Genotype and phenotype in Trisomy 13 and 18.	Power-point presentations, interactive teaching.	Case report
6. Heterosomal aneuploidies, genotype and phenotype.	Power-point presentations, interactive teaching.	PPT presentations
7. Genetic counseling. Pedigree analysis.	Power-point presentations, interactive teaching.	Case report Pedigree analysis
8. Cranio facial developmental disorders. Cranial and facial anomalies Monogenic heredity. Patterns of inheritance.	Power-point presentations, interactive teaching.	PPT presentations Pedigree analysis
9. Cranio facial developmental disorders. Cranial and facial anomalies.	Power-point presentations, interactive teaching.	Case report
10. Genetic component of dental anomalies. Number anomalies.	Power-point presentations, interactive teaching.	PPT presentations
11. Genetic component of dental anomalies. Shape anomalies.	Power-point presentations, interactive teaching.	Case report
12. Dental dystrophies. Amelogenesis imperfecta.	Power-point presentations, interactive teaching.	PPT presentations
13. Dental dystrophies. Dentinogenesis imperfecta	Power-point presentations, interactive teaching.	Case report
14. Applications of DNA analysis in Medical practice. Exemples in forensic genetics.	Power-point presentations, interactive teaching.	PPT presentations
Bibliography: 1. Medical Genetis Laboratory practice fior Second Year Students, 2012		

2. Genetica medicală. Curs pentru studenţii anului II. Coordonator Profesor Dr. I.V. Pop, 2013.

3. Genetica Umană, Bazele mendeliene şi moleculare ale eredităţii, Vol. I, Ioan Victor Pop, Dina Coprean, Ed. Risoprint, 2002.

4. Genetica medicală, Mircea Covic, Dragos Stefanescu, Ionel Sandovici, Polirom, 2004 (2011).

5. Pop Ioan Victor: Genetica şi eredopatologia oro-faciala, Editura Risoprint, Cluj-Napoca, 1998.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Exchange of information with representatives of the academic and medical community - in order to identify the needs and expectations of those in the dental specialties and to adapt the analytical program to the needs of the current medical activity. Permanent participation of the members of the chair at scientific events, forms of continuing medical education to ensure an up-to-date level. Coordinate the content taught with other similar programs within other medical higher education institutions. The concepts studied are consistent with the regulations in force and are consistent with the national preclinical dental practices.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (coverage and accuracy of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization.	Written examination. Multiple choice quiz	66,66%
10.5. Practical Activity	Assessment of theoretical and practical knowledge	Practical exam. Case report analysis	33,33%
10.6. Activity during semester			
10.7. Minimum performance standard			

- ✓ Acquiring the main notions of Genetics and Dent-Facial Embryology
- ✓ Fundamentals of structure and function of chromosomal and genetics.
- ✓ Clinical phenotype in the most common chromosomal syndromes.
- ✓ Clinical phenotype in gene syndromes associated with most common dento-maxillary abnormalities.
- ✓ Basics of genetic counseling and counseling. Risk analysis of recurrence.
- ✓ Recognition of indications for testing in some chromosomal genetic, genetic or multifactorial determinism.

THE SEMIOLOGY OF THE ORAL CAVITY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine, Department 4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Semiology of the Oral Cavity					
2.2. Responsible for lecture			Lecturer Dr. Alexandra Botoș					
2.3. Responsible for practical activity			Lecturer Dr. Alexandra Botoș Assist. Dr. Ioana Vlas Drd. Dr. Mara Rusnac					
2.4. Year of	2	2.5. Semester	1	2.6. Form of	Theoretical exam+	2.7. Course type	Content	DS

study				evaluation	Practical exam		Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					20
Individual study using on-line platforms, field research					10
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					4
Examination/ semester					14
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				58	
3.9. Total hours/semester				100	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	Morphology and function of the dento-maxillary system
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	70% of the hours- Compulsory presence Amphitheater with multi-media system for projection
5.2. For practical activities	Examination rooms with specific equipment (dental unit, dental examination equipment)

6. Acquired specific competences

Professional competences	• The ability to use correctly the professional language in the domain of dental morphology • Knowledge of stages of dental examination • Knowledge of techniques of dental examination • Recognition of normal and pathological aspects of the dentomaxillary system within exo- and endooral examination • The capacity of integration of clinical dental examination stages within the general patient examination • Ability to fill in and use the dental chart

	• Asimilation of specific terminology used in the dental and maxillo-facial examination • Abilities in performing practical activities, based on examination charts and appointnt sheets
Transversal competences	• Ability to use the information in a new context • Ability to apply the theoretical knowledge on a practical basis. • Ability to establish connection between the studied subjects.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The knowledge of notions used in the clinical examination in dentistry, in order to be able to assess normal and pathological elements in the maxilla-facial area.
7.2. Specific objectives	• Knowledge of the stages of clinical examination in dentistry. • Knowledge of examination techniques used in dentistry • Ability to recognize normal and pathological aspects of the dento-maxillary system • Assimilation of general clinical examination knowledge and the ability to correlate them with the health status of the maxilla-facial • Knowledge and use of the dental chart • Knowledge of general categories of signs and symptoms that characterize normal and pathological aspects of the structures of the dento-maxillary system • Gain of the practical experience necessary to use the examination instruments in dentistry

8. Content

a. Lecture	Teaching methods	Observations
1. General information, patient history, reason for seeing the doctor, the history of the present disorder, psychological profile of the patient, parafunctional habits, clinical general examination 2. Perioral examination through frontal face inspection 3. perioral examination through lateral face inspection 4. Perioral examination through palpation – lymphatic nodes,	PP presentations	Interactive presentations,

muscles, bone contours, nerve emergence points. 5. TMJ (temporomandibular joint) examination, opening of the mouth, examination of the fixed mucosa 6. The examination of the oral mucosa, of the salivary glands, of the hard palate, soft palate, mouth floor. The examination of the alveolar ridges, of the maxillary tuberosities. Appreciation of the oral hygiene 7. The examination of the dental arches – shape, occlusion curves, frontal arch, dental contacts. The dental chart 8. The dental examination 9. Single tooth position changes, group position changes 10. The classification of the edentulous spaces by Kennedy, Costa 11. Periodontal examination 12. Static and dynamic occlusion 13. Complementary examinations.		

Bibliography

- Rosenstiel St. F., Land M. F., Fujimoto J., - Contemporary Fixed Prosthodontics, third edition, Mosby, 2001.
- Shillingburg H.T., Hobo S., Whitsett L.D., - Fundamentals of Fixed Prosthodontics, second edition, Quintessence Publishing Co. Inc., 25, 161-163, 1981.
- Ash M.M.- Wheeler's Dental Anatomy, Physiology and Occlusion. Seventh Ed. W.B. Saunders Comp., 1993
- Bath-Balogh M., Fehrenbach M.J.- Illustrated Dental Embriology, Histology and Anatomy-W.B. Saunders Comp,Philadelphia, 1997
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- Brandt R.W., Isselhard D.E.- Anatomy of Orofacial Structures – Sixth edition. Mosby, St.Loius, 1998
- Okeson J.P.- Management of Temporomandibular Disorders and Occlusion. Third edition. Mosby, St. Louis, 1993
- Woelfel J.B., Scheid R.C.- Dental Anatomy: Its relevance to Dentistry, Fifth edition. Williams & Wilkins, Baltimore, 1997

Lundeen H.C.- Introduction to occlusal anatomy. L& J Press, Earlton 1969

a. Practical Activities	Teaching Methods	Activity to be done by students
1. Patient history. 2. Perioral examination through frontal face inspection 3. perioral examination through lateral face inspection 4. Perioral examination through palpation – lymphatic nodes, muscles, bone contours, nerve emergence points. 5. TMJ (temporomandibular joint) examination, opening of the mouth, examination of the fixed mucosa	Practical demonstrations, interactive exercises	Fill in of patient history questionnaire Fill in of dental chart Fill in of facial

6. The examination of the oral mucosa, of the salivary glands, of the hard palate, soft palate, mouth floor. The examination of the alveolar ridges, of the maxillary tuberosities. Appreciation of the oral hygiene 7. The examination of the dental arches – shape, occlusion curves, frontal arch, dental contacts. The dental chart 8. The dental examination 9. Single tooth position changes, group position changes 10. The classification of the edentulous spaces by Kennedy, Costa 11. Periodontal examination 12. Static and dynamic occlusion 13. Complementary examinations.		examination chart Exooral and endooral inspection and palpation of teguments, bone contours, lymph nodes groups, mucosa. Examination of the dental arches Examination of the TMJ Periodontal examination.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Dialog with the representatives of the dental community, in order to identify the requirements for the future dentist; the results are the basis for the continuous update and improvement of the dental curricula
- Participation of the staff to scientific events, continuous education lectures, exhibitions in the domain of dentistry, in order to keep a high level of the knowledge.
- Maintaining of the permenent contact with Faculties of Dentistry in our country and abroad, in order to permanetly update the curriculla according to corresponding programs in other Universities.

10. Evaluation

Activity type	1.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria – to cover the entire range of information , to be able to do connection between subjects, to have a logic approach)	Written exam	50%
10.5. Practical Activity	Practical knowledge aquired	Practical exam	25%

10.6. Activity during semester	Evaluation of the continuity in preparation of theoretical and practical activties.	Periodic tests	25%
10.7. Minimum performance standard			
Knowledge of principles of Anthropology and Notions of Compared Anatomy			

DENTAL TECHNOLOGY 1

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	IV
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Dental Technology in Fixed Prosthodontics					
2.2. Responsible for lecture			Lecturer Cristina Gasparik					
2.3. Responsible for practical activity			Lecturer Cristina Gasparik Assistant Professor Delia Moise					
2.4. Year of study	2	2.5. Semester	1	2.6. Form of evaluation	Written examination + Practical examination	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	3.2. Course	2	3.3. Practical Activity	4
3.4. Total hours in the curriculum	84	3.5. Course	28	3.6. Practical activity	56
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					30

Individual study using on-line platforms, field research	12
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	10
Tutoring	4
Examination/ semester	10
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	66
3.9. Total hours/semester	150
3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	Notions of Dental Morphology Notions of Chemistry and Physics
4.2. Competences	Assimilation of Notions of Dental Morphology

5. Requisites (if applicable)

5.1. For lectures	70% of the hours- Compulsory presence Amphitheater with multi-media system for projection
5.2. For practical activities	100% Compulsory Presence White-Coat for protection, Instruments announced at the beginning of semester Completion of required practical tasks Laboratories with specific equipment for the practical activities

6. Acquired specific competences

Professional competences	The ability to use specialized terminology, properly and in context The accumulation of basic knowledge related to fixed and removable dentures Knowledge of technological steps that are used in the dental office and dental laboratory in manufacturing fixed dental prostheses (cast metal crowns, porcelain fused to metal crowns, all-ceramic crowns, composite resin crowns) Acquiring general information regarding partially edentulous patients - partial edentulism classification, consequences, specific treatment of each class of partial edentulism. Acquiring general principles in making fixed partial dentures (FPD). The fabrication technology in metal-ceramic FPDs by pressing processes, computerized milling, casting-sintering processes. Knowledge of current variants for manufacturing ceramic bridges CAD CAM technique, pressing or combined.
Transversal competences	• Ability to use the information in a new context • Ability to apply the theoretical knowledge on a practical basis. • Ability to establish connection between the studied subjects.

7. Course objectives (derived from the acquired specific competences)

7.1. General	Acquiring information related to specific technological processes involved in

Objectives	the fabrication of most types of fixed dentures
7.2. Specific objectives	The accumulation of basic knowledge related to the classification of fixed dentures Introduction to specific preparation concepts of dental structures for various types of fixed prosthesis Acquiring information regarding general steps in the fabrication of cast metal crowns, mixed crowns, esthetic crowns Understanding the biomechanical, bio functional and prophylactic principles in making each type of denture. Examination protocol in order to establish some landmarks for the study of clinical subjects in dentistry.

8. Content

Lecture	Teaching methods	Observations
1. Introduction in prosthodontics: definition, classification: fixed and removable dentures. Clinical and laboratory steps in the fabrication of dental prostheses	PP presentations	Interactive presentations
2. Tooth preparation: general principles, types of margin designs. Preparation for a cast metal crown. Preparation for a metal-ceramic crown	PP presentations	Interactive presentations
3. Impression in fixed prosthodontics.	PP presentations	Interactive presentations
4. Casts in fixed prosthodontics: materials used in models, types of cast, diagnostic cast, working cast.	PP presentations	Interactive presentations
5. Maxillo-mandibular relations. Face bow registration. Mounting of the casts in the articulator	PP presentations	Interactive presentations
6. Wax pattern for different crowns: definition, materials for pattern, laboratory procedures.	PP presentations	Interactive presentations
7. Preparation of the wax pattern for investing. Investing. Burnout. Casting the metal alloys: casting machines, principles. Cleaning the cast. Defects in the casting, causes and remedies. Finishing the cast restoration.	PP presentations	Interactive presentations

8. Inlays and onlays: classification, contraindications, materials used for inlays, onlays. The technology procedures for making a cast inlay	PP presentations	Interactive presentations
9. Veneers, post and core restorations.	PP presentations	Interactive presentations
10. The metal free aesthetic crowns: the provisional acrylic crown, the composite resin crown. The metal-resin crown	PP presentations	Interactive presentations
11. The full-ceramic crown: different types of full ceramic systems, advantages and disadvantages. The layering technique. The In-Ceram System	PP presentations	Interactive presentations
12. The full-ceramic crown: different types of full ceramic systems, advantages and disadvantages. The heat-pressing technique. CAD-CAM Systems	PP presentations	Interactive presentations
13. The partial edentulousness. Classifications. Fixed-partial dentures- principles, components	PP presentations	Interactive presentations
14. The metal-ceramic FPD. The full-ceramic FPD	PP presentations	Interactive presentations

Bibliography

a. Practical Activities	Teaching Methods	Activity to be done by students
4. Teeth preparation – introduction, general steps.	Power-point presentations Live Practical demonstrations in simulation lab	1 tooth preparation/student
5. Teeth preparation for a complete metal cast crown – demonstration and practical preparation of a molar for a metal crown by every student.		
6. Teeth preparation for a metal-ceramic crown – demonstration and practical preparation of a premolar for a metal-ceramic crown by every student.	Power-point presentations Live Practical demonstrations in simulation lab	1 tooth preparation/student
7. Teeth preparation- revision Impression taking	Power-point presentations Live Practical	1 tooth preparation/student

	demonstrations	
8. Functional wax-up o lateral teeth- principles, technique. Functional waxing of the first maxillary premolar	Power-point presentations Live Practical demonstrations	1 tooth preparation/student
9. Functional waxing of the second maxillary premolar	Power-point presentations Live Practical demonstrations	1 full wax-up Test 1
10. Functional waxing of the first maxillary molar	Power-point presentations Live Practical demonstrations	1 full wax-up
11. Functional waxing - revision	Power-point presentations Live Practical demonstrations	1 full wax-up
12. Wax pattern of the full metal crown	Power-point presentations Live Practical demonstrations	2 wax patterns/student
13. Wax pattern of the full metal crown – finalizing the wax pattern. Wax pattern of the metal component of metal-ceramic crown	Power-point presentations Live Practical demonstrations	2 wax patterns/student
14. Making the wax pattern for cast inlays and onlays.	Power-point presentations Live Practical demonstrations	3 wax patterns/student
15. Wax pattern of full ceramic crowns for heat-press technology	Power-point presentations Live Practical demonstrations	2 wax patterns/student
16. Preparation of the wax pattern of the metal framework for investing. Investing the pattern. Casting the metal crown. Recovery of the casting. Finishing the cast restoration. – Demonstration by the dental technician.	Power-point presentations Live Practical demonstrations	Test 2
17. Revision	Power-point presentations	

	Live Practical demonstrations	

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1. Shillingburg H.T.& all – Fundamentals of Fixed Prosthodontics. 3rd Edition, Quintessence Publishing, Illinois, 1997.
2. Rosentiel S.F, Land M, Fujimoto J.– Contemporary Fixed Prosthodontics. 3rd Edition, Mosby Inc., St. Louis, 2001.
3. Touati B., Miara P, Nathanson D. – Esthetic Dentistry and Ceramic Restorations. New York, Martin Dunitz, 1999.
4. GOLDSTEIN R.E. – Esthetics in Dentistry, Vol. 1, 2, 3, BC Decker 1989, 2001, 2007.
5. UBASSY G. – Shape and Color: the key to successful ceramic restorations. Quintessence Publishing, Illionois, 1993.
6. IRFAM AHMAD – Protocols for Predictable Aesthetic Dental Restorations. Blackwell Publishing, 1 edition, 2006.
7. CHICHE G., PINAULT A. – Esthetics of Anterior Fixed Prosthodontics. Quintessence Publishing, Illinois, 1994.
8. ASCHEIM K.W., DALE B.G. – Esthetic Dentistry: A Clinical Approach to Techniques and Materials. 2nd Edition, Mosby, 2001.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Dialog with the representatives of the dental community, in order to identify the requirements for the future dentist; the results are the basis for the continuous update and improvement of the dental curricula
- Participation of the staff to scientific events, continuous education lectures, exhibitions in the domain of dentistry, in order to keep a high level of the knowledge.
  Maintaining of the permanent contact with Faculties of Dentistry in our country and abroad, in order to permanently update the curricula according to corresponding programs in other Universities.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria – to cover the entire range of information , to be able to do connection between subjects, to have a logic approach)	Written exam- multiple-choice questions and essays	50%
10.5. Practical Activity	Practical abilities evaluation Evaluation of the interconnection between practical work and theoretical knowledge	Practical exam	25%

10.6. Activity during semester	Evaluation of the continuity in preparation of theoretical and practical activities.	Periodic tests	25%
10.7. Minimum performance standard			

DENTAL TECHNOLOGY 2

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	IV
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Dental Technology in Fixed Prosthodontics					
2.2. Responsible for lecture			Lecturer Cristina Gáspárik					
2.3. Responsible for practical activity			Lecturer Cristina Gáspárik Assistant Professor Delia Moise					
2.4. Year of study	2	2.5. Semester	2	2.6. Form of evaluation	Written examination + Practical examination	2.7. Course type	Content Compulsory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	3.2. Course	2	3.3. Practical Activity	4
3.4. Total hours in the curriculum	84	3.5. Course	28	3.6. Practical activity	56
3.7. Distribution of time needed/week					Hours

Study using text books, lecture notes, references	30
Individual study using on-line platforms, field research	12
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	10
Tutoring	4
Examination/ semester	10
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	66
3.9. Total hours/semester	150
3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	Notions of Dental Morphology Notions of Chemistry and Physics Notions of Dental Technology in Fixed Prosthodontics
4.2. Competences	Assimilation of Notions of Dental Morphology

5. Requisites (if applicable)

5.1. For lectures	70% of the hours- Compulsory presence Amphitheater with multi-media system for projection
5.2. For practical activities	100% Compulsory Presence White-Coat for protection, Instruments announced at the beginning of semester Completion of required practical tasks Laboratories with specific equipment for the practical activities

6. Acquired specific competences

Professional competences	The ability to use specialized terminology, properly and in context The accumulation of basic knowledge related to removable dentures Knowledge of technological steps that are used in the dental office and dental laboratory in manufacturing removable and complete dental prostheses Acquiring general information regarding complete edentulous patients; partial edentulism classification, consequences, specific treatment of each class of partial edentulism. Acquiring general principles in making removable partial dentures (RPD) and complete dentures (CD)
Transversal competences	• Ability to use the information in a new context • Ability to apply the theoretical knowledge on a practical basis. • Ability to establish connection between the studied subjects.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Acquiring information related to specific technological processes involved in the fabrication of most types of removable dentures
7.2. Specific objectives	The accumulation of basic knowledge related to the examination of edentulous patients Acquiring information regarding general steps in the fabrication of complete dentures and removable partial dentures Understanding the biomechanical, bio functional and prophylactic principles in making each type of denture. Examination protocol in order to establish some landmarks for the study of clinical subjects in dentistry.

8. Content

Lecture	Teaching methods	Observations
1. Complete denture: general principles, components, clinical and laboratory steps in making a complete denture.	PP presentations	Interactive presentations
2. Stock trays. Preliminary impression. Impression materials, requirements of preliminary impressions. Preliminary cast. Materials used for the fabrication of dental casts.	PP presentations	Interactive presentations,
3. Fabricating the custom impression tray. Materials used for the fabrication of custom trays. Functional impression: techniques, materials. Final cast. Techniques, materials.	PP presentations	Interactive presentations,
4. Fabricating the occlusal rims. Registration of the maxilla-mandibular relationship. Mounting the casts in an articulator.	PP presentations	Interactive presentations,
5. Teeth arrangement for the complete denture: general rules, individual rules. Investment. Polymerization of the resin base for a complete denture. Cleaning the cast. Finishing the denture.	PP presentations	Interactive presentations,
6. Removable partial dentures (RPD): classification, types, components. Partial edentulous arches: intro-oral examination, alveolar ridge, bone and mucosal changes, important features for treatment planning a removable partial denture (RPD).	PP presentations	Interactive presentations

7. Acrylic partial denture: general principles. Analyzing the cast with the surveyor. Types of clasps in RPD. Registration of the maxilla-mandibular relationship.	PP presentations	Interactive presentations
8. Clinical and laboratory steps for making an acrylic resin partial dentures.	PP presentations	Interactive presentations
9. RPDs with metal framework. Components, design, fabrication steps	PP presentations	Interactive presentations
10. RPDs with metal framework. Types of retainers and major connectors.	PP presentations	Interactive presentations
11. RPDs with metal framework. Types of minor connectors, denture bases	PP presentations	Interactive presentations
12. Types of attachments used as retainers for RPDs. Hinges, bars, sliding attachments, magnets	PP presentations	Interactive presentations,
13. Overdentures. Indications, contraindications, components, technological steps	PP presentations	Interactive presentations
14. Implant supported removable dentures. Indications, contraindications, components, technological steps	PP presentations	Interactive presentations

Bibliography

a. Practical Activities	Teaching Methods	Activity to be done by students
1. The wax pattern of fixed partial dentures- full contour waxing, cut-back	Power-point presentations Live Practical demonstrations	1 FPD wax-pattern
2. The wax pattern of fixed partial dentures- full contour waxing, cut-back	Power-point presentations Live Practical demonstrations	1 FPD wax-pattern

3. The wax pattern of fixed partial dentures- full contour waxing, cut-back	Power-point presentations Live Practical demonstrations	1 FPD wax-pattern
4. Introduction to Complete dentures. Preliminary impression making. Preliminary cast fabrication	Power-point presentations Live Practical demonstrations	Preliminary impression making. Preliminary cast fabrication (1 impression and 1 cast/student)
5. Custom tray fabrication. Principles, techniques, materials Final impression. Master cast fabrication	Power-point presentations Live Practical demonstrations	Custom tray fabrication. (1 tray/student) 2 master casts/student
6. Occlusion rim fabrication. Materials, techniques.	Power-point presentations Live Practical demonstrations	Occlusion rim fabrication (2 occlusion rims/student)
7. Recording of maxillo-mandibular relations. Mounting casts in the articulator	Power-point presentations Live Practical demonstrations	Recording of maxillo-mandibular relations. Mounting casts in the articulator (1 task/student)
8. Denture bases fabrication. Arranging teeth in the denture bases. Esthetic and functional principles (1denture/student)	Power-point presentations Live Practical demonstrations	Denture bases fabrication. (1 denture/student)
9. Denture bases fabrication. Arranging teeth in the denture bases. Esthetic and functional principles (1denture/student)	Power-point presentations Live Practical	Denture bases fabrication. (1 denture/student

Transforming the waxed-up denture into the final acrylic denture. Finishing, polishing	demonstrations	)
10. Removable dentures- types, components. Partial edentulism. Classification of partial edentulous arches.	Power-point presentations Live Practical demonstrations	Drawings Exercises and practical activities for recognizing different types of partial edentulism
11. Survey analysis.	Power-point presentations Live Practical demonstrations	Survey analysis.
12. Removable dentures with metal framework. Block-out and relieving of the master cast Preparing the master cast for duplication. Obtaining the duplicated cast.	Power-point presentations Live Practical demonstrations	Block-out and relieving of the master cast for each of the four edentulous classes
13. Waxing the framework of RPDs in different types of edentulous classes. Kennedy Class I and II	Power-point presentations Live Practical demonstrations	Waxing the framework of RPDs in different types of edentulous classes. Kennedy Class I and II (2wax patterns/student)
14. Revision	Power-point presentations Live Practical demonstrations	

Bibliography:

9. Complete denture and overdenture prosthetics – Alfred Geering, 1993, Thieme Medical Publishers
10. Principles And Practices Of Complete Dentures: Creating The Mental Image Of A Denture – Iwao Hayakawa, 1999, Quintessence Pub Co

11. Complete dentures – Hugh Devlin, 2002, Springer-Verlag Berlin Heidelberg
12. Prosthodontic Treatment for Edentulous Patients Complete Dentures and Implant-Supported Prostheses – George Zarb, 2012, Elsevier

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Dialog with the representatives of the dental community, in order to identify the requirements for the future dentist; the results are the basis for the continuous update and improvement of the dental curricula
- Participation of the staff to scientific events, continuous education lectures, exhibitions in the domain of dentistry, in order to keep a high level of the knowledge.
- Maintaining of the permanent contact with Faculties of Dentistry in our country and abroad, in order to permanently update the curricula according to corresponding programs in other Universities.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria – to cover the entire range of information , to be able to do connection between subjects, to have a logic approach)	Written exam- multiple-choice questions and essays	50%
10.5. Practical Activity	Practical abilities evaluation Evaluation of the interconnection between practical work and theoretical knowledge	Practical exam	25%
10.6. Activity during semester	Evaluation of the continuity in preparation of theoretical and practical activities.	Periodic tests	25%
10.7. Minimum performance standard			

PSYCHOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine

1.3. Department	Medical Education – Medical Psychology
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Psychology**					
2.2. Responsible for lecture			Șef Lucr. Dr. Dana – Cristina Herța					
2.3. Responsible for practical activity			Șef Lucr. Dr. Dana – Cristina Herța Asist. Univ. Dr. Radu Flaviu Oroian					
2.4. Year of study	2	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DC
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					7
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					5
Tutoring					4
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				30	
3.9. Total hours/semester				60	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Behavioral Sciences, Basic communication skills in medicine

4.2. Competences	Knowing and understanding psychological terms

5. Requisites (if applicable)

5.1. For lectures	- attendance for at least 75% (12 in 14) of lectures - students are not permitted to use mobile phones - eating and drinking during classes are not permitted - tardiness will not be accepted
5.2. For practical activities	- attendance in all practical works is mandatory - completing the practical work portfolio

6. Acquired specific competences

Professional competences	- Management of bio-psycho-social implications of the medical practice - Identifying and correcting at-risk behaviors - Medical counseling skills
Transversal competences	- Critical assessment of behaviors and reactions of sick perseons - Effective communication and counseling of persons in special situations - Emotional intellingence: empathy, effective management of emotions - Critical thinking skills

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	To acquire knowledge, attitudes and skills concerning psychological implications of the medical practice.
7.2. Specific objectives	- To acquire knowledge, attitudes and skills required to choose and implement the appropriate patient – doctor model - To acquire knowledge, attitudes and skills required to assess reaction to illness and facilitate sick role - To acquire knowledge, attitudes and skills required to perform psychological management of patients going through the diagnostic process - To acquire knowledge, attitudes and skills required to ensure treatment adherence - To acquire knowledge, attitudes and skills required to help patients adopt healthier lifestyles - To acquire knowledge, attitudes and skills required to appropriately manage stress and crisis situations - To acquire knowledge, attitudes and skills required to perform psychological management of terminally ill patients

8. Content

Lecture	Teaching methods	Observations
Lecture 1. Introduction – Mental processes	Lecture	

• Introduction
  ○ General objective of the discipline
  ○ Specific objective of the discipline
  ○ Lectures content
  ○ Requirements for participation
  ○ Assessment process
• Mental processes
  ○ Definition
  ○ Classification
Human cognitive system		

Lecture 2. Biopsychotypology • Brief history • The concept of Type of behavior • Types A, B, C and D of behavior / personality	Lecture	
Lecture 3. Normal – abnormal. Health – illness • Normality criteria • Abnormality criteria • Definition of health • Explanatory models of illness • Mental representation of illness	Heuristic discovery, debate, lecture	
Lecture 4. Doctor – patient relationship • Sick status and role • Doctor status and role • Models of doctor – patient relationship • Specificity of doctor – patient relationship, according to context and patient's personality	Lecture, heuristic conversation, problem solving	

Lecture 5. Stress – health – illness
 	
• Definition of stress
  ○ Stressors
  ▪ Definition
  ▪ Classification
  ▪ Evaluation
  ○ Reactions to stress (somatic, psychological)
  ○ Mediators of stress
  ▪ Patient's support network
  ▪ Defense mechanisms
  ▪ Coping mechanisms
• Stress – illness relationship
  ○ Basic notions of psychosomatic medicine
  ○ Relationship stress – mental illness
	Lecture, heuristic conversation	

Lecture 6. Crisis and crisis intervention	Lecture	

• Definition of crisis • Types of crisis • Dynamics of situational crisis • Dynamics of catastrophic crisis • Principles of crisis intervention • Means of crisis intervention • Stages of crisis intervention		
Lecture 7. Suicide • Definitions • Epidemiology • Suicidal process • Suicide risk assessment • Prevention strategies for suicidal behavior	Lecture, case study	
Lecture 8. Psychology of death and dying • Concept of death in medicine and society • Stages of death and dying • Medical and legal criteria for declaring brain death and death • Main causes of death • Psychological reactions to the diagnosis of terminal illness • Psycholocical assistance of terminally ill patients • Bereavement	Lecture	

Lecture 9. Pain psychology
 	
• Definition of pain
• Acute pain vs. Chronic pain
• Theoretical approaches of pain
• Pain psychological management
• Placebo and nocebo effects
  ○ Definition
  ○ Factors
	Lecture	

Lecture 10. Iatrogenic conditions • The concept of iatrogeny • Therapeutic (medication) iatrogenies • Assessment iatrogenies • Relationship iatrogenies • Hospital iatrogenies	Lecture	
Lecture 11. Compliance and adherence to treatment • Definitions • Factors influencing compliance to treatment • Assessment of compliance to treatment • Main situations of non-compliance	Lecture	

• Methods which increase compliance to treatment		
Lecture 12. Empathy • Definition • Components of empathic attitude • Specificity of empathy in the clinical context • Principles of empathic communication • Main errors in establishing an empathetic doctor – patient communication	Lecture	
Lecture 13. Health psychology • The field of health psyhology • Healthy eating habits • Use of risky substances • Risky sexual behaviors • Healthy lifestyles • Definition of resilience • Characteristics of a resilient person	Lecture	
Lecture 14. Basic notions of psychotherapy • Classification of psychological therapy methods • Psychodynamic therapies • Behavioral therapies • Cognitive therapies • Humanistic therapies. Counseling • Applications of psychotherapies in medicine o Medical counseling o Transferrential relationships	Lecture	

Bibliography

1. Cosman D. Psihologie medicală. Iaşi: Polirom; 2010.
2. Cosman D. Compendiu de suicidologie. Cluj-Napoca: Casa Cărţii de Ştiinţă; 2006.
3. Coman H. Psihiatrie. Cluj-Napoca: Casa Cărții de Știință; 2005.
4. Tudose F. Fundamente în psihologia medicală – psihologie clinică şi medicală în practica psihologului. Bucureşti: România de Mâine; 2003.
5. Secăreanu A. Dicţionar de psihologie medicală. Bucureşti: Univers Enciclopedic; 1997.
6. Ionescu G. Tratat de psihologie medicală şi psihoterapie. Bucureşti: Asklepios; 1995.

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Practical work 1. Assessment of psychological functioning	Demonstration, exercise	Observing of patient assessment. Exercises –

		assessment of psychological functioning
Practical work 2. Interview to assess the personality of the patient	Demonstration, exercise	Observing of patient assessment. Exercises – assessment of personality
Practical work 3. Role of the doctor in shaping a more comprehensive and accurate representation of illness	Heuristic demonstration	Roleplay. Debates about case presentations
Practical work 4. Bio-psycho-social model in medicine	Conversation, problem solving	Roleplay – small teams
Practical work 5. Specificity of relating to difficult patients: anxious, phobic	Case presentation	Roleplay – small teams
Practical work 6 Specificity of relating to difficult patients: obsessive, paranoid	Case presentation	Roleplay – small teams
Practical work 7. Specificity of relating to difficult patients: depressive, histrionic	Case presentation	Roleplay – small teams
Practical work 8. Specificity of relating to difficult patients: aggresive, incarcerated	Case presentation	Roleplay – small teams
Practical work 9. Assessment of stress. Management of burnout	Demonstration, exercise, Case presentation	Patient assessment. Self – assessment of stress. Stress assessment exercise in pairs
Practical work 10. Suicide crisis intervention	Exercise	Roleplay – pairs and small teams
Practical work 11. Bereavement reaction	Case presentation	Roleplay – pair and small teams

Practical work 12. Therapeutic iatrogenies	Case presentation	Patient assessment
Practical work 13. Assessment of therapeutic compliance	Exercise	Patient assessment
Practical work 14. Empathic doctor – patient relationship	Roleplay, exercise	Patient assessment and exercises in groups of 3

Bibliography:

1. Manea MM. Aplicații ale psihologiei în practica medicală. Ghid de studiu. Cluj-Napoca: Editura Medicală Universitară Iuliu Hațieganu; 2016.
2. Cosman D. Psihologie medicală. Iași: Polirom; 2010.
3. Cosman D. Compendiu de suicidologie. Cluj-Napoca: Casa Cărţii de Ştiinţă; 2006.
4. Coman H. Psihiatrie. Cluj-Napoca: Casa Cărţii de Ştiinţă; 2005.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Involvement of the discipline staff in debates and scientific events attended bu staff of other medical universities (Tg Mureş,Timişoara) or other universities (Faculty of Psychology and Education Sciences, University Babes Bolyai)

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	According to educational objectives of lectures	Unique standardized exam with single and multiple choice questions	**50%**
10.5. Practical Activity	According to educational objectives of practical works/stages	Case vignette	**25%**
10.6. Activity during semester	According to educational objectives	Practical activities portfolio	**25%**
10.7. Minimum performance standard			

IMMUNOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Medicine
1.3. Department	2 Functional Sience
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Immunology-allergology**					
2.2. Responsible for lecture			**Sef Lucrari dr. Muntean Ioana Adriana**					
2.3. Responsible for practical activity			Asist dr. Irena Nedelea					
2.4. Year of study	2	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					8
Individual study using on-line platforms, field research					4
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
Tutoring					4

Examination/ semester	2
Other activities	
3.8. Total hours of individual study (a+b+c+d)	36
3.9. Total hours/semester	50
3.10. Number of credits	2

4. Prerequisites (if needed)

4.1. Curriculum	Phisiology
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	
5.2. For practical activities	

6. Acquired specific competences

Professional competences	
Transversal competences	

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the courses the students will be capable to recognize, have knowledge, and correct use of immunology. Justify in a correct manner measures for diseases' treatment and prevention in the dentistry field regarding immunological diseases.
7.2. Specific objectives	At the end of the courses the students will be capable to: • Familiarize students with aspects related to the application of the theoretical and practical principles of immunology with emphasis on the use of diagnostic methods: serological, histological, immunofluorescence, in vivo testing • Knowledge of the main features of diseases with immune-allergic mechanism • Understanding the reasons and mechanisms underlying the defense response • Familiarize with the main research directions in the field of immunology • Exercise of synthesis and bibliographic documentation • To identify correctly the risk for a severe allergic reaction to drugs used in the dentistry field • To propose and justify recommendations for prevention and treatment control of most important diseases with an immunological mechanism.

8. Content

Lecture	Teaching methods	Observations
1.Immune response, History, Importance of immunology, Natural immunity, Natural and acquired immunity. Organs and cells involved in immune response, Antigen recognition method. Immune activation mechanism. The effector response.		
2.Immune response. Antigens, Antibodies, Monoclonal Antibodies, System Complement		
3.Immune response, cytokines, chemokines, receptors, adhesion molecules, apoptosis, types of hypersensitivity.		
4.Allergies, Autoimmune		
5.Transplant, Tumors, Immune Deficiency		
6.Diseases of oral cavity. Gingivite, periodontitis; impairment of oral cavity in systemic diseases		
7.Immunomodulatory / Immunotherapy. Immunosuppressants. Induction to Immune Tolerance		
Bibliography		

Practical Activities	Teaching Methods	Activity to be done by students
1. Knowledge of the elements of the immune system. In vitro investigation methods (ELISA, FACS, immunohistochemistry, etc)		
2. Knowledge of the elements of the immune system. Techniques (including MoAb)		
3. Knowledge modalities of immunological diagnosis. Immune		

investigations and their interpretation		
4. Modalities of immunological diagnosis knowledge. Cytokines, adhesion molecules, complement, Ab, AutoAb		
5. Modalities of immunological diagnosis knowledge. Interpretation of the immune investigations. Presentation of *in vivo* investigations. 6. Immunodeficiency, tumors and transplant- case presentations. Examining of lymph nodes, spline, the corroboration of clinical examination information with patient history and relevant laboratory elements for dissonant states; conditions of performance (compatibility, immunosuppression);		
7. Hypersensitivity and autoimmune diseases - case presentations. Immunological assessment and Allergology: Total IgE, specific IgE, Immunogram, types of autoantibodies, disimune states laboratory identification		

Bibliography:

1. Cristea V,Monica Crietyear (under red.). Course on Immunology - Faculty of Medicine. Ed a-IVa, "Iuliu Haţieganu" Medical University, Cluj-Napoca, 2011.

4. DUMITRAŞCU D. Atopic diseases, Ed. Med. Univ. "Iuliu Haţieganu", Cluj Napoca, 2002.

5. DORU DEJICA Immunotherapy Therapy, Mega Publishing House, Cluj-Napoca, 2006.

6. Middleton's Allergy Principles & Practice 8th Edition. Ed. Mosby 2013

7. Roitt IM - Essential Immunology, 13th Edition, 2017, Blackwell Science

8. Janeway's Immunobiology 9th, Kenneth Murphy, 2017

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade

10.4. Lecture			**70**
10.5. Practical Activity			**30**
10.6. Activity during semester			**0**
10.7. Minimum performance standard			
50			

PHARMACOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies: University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty: Dental Medicine
1.3. Department: Functional Science
1.4. Domain of study: Medicine
1.5. Level of course: License- (undergraduate students)
1.6. Academic degree: Dental Medicine in English
1.7. Qualification: Doctor –Dental Medicine (Dentistry)
1.8. Form of education: Full-time program

2. Information about the discipline

2.1. Course title: FARMACOLOGY, TOXYCOLOGY AND CLINICAL PHARMACOLOGY
2.2. Responsible for lecture: Assistant Professor, Ruxandra Elena Schiotis
2.3. Responsible for practical activity: Assistant Professor, Ruxandra Elena Schiotis
2.4. Year of study: 2; *2.5. Semester:* I; *2.6. Form of evaluation:* Theoretical (written) and practical (oral) examination+ Students' portfolio; *2.7. Course type:* Content-DS; Compulsory-DI;

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week: 4h; *3.2. Course:* 2h; *3.3. Practical Activity:* 2h;
3.4. Total hours in the curricula: 56h; *3.5. Course:* 28h; *3.6. Practical activity:* 28h;
3.7. Distribution of time needed/week
a. Study using text books, lecture notes, references: 7h;
b. Individual study using on-line platforms, field research: 7h;
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays: 2h;
d. Tutoring:2h;
e. Examination/ semester: 20h;
f. Other activities: 0h;
3.8. Total hours of individual study (a+b+c+d): 46h;
3.9. Total hours/semester: 122h;
3.10. Number of credits: 5;

4. Prerequisites (if needed)

4.1. Curriculum: To know the physiology of cell signaling by endogenous molecules; Essential knowledge of Microbiology
4.2. Competences: Physiological mechanisms

5. Requisites (if applicable)

5.1. For lectures: Students must turn off their laptops during course. Phone conversations are not tolerated during the course; It is forbidden the consumption of foods and beverages during lectures or practical activities. Students' delay will not be tolerated during the course and practical work students as it proves disruptive to the educational process.
5.2. For practical activities: Each student must complete individual portfolio;

6. Acquired specific competences

6.1. Professional competences:
- To know general aspects about drugs
- To know and properly prescribe pharmaceutical dosage forms
- To write correctly a prescription
- To use effectively sources of drug information

6.2. Transversal competences:
- To have the ability to communicate effectively with the patient
- To demonstrate concern for professional development through training of critical thinking;
- To demonstrate involvement in research, such as to write scientific articles
- To demonstrate the ability to use digital sources for medical information

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives:
- To become familiar with various substances that can act on the body
- To know the legal provisions concerning drug use
- To be able to give patients the necessary explanations on drug use

7.2. Specific objectives:
At the end of the course, students will be able to:
- To know the importance of the major criteria of effectiveness of medicines and their benefit-risk ratio
- To establish drugs selection criteria depending on the therapeutic objective

8. Content

a. Lecture

Teaching methods: Presentations, Systematic exposition, Conversation; Oral Presentations PowerPoint slides and films
Content:
1. General pharmacology. Definitions. Categories of drugs. Denomination of drugs. The introduction on pharmacokinetics.
2. General pharmacokinetics. General pharmacodynamics.
3. Adverse reactions and drug toxicity. Adverse drug reaction in dentistry.
4. Pharmacology of the autonomic and peripheral nervous system. The parasympathetic system. Direct cholinomimetics. Nicotine, reversible and irreversible cholinesterase inhibitors. The M-cholinolithics
5. Pharmacology of the autonomic and peripheral nervous system. The sympathetic nervous

system: The adrenomimetics and adrenolithics.

6. The autocides. Histamine. Antihistamines. Antiemetic drugs. Serotonin (5-HT). The treatment of migraine; the treatment of emesis produced by chemotherapy. Eicosanoids.
7. Analgesics. Opioid analgesics. Non-opioid analgesics.
8. Nonsteroidal anti-inflammatory drugs. Steroidal anti-inflammatory drugs.
9. CNS drugs. Hypnotics. Anxiolytics (tranquilizers). Antidepressants. Antiepileptic.
10. The pharmacology of the central nervous system: Local and general anesthetics.
11. Respiratory Pharmacology - Cough suppressants, expectorants and mucolytics. Asthma medications. Gastrointestinal Pharmacology.
12. Cardiovascular Pharmacology. The hypolipaemic drugs. Agents acting on the formation and blood clotting.
13. Chemotherapy of infectious Diseases. The strategy and the rational use of antibiotics. The beta-lactams . Glycopeptides.
14. Aminoglycosides, macrolides and exposed. The phenicol. Cyclins
15. Sulfonamides and inhibitors of bacterial DHFR (trimetoprim). DNA gyrase inhibitors bacterial (quinolones). Antifungal

b. Practical activity

Teaching methods: Conversations, clinical cases, demonstration, calculations, problems

Activity to be done by students:

At the end of the practical students will know:

- to locate, the types of drug information sources, to establish the use of information sources as required;
- to practice ATC class by actively seeking products; to identify international name/generic name/ brand name of drugs
- To use the pharmaceutical dosage forms suitable for each route of administration;
- To select a suitable type of dosage form according to disease (acute, chronic) and the patient's age: child, adult, elderly)

Content:

1. General information regarding drugs. Sources of drugs information. ATC classification of drugs. Drugs denomination. Original and generic products.
2. Dosage forms. Classification of dosage forms.
3. Types of doses and posology of drugs. Exercises
4. Pharmacokinetic. Pharmacokinetic parameters. Mathematic formula to calculate pharmacokinetic parameters. Practical problems.
5. Medication history of the patients. Role play
6. Medical prescription. Types of medical prescription. Basic rules to write a prescription.
7. Medical prescription. Legislation. Practical exercises
8. Compliance to treatment.
9. Pharmacovigilence.
10. Local anesthetics. Practical aspects of choosing the proper anesthetic in dental medicine. The role of general anesthesia in dental medicine
11. Pain therapy. Non-steroidal anti-inflammatory Conversations, drugs in dental medicine. How to prescribe clinical cases, glucocorticoids in dental medicine
12. Pain therapy. Opioids in dental medicine. WHO analgesic ladder. Antiseptics and disinfectants used in dental medicine.
13. Antibiotics. Generalrules in prescribing antibiotics. Antibiotic prophylaxis in dental medicine

14. Antibiotics. Choosing the proper antibiotic in patients with dental problems. Exercises.

Bibliography

1. Goodman, Gillman's. The pharmacological basis of therapeutics (1ihed). McGraw Hill Publishing, 2010.
2. Katzung BG. Basic and Clinical Pharmacology (IIth edition). McGraw Hill, Ed. Elsevier, 2012
3. RA Harvey, PC Champe, MJ Mycek. Pharmacology -4th ed. Lippincott Williams, Wilkins, 2009.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

10. Evaluation

Activity type	*10.1 Evaluation criteria*	*10.2. Evaluation*	*10.3 Percent from the final grade*
10.4. Lecture	In accordance with the general objectives	50 questions (MCQs) 2 written subjects	70%
10.5. Practical Activity	Following the specific objectives of practical activity	1. To identify BN,GN , pharmaceutical form, and to write prescriptions for two drugs studied 2.Calculation problems (pharmacokinetic s. Dose calculation)	20%
10.6. Activity during semester	Following the specific objectives of practical activity	Portfolio Projects - Individual themes	10%
10.7. Minimum performance standard			
Key messages at the end of the course			

DENTAL MATERIALS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine

1.3. Department	4. Prosthetics and Dental materials
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Dental materials					
2.2. Responsible for lecture			Lecturer dr. Adriana Objelean					
2.3. Responsible for practical activity			1. Lecturer dr. Objelean Adriana 2. Assistant Lecturer dr. Rusu Laura 3. Assistant Lecturer dr. Vigu Alexandra					
2.4. Year of study	2	2.5. Semester	4	2.6. Form of evaluation	-Written exam -Practical exam	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.4. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					56
Individual study using on-line platforms, field research					7
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					11
Tutoring					2
Examination/ semester					2
Other activities					2

3.7. Total hours of individual study (a+b+c+d)	80
3.8. Total hours/semester	150
3.9. Number of credits	6

4. Prerequisites (if needed)

4.1. Curriculum	High school elementary knowledges of organic and inorganic chemistry, and physics. Elementary knowledges of biochemistry and teeth morphology.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Video projection amphitheater
5.2. For practical activities	Laboratories with specific practical activity equipment

6. Acquired specific competences

Professional competences	❖ Ability to adequately use the specialty terminology ➢ Interdisciplinary synthesis capacity development of organiv and inorganic chemistry, physics and biochemistry in order to comprehend and knowledge the general properties of dental materials ➢ Knowledges regarding general principles of adhesion ➢ Assimilation of general information regarding properties and handling of impression materials ➢ Knowledges regarding: metals and alloys, detal ceramics and polymers ➢ Required practical experience acquisition in order to handle different types of impression materials
Transversal competences	• Use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Knowledges regarding materials used by the dentist in the daily practice
7.2. Specific objectives	➢ Assimilated knowledges regarding composition, properties and clinical indications of dental materials based on practical activity. ➢ Detailed study of how dental materials are directly handled during clinical treatments by the dentist ➢ Assimilated theoretical knowledges and a logical algorithm to choose the most suitable dental material for a certain clinical case.

	➢ Exercising the synthesis ability and bibliographical research

8. Content

8.1 Lecture	Teaching methods	Observations
1. Classification of dental materials. Properties of dental materials during storage, mixing, during and after setting reaction	Interactive systematic lectures	Power-Point oral presentations
2. Classification of dental materials. Properties of dental materials during storage, mixing, during and after setting reaction.	Interactive systematic lectures	Power-Point oral presentations
3. Corrosion of dental alloys. Biocompatibility of dental materials.	Interactive systematic lectures	Power-Point oral presentations
4. Principles of adhesion in dentistry.	Interactive systematic lectures	Power-Point oral presentations
5. Impression materials: imposed conditions of a rigid impression material, classification, properties, and indications.	Interactive systematic lectures	Power-Point oral presentations
6. Impression materials: imposed conditions of an elastic impression material, classification, properties, and indications.	Interactive systematic lectures	Power-Point oral presentations
7. Metals and dental alloys: terminology, presentation forms, classification, structure and thermal behavior.	Interactive systematic lectures	Power-Point oral presentations
8. Noble and non-noble dental alloys. Titanium.	Interactive systematic	Power-Point oral

	lectures	presentations
9. Ceramic-compatible alloys. The bond between metal-aesthetic component– theories, principles, imposed conditions.	Interactive systematic lectures	Power-Point oral presentations
10. Ceramics: composition, properties, classification of ceramic systems.	Interactive systematic lectures	Power-Point oral presentations
11. Ceramics: technology and clinical applications of PFM and full-aesthetic ceramic restorations.	Interactive systematic lectures	Power-Point oral presentations
12. Polymers. Resin-based composites: classification, properties, indications. Heat-based polymerization-graphics, conditions, advantages/disadvantages.	Interactive systematic lectures	Power-Point oral presentations
13. Lab resin-based composites. Classification, composition, properties, indications.	Interactive systematic lectures	Power-Point oral presentations
14. Fiber -reinforced resin based composites-clinical indications.	Interactive systematic lectures	Power-Point oral presentations

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1. NICOLA C şi colab. – MATERIALE DENTARE – CONSIDERAŢII CLINICE ŞI TEHNOLOGICE, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009.
2. NICOLA, C., BORZEA D., SECELEANU R. – MATERIALE UTILIZATE ÎN PROTETICA DENTARĂ, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2003.
3. BORZEA, D. – CERAMICA ÎN STOMATOLOGIE, Ed. Dacia, Cluj-Napoca, 2000.
4. BRATU, D. şi colab. – MATERIALE DENTARE, Ed. Helicon, Timişoara, 1994.
5. CRAIG, R. – RESTORATIVE DENTAL MATERIALS, Mosby, 1996.
6. McCABE, J. F., WALLS, A. W. G. – APPLIED DENTAL MATERIALS, Blackwell Science Ltd., 1998.
7. GLADWIN, M., BAGBY, M. – CLINICAL ASPECTS OF DENTAL MATERIALS, Lippincott Williams Wilkins, 2000.
8. Van Noort R. INTRODUCTION TO DENTAL MATERIALS. 3rd edition. Mosby Elsevier, 2008

8.2 Practical Activities	Teaching Methods	Activity to be done by students
1. Classification of dental materials.	Power-Point oral presentations and interactive teaching activities	Panoramic radiography examination
2. Teeth color choice using the shade guide.	Interactive teaching activities	Exercises of teeth color choice using different shade guides and lightning sources.
3. Mechanical properties-stress-strain relation.	Interactive teaching activities	Exercises based on clinical cases of stress-strain curves for different dental materials.
4. Chemical properties-solubility.	Interactive teaching activities	Practical applications
5. General rules of handling the dental materials.	Interactive teaching activities	Practical applications
6. Rigid impression materials.	Impression materials presentation and impression techniques	Impression techniques used on human oral cavity-like dummies
7. Elastic reversible impression materials.	Impression materials presentation and	Impression techniques used on human oral

	impression techniques	cavity-like dummies
8. Irreversible elastic impression materials-hydrocolloids-alginate.	Impression materials presentation and impression techniques	Impression techniques used on human oral cavity-like dummies
9. Irreversible elastic impression materials – putty-like elastomers.	Impression materials presentation and impression techniques	Impression techniques used on human oral cavity-like dummies
10. Irreversible elastic impression materials – light-body elastomers.	Impression materials presentation and impression techniques	Impression techniques used on human oral cavity-like dummies
11. Dental metallic alloys-phase diagrams.	Interactive teaching activities	Analysis of phase diagrams.
12. Ceramics – ceramic kit.	Demo videos of different lab technologies of ceramic prosthetic restorations.	Acquaintance with lab dental ceramic kit
13. Polymers-polymerization reaction.	Interactive teaching activities	Heat-based polymerization graphics
14. Practical exam.		Knowledges and skills regarding impression techniques used on human oral cavity-like dummies.
Bibliography:		

1. NICOLA C şi colab. – MATERIALE DENTARE – CONSIDERAŢII CLINICE ŞI TEHNOLOGICE, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009.
2. NICOLA, C., BORZEA D., SECELEANU R. – MATERIALE UTILIZATE ÎN PROTETICA DENTARĂ, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2003.
3. BORZEA, D. – CERAMICA ÎN STOMATOLOGIE, Ed. Dacia, Cluj-Napoca, 2000.
4. BRATU, D. şi colab. – MATERIALE DENTARE, Ed. Helicon, Timişoara, 1994.
5. CRAIG, R. – RESTORATIVE DENTAL MATERIALS, Mosby, 1996.
6. McCABE, J. F., WALLS, A. W. G. – APPLIED DENTAL MATERIALS, Blackwell Science Ltd., 1998.
7. GLADWIN, M., BAGBY, M. – CLINICAL ASPECTS OF DENTAL MATERIALS, Lippincott Williams Wilkins, 2000.
8. Van Noort R. INTRODUCTION TO DENTAL MATERIALS. 3rd edition. Mosby Elsevier, 2008

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, dental continuing education forms and exhibitions of medical devices and dental materials in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure.
- Maintain of contact with other teachers from different dental institutions for coordination of taught content with similar curriculae.
- The studied concepts are in accordance with valid regulations and are compatible with similar preclinical dental activities developed at the national level.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General criteria evaluations (the coverage area and precision of assimilated knowledges, logical coherence, fluency of speech) Ability to understand fundamental problems and particular ones.	Written and multiple choice questions exam	33%
10.5. Practical Activity	Evaluation of theoretical knowledges and practical abilities Permanent training during the whole	Practical exam	33%

	semester	Evaluation tests	33%
10.7. Minimum performance standard			
Acquire of main Dental Materials concepts: • Physical, mechanical, chemical and biochemical properties of dental materials. • Features and handling techniques of impression materials. • Features of metals and alloys • Features of dental ceramics • Features of dental polymers • Features of lab-fabricated resin-based composites			

DENTAL ERGONOMICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	4. Prosthetics and Dental materials
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Ergonomics					
2.2. Responsible for lecture			Lecturer dr. Tonea-Voina Andrada					
2.3. Responsible for practical activity			Assistant lecturer : 1. dr. Rusu Laura 2. dr. Vigu Alexandra					
2.4. Year of	2	2.5. Semester	4	2.6. Form of	-Written exam	2.7. Course type	Content	DS

study				evaluation	-Practical exam		Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
e. Study using text books, lecture notes, references					48
f. Individual study using on-line platforms, field research					7
g. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					8
h. Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				69	
3.9. Total hours/semester				125	
3.10. Number of credits				5	

4. Prerequisites (if needed)

4.1. Curriculum	Elementary knowledges of human body anatomy
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Video projection amphitheater
5.2. For practical activities	Laboratories with specific practical activity equipment

6. Acquired specific competences

Professional competences	Ability to adequately use the specialty terminology ➢ Knowledges of some concepts regarding rules of dentist behavior during its

	work. ➢ Knowledges regarding correct working positions, optimal movements and adequate armamentarium. ➢ Acquisition of practical experience necessary for "four-handed dentistry" ➢ Assimilation of general information regarding the rules of dental practice organization and environmental factors. Dental muscular-skeletal disorders recognition and their treatments.
Transversal competences	• Use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Knowledges of some concepts regarding rules of dentist behavior during its work in such a way to obtain the comfort and protection of his health with a maximum of work efficiency.
7.2. Specific objectives	• Assimilated knowledges regarding dental work positions, movements and adequate armamentarium • Acquisition of practical experience necessary for "four-handed dentistry" • Assimilation of general information regarding the rules of dental practice organization and environmental factors • Study of dental muscular-skeletal disorders recognition and their treatments • Exercising the synthesis ability and bibliographical research

8. Content

Lecture	Teaching methods	Observations
1. Ergonomic-based organizing criteria: Anthropometric criterion	Interactive systematic lectures	Power-Point oral presentations
2. Ergonomic-based organizing criteria: Physiological and neuro-psychological criterion	Interactive systematic lectures	Power-Point oral presentations
3. Ergonomic-based organizing criteria: Chrono-biological and environmental criterion.	Interactive systematic lectures	Power-Point oral presentations
4. Ergonomic-based organizing criteria: Environmental criterion. Specific dental activity criterion.	Interactive systematic lectures	Power-Point oral presentations
5. Ergonomic organization of dental activity. Dental practice: location, internal organization. Ergonomic parameters of the working space.	Interactive systematic lectures	Power-Point oral presentations
6. Equipment of the treatment area.	Interactive systematic lectures	Power-Point oral presentations
7. Dental unit components. Dental instruments.	Interactive systematic lectures	Power-Point oral presentations
8. Dental unit components. Dental instruments.	Interactive systematic lectures	Power-Point oral presentations
9. Ergonomic organizing of medical activity.	Interactive systematic	Power-Point oral

	lectures	presentations
10. Ergonomic organizing of medical activity.	Interactive systematic lectures	Power-Point oral presentations
11. Four-handed and six-handed dentistry.	Interactive systematic lectures	Power-Point oral presentations
12. The transfer of instruments and materials during dental procedures.	Interactive systematic lectures	Power-Point oral presentations
13. The transfer of instruments and materials during dental procedures.	Interactive systematic lectures	Power-Point oral presentations
14. Overstress. Muscular-skeletal disorders.	Interactive systematic lectures	Power-Point oral presentations

Bibliography

1. BURLUI V., MORĂRAŞU C. – ERGONOMIE STOMATOLOGICĂ, Ed. Apollonia, Iaşi, 2012
2. DENIS C. MURPHY – ERGONOMICS AND DENTAL CARE WORKER, Canada, 1998
3. MARTIN DUNITZ – TEAM DENTISTRY: chairside procedures and practice management, J. Ellis Paul, London, 1991
4. CARMEN SCHELLER – BASIC GUIDE TO DENTAL INSTRUMENTS, Blackwell Publishing Ltd, 2006
5. HACKSHAW A., ELIZABETH PAUL, ELIZABETH DAVENPORT – EVIDENCE-BASED DENTISTRY: An introduction, Blackwell Munksgaard, 2006

8.2 Practical Activities	Teaching Methods	Activity to be done by students
1. Dentist's dress code in order to avoid contamination.	Dentist protection equipment presentation	Acquaintance with dentist protection equipment in order to avoid contamination.
2. Dental assistant's dress code in order to avoid contamination.	Dental assistant protection equipment presentation.	Acquaintance with dental assistant protection equipment in order to avoid contamination.
3. Manual instruments (examination kit). Light-curing device.	Presentation of dental examination instruments and different types of light-cuing devices.	Indirect vision mirror exercises using handwriting and shape reproductions
4. The ambient: information regarding dental treatment room dimensions, walls and floors, chromatics, lightning sources, microclimate, noise effects.	Dental practice presentation.	Acquaintance with dental office and design of a dental practice plan.
5. Equipment of the treatment area: "zero" point, optimal and maximum space.	Presentation of the way how the dental treatment room is organized.	Acquaintance with dental office equipment.
6. Dental unit: components, handling.	Presentation of the dental unit components and their	Handling exercises of dental unit components.

	handling.	
7. Rubber dam system: components and handling.	Presentation of how the rubber dam system is applied in the oral cavity.	Application of rubber dam system on an oral human cavity-like dummies.
8. Working positions of dentist and dental assistant. Patient positioning in the dental chair.	Presentation of the correct working positions of the dentist and dental assistant and the patient during dental procedures.	Correct working positions of the dentist and dental assistant Correct positioning of the patient in the dental chair.
9. Four-handed and six-handed dentistry.	Presentation of how the dental instruments are grasped and transferred during dental procedures.	Exercises of instruments' grasp and transfer
10. Ergonomic organizing of medical activity: Scaling.	Presentation of scaling instruments and their transfer during this procedure.	Exercises of instruments' transfer for scaling
11. Ergonomic organizing of medical activity: Preparation of a dental cavity and its restoration using a light-cured resin composite.	Presentation of the instruments and devices necessary to restore a dental cavity with a light-cure resin composite and their transfer during this procedure.	Exercises of instruments' transfer for specific cavity preparation and light-cured resin composite restoration.
12. Ergonomic organizing of medical activity: Application of an amalgam restoration.	Presentation of the instruments and devices necessary to restore a dental cavity with amalgam and their transfer during this procedure.	Exercises of instruments' transfer for specific cavity preparation and amalgam restoration.
13. Ergonomic organizing of medical activity: Full-arch impression.	Presentation of the instruments and devices necessary to take a full-arch impression and their transfer during this procedure.	Exercises of instruments' transfer specific for this procedure.
14. Practical exam	Analysis of dental office plans. Pictures with different studied ergonomic situations	To recognize the correct or incorrect situations shown in the pictures or plans. Transfer of the instruments for certain clinical procedures.

Bibliography:

9. NICOLA C şi colab. – MATERIALE DENTARE – CONSIDERAŢII CLINICE ŞI TEHNOLOGICE, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009.
10. NICOLA, C., BORZEA D., SECELEANU R. – MATERIALE UTILIZATE ÎN PROTETICA DENTARĂ, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2003.
11. BORZEA, D. – CERAMICA ÎN STOMATOLOGIE, Ed. Dacia, Cluj-Napoca, 2000.
12. BRATU, D. şi colab. – MATERIALE DENTARE, Ed. Helicon, Timişoara, 1994.

13. CRAIG, R. – RESTORATIVE DENTAL MATERIALS, Mosby, 1996.
14. McCABE, J. F., WALLS, A. W. G. – APPLIED DENTAL MATERIALS, Blackwell Science Ltd., 1998.
15. GLADWIN, M., BAGBY, M. – CLINICAL ASPECTS OF DENTAL MATERIALS, Lippincott Williams Wilkins, 2000.
16. Van Noort R. INTRODUCTION TO DENTAL MATERIALS. 3rd edition. Mosby Elsevier, 2008

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, dental continuing education forms and exhibitions of medical devices and dental materials in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure.
- Maintain of contact with other teachers from different dental institutions for coordination of taught content with similar curriculae.

The studied concepts are in accordance with valid regulations and are compatible with similar preclinical dental activities developed at the national level.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General criteria evaluations (the coverage area and precision of assimilated knowledges, logical coherence, fluency of speech) Ability to understand fundamental problems and particular ones.	Multiple choice questions exam	33%
10.5. Practical Activity	Evaluation of theoretical knowledges and practical abilities Permanent training during the whole semester	Practical exam Evaluation tests	33% 33%
10.7. Minimum performance standard			
Acquire of main Ergonomics concepts: • Dental practice organization. • Correct working positions of the dentist and dental assistant • Positioning of patient • Correct grasp of the dental instruments.			

- Transfer of the instruments according to the dental procedure
- Overstress. Muscular-skeletal disorders.

MEDICAL RESEARCH METHODOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	*Iuliu Haţieganu* University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine (Stomatology)
1.3. Department	Medical Education
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine (Stomatology) in English
1.7. Qualification	Doctor –Dental Medicine (Stomatology)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Medical Research Methodology					
2.2. Responsible for lecture			Assoc. Prof. Dr. Horaţiu Colosi					
2.3. Responsible for practical activity			Lect. Dr. Mădălina Văleanu Lect. Dr. Dan Istrate					
2.4. Year of study	2	2.5. Semester	II	2.6. Form of evaluation	SE (summative evaluation) Theoretical exam Practical exam	2.7. Course type	Content	DF
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					20
Individual study using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examination/ semester					3
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				40	
3.9. Total hours/semester				82	

3.10. Number of credits	3

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Fundamental Knowledge of Medical Informatics and Biostatistics

5. Requisites (if applicable)

5.1. For lectures	Telephone calls are not allowed during classes; Food and beverage consumption are not permitted during classes; Late students are not accepted in class, since this proves to be disruptive to the educational process.
5.2. For practical activities	Each student must complete an individual portfolio of practical activities. Students will scan the keycard to access the discipline IT resources using the specially designed system. They will use their authentication data (username, password) to log in the discipline network. Students shall comply to the Regulations of the Discipline of Medical Informatics and Biostatistics; Telephone calls are not allowed during classes; Food and beverage consumption are not permitted during classes; Late students are not accepted in class, since this proves to be disruptive to the educational process.

6. Acquired specific competences

Professional competences	1. Efficient use of bibliographic documentation methods to retrieve, use and critical evaluate medical scientific literature. 2. Identification and application of proper study types and research procedures in medical research. 3. Selecting and applying correct methods of data analysis in medical research. 4. Correct interpretation and critical assessment of published research results. 5. Correct dissemination of scientific works (written and oral presentation).
Transversal competences	1. Competencies for the use of digital media for medical information 2. Competencies for professional continuous education by training of critical thinking skills

	3. Competencies for critical evaluation of medical literature for practicing evidence-based medicine / dentistry (EBM / EBD) 4. Competencies for writing a scientific thesis and its oral defense 5. Competencies of professional ethics

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	1. To develop skills for effective retrieval, use and critical evaluation of medical scientific literature. 2. To develop skills to choose proper research methods and types of clinical studies in medical research. 3. To develop skills to choose suitable methods for data analysis and to correctly interpret results from medical research. 4. Skills development and acquisition of knowledge about appropriate methods of presenting results of scientific research. 5. Skills development and acquisition of knowledge needed to practice evidence-based medicine / dentistry (EBM / EBD).
7.2. Specific Objectives	*The course* provides students fundamental knowledge on: 1. Searching, recording and analyzing medical literature 2. Domains of medical research and clinical study types 3. Methods of medical research 4. Analysis and interpretation of results of medical studies 5. Principles for writing and correct presentation of research results 6. Principles of evidence-based medicine / dentistry (EBM / EBD) 7. Ethical principles in medical research *Practical Activities* have as objective the application of knowledge regarding: 1. Retrieving and accessing relevant medical information 2. Formulating proper research questions, defining the aim and objectives of research. The selection and proper formulation of research hypotheses. The identification of target populations in medical studies. Understanding sampling methods. Defining appropriate research variables. Writing a research protocol correctly. 3. Understanding and choosing correct methods of data collection 4. Understanding and choosing correct statistical methods for data analysis 5. Using computer tools to assist medical research 6. Understanding and using the correct principles of medical writing and oral presentation of medical research results 7. Evaluating the validity of studies 8. Critical reading of medical scientific literature

8. Content

Lecture	Teaching methods	Remarks
Introduction Variability in the living world Types of variables Bibliographic documentation	Academic lectures, demonstrations, interactive case studies, discussions based on research scenarios.	Oral exposure doubled by interactive multimedia presentations.
Basic methodology of medical research Phases of a research Data collection Sample-sampling Estimation and confidence intervals The research protocol		
Study validity and bias in medical studies Selection bias Measurement and information bias Confounding		
Clinical studies Prognostic studies		
Clinical studies Survival analysis		
Clinical studies Diagnostic studies		
Clinical studies Therapeutic studies		

Clinical studies The description of a health phenomenon Meta-analysis		
Choosing a statistical method Data types Comparing two groups Independent and paired samples Relation between two variables Statistical methods for multiple variables		
Presenting data Tables and graphics used to present categorical data Tables and graphics used to present quantitative data Graphics for two variables Errors in presenting data		
Medical writing and communication of research results Objectives of scientific writing Proper scientific language and style Types of medical texts Principles of medical writing of a research paper Principles of oral communication of a research paper The structure and content of a research paper		
Evidence based medicine / dentistry (EBM / EBD) Basic concepts Steps for practicing EBM /EBD		

Acquiring evidences by clinicians Hierarchy of evidence Searching for evidence Building pertinent clinical questions (the PICO format) Evaluation of validity for different types of clinical studies Evaluation of study relevance		
Ethical aspects of medical research Ethical principles in medical research Committees of clinical ethics Ethical rules during research Research fraud		
Modeling and simulation in medical research Principles of modeling and simulation Domains and examples of modeling and simulation in biomedical sciences		

Bibliography

Machin D, Campbell MJ. Design of studies for medical research. Chichester. West Sussex: John Wiley & Sons Ltd; 2005.

Hulley SB, Cummings SR, Browner WS, Grady DG, Newman TB. Designing Clinical Research. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2013.

Drugan T, Berghe AS, Bolboaca SD, Bondor C, Calinici C, Colosi H, Cutas A, Iancu M, Istrate D, Leucuta DC, Valeanu M. Metodologia Cercetării Științifice Medicale. Cluj-Napoca: Editura Medicală Universitară „Iuliu Haţieganu", 2017.

Course presentations for students of the faculty of dental medicine / stomatology [online] 2002-2019. Available from URL: http://www.info.umfcluj.ro/

Practical Activities	Teaching Methods	Activity to be performed by

		students
Safety rules. Introduction. Bibliographic documentation – citing references according to the Vancouver style.	Computer assisted solving of clinical research scenarios; Explanations and dialogue in classroom doubled by individual assistance.	Each student completes a portfolio of practical works using dedicated computer software
Bibliographic documentation – literature search, bibliographic files.		
Assessing prognostic factors 1. – Case-control study: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Assessing prognostic factors 2. – Cohort study: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Assessing the existence, level and direction of influence for prognostic factors – correlations and regressions: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Assessing prognostic factors 3. – Survival analysis: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Assessing a diagnostic test: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Assessing a therapy – RCT: research scenario (research protocol, data description, data analysis, presenting and interpreting the results).		
Identifying bias in medical research.		
Choosing correct statistical methods.		
Presenting medical research (oral communication of research results): Practical activity for acquiring skills in using proper scientific style for oral presentations with slides.		

Presenting medical research (written communication of research results): Case study (critical appraisal of a published original research).		
Evaluation of study validity. Interpreting the results of medical studies. Practice of Evidence Based Medicine / Dentistry (EBM /EBD).		
Recapitulative research scenarios.		
Bibliography: Practical activities of medical research methodology for students of the faculty of dental medicine / stomatology [online] 2002-2019. Available from URL: http: //www.info.umfcluj. com /		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

The course content was linked to the current requirements of medical organizations, major international medical publishing houses and medical employers regarding standards in researching and drafting scientific articles/theses and their application in evidence based medical practice (EBM/EBD). The educational content and the choice of teaching methods, has been updated together with specialists, researchers, PhD students, and representatives of organizations involved in promoting various techniques of medical education (AMEE, Prime Foundation). These issues were also discussed with other teachers in the field, instructors in other medical schools, from both Romania and abroad.

10.Evaluation

Activity type	10.1. Evaluation criteria	10.2. Evaluation methods	10.3 Percent of the final grade
10.4. Lecture	consistent with the educational objectives	Multiple-choice questions assessing the theoretical understanding and reasoning regarding the design and methodology of medical studies, medical writing and presentation of research results, reading and critical evaluation of	70%

		medical scientific literature	
10.5. Practical Activity	consistent with the educational objectives	Solving of research scenario based problems followed by oral examination. The ability to understand and interpret the results of research scenarios as well as practical skills of computer use in medical research will be assessed.	30%
10.6. Minimum performance standard			
The correct understanding and the ability to explain the key concepts outlined in the course presentations and at the beginning of each practical work.			

MODERN LANGUAGES

1. Information about the program

1.1. Institution for graduate and postgraduate studies: University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty: Dental Medicine
1.3. Department: Medical Education
1.4. Domain of study: Medicine
1.5. Level of course: License- (undergraduate students)
1.6. Academic degree: Dental Medicine in English
1.7. Qualification: Doctor –Dental Medicine (Dentistry)
1.8. Form of education: Full-time program

2. Information about the discipline

2.1. Course title: MODERN LANGUAGES
2.2. Responsible for lecture: Assistant Professor Cristina Gogâţă
2.3. Responsible for practical activity: Assistant Professor Cristina Gogâţă
2.4. Year of study: 2; *2.5. Semester:* I/II; *2.6. Form of evaluation:* examination; *2.7. Course type:* Content-DS; Compulsory-DI;

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week: 4h; *3.2. Course:* 0h; *3.3. Practical Activity:* 4h;
3.4. Total hours in the curricula: 56h; *3.5. Course:* 0h; *3.6. Practical activity:* 56h;
3.7. Distribution of time needed/week

a. Study using text books, lecture notes, references: 8h;
b. Individual study using on-line platforms, field research: 2h;
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays: 12h;
d. Tutoring: 2h;
e. Examination/ semester: 4h;
f. Other activities: 6h;
3.8. Total hours of individual study (a+b+c+d): 34h;
3.9. Total hours/semester: 90h;
3.10. Number of credits: 3;

4. Prerequisites (if needed)

4.1. Curriculum: -
4.2. Competences: -

5. Requisites (if applicable)

5.1. For lectures: -
5.2. For practical activities: To respect the rules and regulations for practical activities

6. Acquired specific competences

6.1. Professional competences:
- The ability to properly employ Romanian (listening, reading, speaking, writing) in order to communicate in general contexts, both academic and medical
- The ability to use medical terms specific to various fields

6.2. Transversal competences:
- The ability to employ prior knowledge of Romanian in medical and academic activities in order to communicate adequately in Romanian
- The ability to make interdisciplinary connections in the fields ofstudy

7. Course objectives (derived from the acquired specific competences)

7.1. General objectives
- Development of competences in general Romanian and in academic medical language

7.2. Specific objectives
At the end of the seminar, the learner is capable:
- To use all forms of the verb and to conjugate it in all verb tenses
- To give advice and to make recommendations for a patient
- To speak about teeth and tooth structure
- To perform an inventory of medical instruments specific to dentistry
- To speak about prevention of dental affections

8. Content

a. Practical activity

Teaching methods: Interactive teaching and multimedia support
Activity to be done by students: Specific exercises and activities (individual, in pairs or in groups) aiming to develop the main competences in Romanian (speaking, listening, reading, and writing).
Content

1. My identity. Expressing personal tastes, speaking about daily activities. Revision - verbs in present tense, verbs that require personal and reflexive pronouns. Family. Possessive adjectives. Verbs in the subjunctive mood.
2. Food produce. Revision - past tense simple, the noun, the article. Pronouns in the Accusative case.
3. Future tense simple. Verbs m the future tense. Pronouns in the Dative case.
4. At the dentist's. Prepositions. Ordinal numerals. Describing an image. Speaking about differences.
5. At the doctor's. The imperative. Pronouns in the Dative case.
6. My future doctor's practice. The popular future. Vocabulary.
7. Sterilization of dental instruments. Vocabulary. The impersonal pronoun se.
8. Making an appointment at the dentist's. Verbs in the conditional mood.
9. Taking clinical advice. An anamnesis. Examination. The medical chart. The Expressing pain. Giving
10. Prevention of dental problems. Tooth brushing. The mouth. Verbs in the imperative mood.
11. The dental cavity. The anatomy of the tooth. The subjunctive - 3rd person.
12. The dental obstruction. Stages, instruments. Expressing advantages and disadvantages.
13. Dental emergencies. Indefinite pronouns and adjectives (multi, putini, toti, fiecare , unul, altul, cineva, ceva, orice).
14. Primary dentition and permanent dentition. Verbs in the Gerund mood. Expressing simultaneity, anteriority and posteriority (deja, fnainte de, acum ... ore/ zilel ani; apoi, dupa, dupa ce, peste, dupa aceea; in timpul, in acelai timp, fn timp ce).
15. Radiological examination. Nouns in the Genitive and Dative cases.

9. Connecting the course content with the demands of the epistemic community, professional association s, and representative employers in the field

Collaboration with teachers specialized in medical disciplines in order to identify students' needs and to adjust the contents of the seminar.
Teachers' participation at scientific manifestations and professional formation classes in order to adjust teaching methods to the actual communication needs in the academic medical field.

10. Evaluation

Activity type	*10.1. Evaluation criteria*	*10.2. Evaluation methods*	*10.3. Percent of final grade*
10.4. Lectures	-	-	-
10.5. Laboratory/ Seminar	Evaluation of written communication abilities Evaluation of oral communication skills	Written test Oral test	33% 33%
10.6 Activity during 1st /2nd semester	Active participation m seminars, portfolio for the seminar	Evaluation of the activity during Seminars and of the individual portfolio	33%
10.7.Minimum performance standard			

Competences in Romanian and competences in general and medical communication allowing general, academic and medical communication at the A2 level according to the Common European Framework of Reference for Languages.

SPORTS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medical Education
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Physical Education and Sport**					
2.2. Responsible for lecture								
2.3. Responsible for practical activity			Conf. Dr. Mihai Ludovic Kiss Şef Lucr. Dr. Suciu Cornelia					
2.4. Year of study	2	2.5. Semester	1	2.6. Form of evaluation	ES (summative evaluation) + test	2.7. Course type	Content Mandatory	DC DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	2	3.2. Course		3.3. Practical Activity	2
3.4. Total hours in the curriculum	24	3.5. Course		3.6. Practical activity	24
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					
Individual study using on-line platforms, field research					
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					

Tutoring	
Examination/ semester	2
Other activities	
3.8. Total hours of individual study (a+b+c+d)	
3.9. Total hours/semester	24
3.10. Number of credits	2

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Physical and motor skills acquired in high school

5. Requisites (if applicable)

5.1. For lectures	The use of mobile phone is not allowed and the consumption of food and beverages is forbidden
5.2. For practical activities	Each student must have specific equipment for the activity

6. Acquired specific competences

Professional competences	- Modern design training on lifestyle optimization based on the systematic practice of physical exercise
Transversal competences	- Strengthening systematic practice of physical exercise capacity ("Mens sana in corpore sano") - Knowledge of issues on the prevention and correction of deficient body attitude and traumatic recovery - Knowledge about the specific terminology of sport - Development and deepening of artistic sense

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Maintaining a better form of health used to practice systematic physical exercise
7.2. Specific objectives	After the course students will be able to apply the skills

8. Content

Lecture	Teaching methods	Observations

Bibliography		
Practical Activities	Teaching Methods	Activity to be done by students
1. Physical Education and Sport	Lecture, explanation, demonstration	
2. Other sports (basketball, volleyball, volleyball, football, ballroom dancing, aerobics, bodybuilding fitness-, tennis, karate, skiing, chess, badminton)	Lecture, explanation, demonstration	
3. Medical Gymnastics Elements	Lecture, explanation, demonstration	
Bibliography: - M. Kiss, Caiet de lucrări practice: Dans de societate, 2012 - M. Kiss, Caiet de lucrări practice: Baschet, 2012 - M. Kiss, Caiet de lucrări practice: Culturism - Fitness, 2013 - C. Suciu, Îndreptar de lucrări practico-metodice, 2013 - Bocu T. Activitatea fizică în viaţa omului contemporan. Editura Casa Cărţii de Ştiinţă 2007 - Regulamentele ramurilor de sport practicate		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Discussions with other teachers in other universities on new methodologies	

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture			
10.5. Practical Activity	according to specific objectives	Practical test	80% (20% practical test, 10% summative evaluation)
10.6. Activity during semester			

10.7. Minimum performance standard
Key messages at the end of the course

CONCEPTS OF PERIODONTAL SEMIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	3 - Oral Rehabilitation
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Concepts of periodontal semiology					
2.2. Responsible for lecture			Lecturer Dr. Stefan Adrian Petrutiu, DMD, PhD					
2.3. Responsible for practical activity			Lecturer Dr. Stefan Adrian Petrutiu, DMD, PhD Assistant Professor Dr. Cosmin Ciobanu DMD, PhD Assistant Professor Dr. Micu Cristina, DMD, PhD Student Med Rez Costea Cristina, PhD student					
2.4. Year of study	2	2.5. Semester	2	2.6. Form of evaluation	Written and oral exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28

3.7. Distribution of time needed/week	Hours
Study using text books, lecture notes, references	14
Individual study using on-line platforms, field research	8
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	12
Tutoring	1
Examination/ semester	1
Other activities	0
3.8. Total hours of individual study (a+b+c+d)	35
3.9. Total hours/semester	78
3.10. Number of credits	3

4. Prerequisites (if needed)

4.1. Curriculum	Basic knowledge of histology, physiology, microbiology
4.2. Competences	Evaluation of clinical and microbiological parameters

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Preclinical laboratory with preclinical study models and audio/video system

6. Acquired specific competences

Professional competences	• Ability to identify the clinical signs of periodontal inflammation • Ability to identify the clinical signs of periodontal destruction • Ability to interpret and use the results of the microbiological testing • Ability to analyze the clinical data in correlation with the complementary investigations • Ability to advice the patient on the improvement of their oral hygiene status and how to decrease the inflammation
Transversal competences	• Application of theoretical knowledge in clinical practice • Determination of interdisciplinary correlations of the studied fields

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Provide the necessary data to identify the signs and symptoms associated with specific periodontal affections and their type of

	quantification
7.2. Specific objectives	• Provide the theoretical knowledge about periodontal entities semiology • Provide the necessary knowledge for clinical application of the above notions • Provide the necessary knowledge for pain management of the periodontal patient • Provide the knowledge necessary for the development of communication skills with periodontal patients • Practice the bibliographic documentation skills

8. Content

Lecture	Teaching methods	Observations
1. Periodontology – history, terminology, medical concepts in periodontal medicine	Interactive lecture	Lectures, Power point presentations
2. Clinical signs in gingival diseases	Interactive lecture	Lectures, Power point presentations
3. Symptomatology of gingival diseases	Interactive lecture	Lectures, Power point presentations
4. Recognition of some signs and symptoms of deep periodontal destruction	Interactive lecture	Lectures, Power point presentations
5.Local vs. systemic inflammatory status. Oral signs, symptoms and correlation with systemic changes	Interactive lecture	Lectures, Power point presentations
6.Periodontal signs and symptoms in pregnancy, Down syndrome, Alzheimer disease	Interactive lecture	Lectures, Power point presentations
7.Drug induced gingival enlargement: signs and symptoms	Interactive lecture	Lectures, Power point presentations

8. Gingival bleeding as symptom of periodontal disease	Interactive lecture	Lectures, Power point presentations
9. Pain as symptom of periodontal disease	Interactive lecture	Lectures, Power point presentations
10. Aesthetic changes- reason for periodontal consult	Interactive lecture	Lectures, Power point presentations
11. Other symptoms for patient presentation to the periodontist: tooth migration, mobility, fear of teeth loss	Interactive lecture	Lectures, Power point presentations
12.Appreciation parameters of quality of life changes in the periodontal diseased patient before, during and after treatment	Interactive lecture	Lectures, Power point presentations
13.Symptoms and signs associated with lack of attached gingiva	Interactive lecture	Lectures, Power point presentations
14.Periodontal signs and symptoms of the patient with orthodontic and prosthetic treatment	Interactive lecture	Lectures, Power point presentations

Bibliography

1. Soancă A, Roman A, Petruțiu SA. Concepts in Periodontal Therapy, Ed Med Univ Iuliu Hatieganu, 2013, ISBN 978-973-693-540-4
2 Lindhe J, Lang NP, Karring T (eds). Clinical Periodontology and implant dentistry, 5th ed, Blackwell, Muncsgaard, 2008.
3. Roman A, Soancă A, Concepts in Periodontal Therapy, Ed Med Univ Iuliu Hatieganu, 2011, ISBN 978-973-693-471-1

b. Practical Activities	Teaching Methods	Observations
1. Healthy periodontium – clinical cases, clinical evaluation	Interactive presentation based on clinical cases	Power-point presentation
2. Gingival inflammation – signs and symptoms	Interactive presentation based	Patients, Power point

	on clinical cases	presentation
3. Non-plaque induced gingivitis. Signs and symptoms	Interactive presentation based on clinical cases	Power point presentation, study models
4. Plaque induced vs. non-plaque induced gingivitis. Differential signs and symptoms	Problem solving exercises based on clinical case reports	Power point presentation
5. Clinical evaluation of signs associated with the lack of attached gingiva	Exercises on Frasaco models, case reports	Power point presentation, study models
6. Periodontal probes. Description, comparison of different types, advantages and disadvantages	Instrument identification	Instruments, Power point presentation
7. Instruments used for supra-gingival and sub-gingival scaling	Description of the instruments, exercises for identification	Instruments, Power point presentation
8. Instruments used in periodontal surgery	Description of the instruments, exercises for identification	Patients, power point presentation
9. Maintenance care of periodontal patients with Down syndrome. Primary and secondary prophylaxis of periodontal disease	Maintenance plans based on clinical examples according to the proposed objectives	Patients, power point presentation
10. Maintenance of the diabetes patients with gingivitis. Maintenance plans	Maintenance plans based on clinical examples according to the proposed objectives	Patients, power point presentation
11. Recapitulation of the signs and symptoms encountered in periodontal disease	Maintenance plans based on clinical examples according to the proposed objectives -Differentiated algorithms	Power point presentation
12. Medication used for pain management and gingival bleeding management	-Examples of marketed products.	Power point presentation

	Discussions advantages/disadvantages.	
13.Clinical appreciation of aesthetic modification in periodontology	Clinical exercises	Power point presentation
14.The evolution of signs of symptoms after periodontal treatment	Clinical exercises	Power point presentation

Bibliography:
1. Soancă A, Roman A, Petruțiu SA. Concepts in Periodontal Therapy, Ed Med Univ Iuliu Hatieganu, 2013, ISBN 978-973-693-540-4
2 Lindhe J, Lang NP, Karring T (eds). Clinical Periodontology and implant dentistry, 5th ed, Blackwell, Muncsgaard, 2008.
3. Kuboniwa M, Lamont RJ. Subgingival biofilm formation. Periodontology 2000, 2010; 52: 38-52.
4. Freire MO, Van Dyke TE. Natural resolution of inflammation. Periodontol 2000. 2013 Oct;63(1):149-64.
5. Pizzo G, Guiglia R, Lo Russo L, Campisi G. Dentistry and internal medicine: from the focal infection theory to the periodontal medicine concept. Eur J Intern Med. 2010 Dec;21(6):496-502.
6. Taylor JJ, Preshaw PM, Lalla E. A review of the evidence for pathogenic mechanisms that may link periodontitis and diabetes. J Periodontol. 2013 Apr;84(4 Suppl):S113-34
7. Nualart Grollmus ZC, Morales Chávez MC, Silvestre Donat FJ. Periodontal disease associated to systemic genetic disorders Med Oral Patol Oral Cir Bucal 2007;12:E211-5.
8. Roman A, Soancă A, Concepts in Periodontal Therapy, Ed Med Univ Iuliu Hatieganu, 2011, ISBN 978-973-693-471-1

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives from the dental medicine community – in view of the identification of the needs and expectations of employers from the field and the adaptation of the analytical curriculum to the necessities of current practical activities.
- Permanent participation of the department members in scientific manifestations, various forms of continual medical education, equipment and medical material exhibitions dedicated to dental medicine activities – in view of maintaining the theoretical and practical information constantly being introduced in the course structure at a high level of quality.
- Maintaining contact with other department chairs from the field, in order to coordinate the teaching material with other similar programs from within other similar institutions of superior education.
- The studied notions are in accordance to the current regulations and are compatible with activities taking place on a national level in the segment of pre-clinical dental medicine..

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Evaluation criteria (the width and corectness of acquired knowledge, logical coherence) Ability to undderstand fundamental problems and to customize them.	Written exam	50 %
10.5. Practical Activity	Evaluation of the assimilated theoretical knowledge	Oral exam	50 % (40 % practical exam and 10 % individual portofolio)
10.6. The student's activity during the semester		Test	10 % - part of 10.5
10.7. Minimum performance standard			
The acquirement of the basic knowledge in periodontology • Signs and symptoms of periodontal diseases • The importance of the clinical exam in the diagnostic of periodontal disease • Primary and secondary prophylaxis algorithms in periodontal diseases considering the systemic risk factors			

ETHICS AND ACADEMIC INTEGRITY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Reabilitation
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)

1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Ethics and Integrity in Academia					
2.2. Responsible for lecture			Maria Aluaș					
2.3. Responsible for practical activity			-					
2.4. Year of study	2	2.5. Semester	4	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	1	3.2. Course	1	3.3. Practical Activity	-
3.4. Total hours in the curriculum	14	3.5. Course	14	3.6. Practical activity	-
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					8
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				38	
3.9. Total hours/semester				52	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Adequate level of understanding, conversation, speaking, and writing in English

5. Requisites (if applicable)

5.1. For lectures	Students will keep them off GSM. During the course, phone calls are

	not allowed. Students cannot leave the amphitheater to the reason of personal phone calls; It is not allowed to eat during class sessions consumption of food and drinks is prohibited; Students must respect timetables; the late arrival to activities is prohibited, as this will disturb the working sessions.
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	•Being able to use correctly, in the appropriate context, the specific terminology •Being able to frame ethical and integrity issues in the medical and health context •Identify the negative consequences that can raise from the misconduct and misbehavior practices • Being able to use efficient sources of information and distinguish official information other information found on the internet
Transversal competences	•Having the ability to use the concepts learned in new contexts; •To optimize creatively their potential in the scientific and research activities in which they are involved; • To have the ability to identify the consequences of the presented topics in personal and professional life; • To show concern for identifying solutions and arguments in favor of proposed solutions; • To justify the decisions they would make in such situations; • Demonstrate the ability to use digital media and reference documents for information purposes in order to solve ethical and academic integrity issues.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the semester, students will acquire skills that make them able to identify and contextualize an ethical and integrity issue and, to be aware about consequences of such practices for the profession of dentist and researcher.
7.2. Specific objectives	At the end of the semester, students will be able to: - Distinguish between describe and evaluate a concrete situation and delineate the ethical and integrity issues from other types of frauds. - To problematize and analyze the presented cases and situations. - Identify solutions or possibilities to avoid such situations.

8. Content

Lecture	Teaching methods	Observations

1. Introductory course. Conceptual definitions and boundaries: What does ethics and academic integrity mean?	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
2. The causes and cases that led to the emergence of this new discipline: Jon Studbo, Eric Poehlman, Andrew Wakelfied.	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
3. Forms of facts that can be classified as misconduct in the academic environment: data falsification, fabrication, plagiarism, other frauds	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
4. Data fabrication: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)

5. Data falsification: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
6. Plagiarism: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
7. Conflict of interests: definition, causes, consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of 5multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
8. Data protection. The concept of privacy and confidentiality	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
9. Intellectual property rights: copyright and patents	Exhibition of knowledge	Oral presentation

	according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	(lecture), with multimedia support (Powerpoint, doubled images / movies)
10. Legal regulations regarding Misconduct practices	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
11. European Code of Research Integrity	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
12. Sanctions applied to acts of misconduct: academic, disciplinary, legal sanctions	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
13. Solutions: education, methodological skills, change of policies	Exhibition of knowledge according to the proposed themes, stimulating	Oral presentation (lecture), with

	interactivity; illustration by clinical cases; use of multimedia;	multimedia support (Powerpoint, doubled images / movies)
14. Science and professional responsibility	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
Bibliography All European Academies, The European Code of Conduct for Research Integrity. Revised Edition, Berlin 2017 PRINTEGER (2016). Documents and Results. https://printeger.eu/documents-results/. Accessed 20-06-2019 A.Shamoo, D. Resnik, Responsible Conduct of Research, 3rd ed. Oxford University Press, 2015		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

To structuring the content, the choice of teaching / learning methods, the responsible of this discipline has : Held working meetings with doctors, lawyers, historians, and other professionals in the medical universities. These meetings had the objective to identify problems and to contemplate appropriate solutions as well as coordination with other similar programs of faculties.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	In accordance with the educational objectives (theoretical examination)	Written exam: ethical scenario and role play (70%) Argumentation of	100%

		the decision and proposed solution (30%)	
10.5. Practical Activity			
10.6. Activity during semester			
10.7. Minimum performance standard			

SUMMER MEDICAL PRACTICE

10. Information about the program

10.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
10.2. Faculty	Dental Medicine
10.3. Department	Dental Medicine IV
10.4. Domain of study	Medicine
10.5. Level of course	License- (undergraduate students)
10.6. Academic degree	Dental Medicine in English
10.7. Qualification	Doctor –Dental Medicine (Dentistry)
10.8. Form of education	Full-time program

11. Information about the discipline

2.1. Course title			**Summer Medical Practice**					
2.2. Responsible for lecture			Lecturer Cristina Gasparik					
2.3. Responsible for practical activity								
2.4. Year of study	2	2.5. Semester	2	2.6. Form of evaluation	Theoretical Exam	2.7. Course type	SD	

12. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**40**	3.2. Course	**0**	3.3. Practical Activity	40
3.4. Total hours in the curriculum	**160**	**3.5. Course**	**0**	**3.6. Practical activity**	**160**
3.7. Distribution of time needed/week					Hours
i. Study using text books, lecture notes, references					
j. Individual study using on-line platforms, field research					
k. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					
l. Tutoring					
Examination/ semester					
Other activities					
3.8. Total hours of individual study (a+b+c+d)					
3.9. Total hours/semester					
3.10. Number of credits				4	

13. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	

14. Requisites (if applicable)

5.1. For lectures	
5.2. For practical activities	• Attendance is mandatory in a proportion of 100%. • Adequate dress code – lab coat • Filling in the summer medical practice notebook, in accordance with the curriculum

15. Acquired specific competences

Professional competences	Medical practice activities in general medicine units Medical practice activities in dental medicine units
Transversal competences	Ability to work in a team during therapeutic procedures

16. Course objectives (derived from the acquired specific competences)

16.1. General Objectives	Acquiring the knowledge of the working of general medicine units and dental medicine units
16.2. Specific objectives	• Knowledge of the working of general medicine units and dental medicine units, the patients' and dental instruments' circuits • Learning and exercising the examination of patients, elaboration of the patient chart. • Learning notions regarding preparation of the instruments for disinfection and sterilization and regarding instrument sterilization. • Knowledge of the specific instruments used in the medical unit where the student goes for summer medical practice.

17. Content

c. Lecture	**Teaching methods**	**Observations**
d. Practical Activities	**Teaching Methods**	**Activity to be done by students**
Common subjects 9. Knowledge of the structure and functioning of the medical unit 10. Knowledge of the medical records and documents used in the medical unit 11. Knowing and applying the medical attributes of the nurses regarding receiving, registering and preparing the patients for the clinical examination 12. Development of communication skills with the patient: patient history, informing and educating the patient. Development of special communication skills according to: sex, age, childhood, incurable, terminally ill or non-cooperating patient. Communicating with the patient's family. 13. The preparation of medical instruments: washing, degreasing, syringe and needle control, sterilization, the maintenance and route of sterile materials 14. Knowing and applying the attributes of the nurse regarding the maintenance of hygiene norms in the		

medical unit 15. Elementary sterilization practices: chemical sterilization, steam sterilization, modern techniques of sterilization. 16. Development of clinical examination skills: physical examination, palpation, auscultation, percussion and special examination techniques: (measuring blood pressure, temperature, pulse) 17. Recognizing the specific instruments for oral examination 18. Recognizing the specific instruments for dental treatments performed in the dental office 19. Basic knowledge on the dental unit: components, action, and accurate position of the patient and of the physician. 20. The desinfection of the dental office. 21. Knowledge of the protection methods against infectious diseases in the dental office. 22. Basic patient care procedures 23. The knowledge of notions regarding the dental instruments' preparation for disinfection and sterilization. 24. The preparation of dental materials for impressions, fillings 25. Completion of medical charts 26. Elaboration of treatment plans	160 hours	

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

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11. Evaluation

Activity type	11.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture			
10.5. Practical Activity	Theoretical written exam		**100%**
10.6. Activity			

during semester			
10.7. Minimum performance standard			
Knowledge of prevention methods against contamination of the dental office and transmission of infectious diseases Knowledge of the protection methods against infectious diseases in the dental office. Basic patient care knowledge Recognizing the specific instruments for oral examination of the patient			

DENTAL AND ORAL BIOCHEMISTRY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Medicine 3
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Oro-Dental Biochemistry**				
2.2. Responsible for lecture			Lecturer Dr. Tiberiu Nistor				
2.3. Responsible for practical activity			-				
2.4. Year of study	2	2.5. Semester	2	2.6. Form of evaluation	Oral presentation + written	2.7. Course type	Optional

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	1	3.2. Course	1	3.3. Practical Activity	-
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**-**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					12
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					8
Tutoring					-
Examination/ semester					2
Other activities					14
3.8. Total hours of individual study (a+b+c+d)				34	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	General knowledge of biochemistry

5. Requisites (if applicable)

5.1. For lectures	Amphitheater
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	Basic knowledge necessary for the understanding of the biochemical modifications in the oral cavity. Correlation between pathological modifications of the oral cavity and systemic diseases.
Transversal competences	Correlation of the theoretical knowledge with the practical activity Interdisciplinary correlations

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The accumulation of the major knowledge of biochemical modifications in the oral cavity in different types of diseases, important in dental medicine.
7.2. Specific objectives	Periodontal diseases and diabetes mellitus Inherited disorders with oral manifestations

	Nutritional deficiency diseases Heavy metal toxicity Connective tissue diseases Salivary gland disorders Oral manifestations of systemic diseases

8. Content

Lecture	Teaching methods	Observations
1. Periodontal diseases and diabetes mellitus	Lecture, interactive conversation	Oral presentation, Power-Point presentation
2. Inherited disorders with oral manifestations	Lecture, interactive conversation	Oral presentation, Power-Point presentation
3. Nutritional deficiency diseases	Lecture, interactive conversation	Oral presentation, Power-Point presentation
4. Heavy metal toxicity	Lecture, interactive conversation	Oral presentation, Power-Point presentation
5. Connective tissue diseases	Lecture, interactive conversation	Oral presentation, Power-Point presentation
6. Salivary gland disorders	Lecture, interactive conversation	Oral presentation, Power-Point presentation
7. Oral manifestations of systemic diseases	Lecture, interactive conversation	Oral presentation, Power-Point presentation
Bibliography:		

David K. Mason, J. Harold Jones – Oral Manifestations of Systemic Diseases, W.B. Saunders Company, 2nd edition, 1990

Robert K. Murray, Daryl K. Granner, Peter A. Mayes, Victor W. Rodwell – Harper's Illustrated Biochemistry, twenty-sixth edition, 2003

David L. Nelson, Michael M. Cox – Lehninger-Principles of Biochemistry, fourth edition, New York, 2005

Thomas M. Devlin – Textbook of Biochemistry with Clinical Correlations, sixth edition, 2006

Jean M. Bruch, Nathaniel Treister – Clinical Oral Medicine and Pathology, Humana Press, 2010

Practical Activities	**Teaching Methods**	**Activity to be done by students**
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9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

A continous dialogue with the dental medicine community.
A constantly participation of the department to scientific manifestations.
To maintain contacts with other departments from the same field.

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Evaluation of the knowledge and understanding accumulated by students during the semester	Open questions	**75%**
10.5. Practical Activity	-	-	**-**
10.6. Activity during semester	Term Work	Oral presentation	**25%**

10.7. Minimum performance standard
The students have to know about: - Periodontal diseases and diabetes mellitus - Inherited disorders with oral manifestations - Nutritional deficiency diseases - Heavy metal toxicity - Connective tissue diseases - Salivary gland disorders - Oral manifestations of systemic diseases

ANTHROPOLOGY AND COMPARATIVE ANATOMY OF THE ORAL SYSTEM

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine, Department 4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Anthropology and notions of compared anatomy**					
2.2. Responsible for lecture			Lecturer Dr. Alexandra Botoș					
2.3. Responsible for practical activity			Lecturer Dr. Alexandra Botoș					
2.4. Year of study	2	2.5. Semester	1	2.6. Form of evaluation	Colocvium	2.7. Course type	Content Compulsory	 Optional

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	0
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**0**
3.7. Distribution of time needed/week					Hours
1. Study using text books, lecture notes, references					14
2. Individual study using on-line platforms, field research					10
3. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
4. Tutoring					4
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

5. Prerequisites (if needed)

4.1. Curriculum	General and Head and neck anatomy
4.2. Competences	

6. Requisites (if applicable)

5.1. For lectures	100% of the hours- Compulsory presence Amphitheater with multi-media system for projection
5.2. For practical activities	-

7. Acquired specific competences

Professional competences	• The ability to use correctly the professional language in the domain of dental morphology and human anatomy • Knowledge of human and facial development • Knowledge of human embriology • The compared analysis of the disposition of anthropometrical points in the human face and in other mamals • The knowledge about human posture – the evolution from four leg walking to two leg walking • The understanding of filogenetic evolution of the face bone structures and muscles and of the temporomandibular joint • The ability to understand in a syntetic manner and to integrate informatons in the field of anatomy, physiology, histology of the oral system. • Abilities in performing practical activities, based on modeling the dental

	anatomy in various dental materials.
Transversal competences	• Ability to use the information in a new context • Ability to apply the theoretical knowledge on a practical basis. • Ability to establish connection between the studied subjects.

8. **Course objectives (derived from the acquired specific competences)**

a. General Objectives	The knowledge of human anthropology and compared anatomy
b. Specific objectives	• Knowledge of human and mammal compared anatomy • Knowledge of human and mammal topographic anatomy • Knowledge of specific evolution of the facial complex within human evolution • Development of communication skills • Development of analysis and bibliographical documentation

9. Content

Lecture	Teaching methods	Observations
2. Introduction, the filogenetical evolution of the craniofacial area 3. Craniofacial embrioloy, prenatal development – the formation and evolution of tooth buds, the development of the tongue; filogenetic evolution of teeth (number, structure); swallowing reflex, sucking reflex. 4. Postnatal craniofacial development, the evolution of tooth eruption; evolutive modification of the shape and function of the cephalic extremity; facial growth centers. 5. Facial and bone anthropometric points; the evolution of anthropometric ratios; the evolution of facial roportions 6. Evolution of body posture – walking on two legs; the	PP presentations	Interactive presentations,

influence of muscles on bone development; muscle tone 7. The filogenetic evolution of the temporomandibular joint; the evolution of mandibular mevements. 8. Student presentations.		

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Diana Dudea, Dorin Borzea- Morfologia dinţilor şi a arcadelor dentare. Casa Cărţii de ştiinţă, Cluj, 2001.

Diana Dudea- Morfologia si functia ADM - caietul studentului. Editura Iuliu Hatieganu, Cluj-Napoca, 2009

Scheid R.C, Weiss G,- Woelfel`s Dental anatomy, 8th Eddition, Williams & Wilkins, 2012

Brandt R.W., Isselhard D.E.- Anatomy of Orofacial Structure, A Comprehensive approach, Enhanced 7th Ed Mosby, St. Louis, 2013

Nelson SJ, Ash M.M. Wheeler's dental anatomy, Physiology and occlusion, 9th Eddition, Philadelphia, W.B.Sanders, Elsevier 2010

Okeson JP. Management of Temporomandibular Disorders and Occlusion 7th Ed. Mosby, St. Louis, 2012

Ash M.M., Ramfjord S., Occlusion, 4th Ed, W.B. Sanders Comp, Philadelphia, 1995

Victor R. Preedy, Handbook of Anthropometry, Physical Measures of Human Form in Health and Disease, Springer, London 2012

Claire Elizabeth Terhune, The temporomandibular joint in anthropoid primates. Functional, allometric, and phylogenetic influences, PhD thesis, Arizona State University, 2010.

Practical Activities	Teaching Methods	Activity to be done by students
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9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• Dialog with the representatives of the dental community, in order to identify the requirements for the future dentist; the results are the basis for the continuous update and improvement of the dental curricula • Participation of the staff to scientific events, continuous education lectures, exhibitions in the domain of dentistry, in order to keep a high level of the knowledge. • Maintaining of the permenent contact with Faculties of Dentistry in our country and abroad, in order to permanetly update the curriculla according to corresponding programs in other Universities.

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria – to cover the entire range of information , to be able to do connection between subjects, to have a logic approach)	Colocvium	**75%**
10.5. Practical Activity			
10.6. Activity during semester	Evaluation of the continuity in preparation of theoretical and practical activties.	Periodic tests	**25%**
10.7. Minimum performance standard			
Knowledge of principles of Anthropology and Notions of Compared Anatomy			

20.THE CURRICULA OF THE 3RD YEAR

PREVENTION IN DENTISTRY 1

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	III, Oral Rehabilitation

1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form ofeducation	Full-time program

2. Information aboutthe discipline

2.1.Course title			Preventive pediatric dentistry					
2.2. Responsible for lecture			Prof. Dr. Mindra Badea					
2.3. Responsible for practical activity			Lecturer Dr. Iulia Badea Lecturer Dr Ioana Chifor Asist. Univ. Dr. Andrei Picos					
2.4. Year of study	III	2.5. Semester	I	2.6. Form of evaluation	Theoretical Exam + Practical Exam	2.7. Course type	Conten	DI
							Mandatory	DS

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3.Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					10
Individual study using on-line platforms, field research					2
Preparing seminars/Laboratoryactivities, homework, projects, portfolios, essays					2
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				20	
3.9. Total hours/semester				90	
3.10. Number of credits				3	

4. Prerequisites (if needed)

4.1. Curriculum	Basic knowledge of anatomy, physiology and physiopathology of the oral cavity, dental propaedeutic and cariology.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projector system
5.2. For practical activities	Laboratories with specific requisites for the practical activities

6. Acquired specific competences

Professional competences	• The capacity of utilizing the specialty terminology in an adequate manner and in context • Obtaining knowledge regarding the examination instruments and the instruments used for performing the dental cleaning (manual and ultrasonic scaling, non-invasive sealing) • Knowing various dental diagnostic methods: clinical methods, visual methods (caries indices), clinical methods (diagnodent) and imagistic methods (radiography) • Obtaining knowledge regarding dental plaque control using different methods • Perfecting the capacity to apply the theoretical knowledge of caries prophylaxis in a practical manner by working on models (for the sealing procedure) and on clinical cases (for the scaling and topical fluoridation procedure) • Acquiring the necessary practical experience of utilizing the special instruments and armamentarium in order to be able to perform all the methods of caries prevention using different methods and materials.
Transversal competences	• The capacity of using the learned notions in a new context • To apply the theoretical knowledge in the practical activity • Establishing interdisciplinary correlations between the studied subjects

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Acquiring knowledge of dental pathology prophylaxis for children and adults.
7.2. Specific objectives	• Acquiring knowledge of dental prevention for children and adults. • The introduction of dental plaque control notions. • Acquiring knowledge of the auxiliary means of hygiene and

	personalizing their usage. • The diagnosis of the incipient carious lesion • The in depth study of the systemic fluoridation • The in depth study of the topical fluoridation and the fluoride products used • Acquiring notions of cross-infection control in the dental office • Exercise capacity of synthesis and bibliographical documentation

8. Content

Lecture	Teaching methods	Observations
1. Dental prevention. General aspects.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
2. Patient examination chart.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
3. The cross-infection control in the dental office.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
4. Indices in dental prevention (classification, plaque indices, caries indices, gingival bleeding indices)	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
5. Pediatric prevention of dental caries. The mechanical control over the bacterial plaque (Reducing the number of bacteria): Dental brushing and auxiliary means of oral hygiene. - 2 hours	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
6. The chemical control over the bacterial plaque: Toothpaste and other dentifrices.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
7. Increasing the resistance of the dental tissues through systemic and local fluoridation	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

8. The professional topical fluoridation – Uses of fluoride pharmaceuticals. Commercial products.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
9. Acute and chronic fluoride intoxication. Administration of fluoride pharmaceuticals	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
10. The concept of food hygiene and nutritional, caries-preventive food. Nutrients, which contain hidden sugar.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
11. The pits and fissure sealing procedure. Indications, technique, commercial products.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
12. Sanitary education divided on age groups. Prenatal and postnatal recommendations. Recommendations for infants and pre-school children. Recommendations for school-aged children once the first permanent teeth appear until the age of 18.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
13. The professional brushing procedure. Indications, technique, precautions. The supra gingival scaling. Supra gingival scaling instruments (manual and mechanical).	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
14. The prophylaxis of the dento-maxillary anomalies. The detection of vicious habits. The preventive attitude towards the orthodontic patient and the patient with dentures.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

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2. Badea ME, Avram R. *Prophylaxie de la carie dentaire.* Editura Medicală Universitară "Iuliu Haţieganu", 2007. ISBN 978-973-693-254-0
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11. Takahashi, Nobuhiro-Stashenko, P.-Sasaki, Keiichi.-Suzuki, O.,- *Interface Oral Health Science 2011*-Springer Science & Business Media, 2012*2011*- Springer Science & Business Media, 2012

Practical Activities	Teaching Methods	Activity to be done by students
1. Clinical examination of the patient. Examination chart. (One case).	Interactive discussions and demonstrations on film.	Performing the clinical exo- and end oral examination. Filling in the patient examination chart.
2. Preventing the transmission of the infection inside the dental office. Asepsis, antisepsis and disinfection: terminology, sterilization methods, disinfection methods, disinfectant agents and antiseptic agents for dental use. Using the adequate protection equipment for the personnel of the dental office.	Interactive discussions. Presentations on the model.	Cross-infection control in the dental office. Using the adequate protection equipment for the dental doctor.
3. Relieving the bacterial plaque and the dental tartar. Plaque relieving substances. Indices (recording technique, estimation formula): OHI-S oral hygiene index, Lange proximal plaque index (API), and tartar surface index. (One case).	Interactive discussions. Presentations on the model.	Assessing the oral hygiene level using the oral hygiene indices, on the patient.
4. Assessing the dental status – DMF and dmf, oral hygiene status. (One case).	Interactive discussions. Presentations on the model.	Assessing the dental status, clinically, on a patient.
5. Gingival inflammation indices, periodontal indices (recording technique, estimation formula): SBI index (sulcular haemorrhage), PBI index (papillary bleeding), CPITN(one case). Assessing dental mobility by means of the periotest. (One case).	Interactive discussions. Presentations on the model.	Assessing the health status of the periodontium, clinically on a patient.

6. Mechanical and chemical methods in preventing bacterial plaque. Manual dental brushing techniques, mechanical brushing, auxiliary means of oral hygiene. (One case). Partial evaluation of the knowledge.	Interactive discussions. Presentations on the model.	Performing the learned techniques on the model.
7. Professional brushing: brushing technique, polishing paste, devices (rubber cups, brushes, discs, dental silk).	Interactive discussions. Presentations on the model. Demonstration on a clinical case.	Performing the professional brushing procedure, clinically on a patient.
8. Manual scaling: describing and using manual scaling instruments, scaling technique divided on dental groups. (One case).	Interactive discussions. Presentations on the model. Demonstration on a clinical case.	Performing the manual scaling procedure, clinically on a patient.
9. Ultrasonic scaling: indications, contraindications, and technique.	Interactive discussions. Presentations on the model. Demonstration on a clinical case.	Performing the ultrasonic scaling procedure, clinically on a patient.
10. Topical fluoridation procedure. Professional administrations: appearance (varnishes, gels, fluids), administration method, and commercial products.	Interactive discussions. Presentations on the model. Demonstration on a clinical case.	Performing the topical fluoridation procedure, clinically on a patient.
11. Detecting the carious lesion by means of the Diagnodent.	Interactive discussions. Demonstration on a clinical case.	Detecting the carious lesion with the help of the Diagnodent device.
12. Remineralizing the incipient dental caries. Bitewing X-Rays for the assessment of the approximal caries.	Interactive discussions. Demonstration on a clinical case.	Remineralizing the incipient dental caries.
13. Preventive sealing procedure.	Interactive discussions. Presentations on the model. Demonstration on a clinical case.	Performing the sealing procedure, clinically on a patient.
14. Practical exam – The presentation of the dental prophylaxis project + interview	Knowledge evaluation by interview	Meeting the required number of performed procedures.
4. Preventing nosocomial infections. Means of transmitting infectious-contagious diseases in the dental office. Bacteremia beginning in the oral cavity. Preventing disease	Interactive discussions and demonstrations on film.	Demonstrations - cross-infection control in the dental office.

transmission. Pathogenictransmitting agents from the oral cavity.		
5. The acknowledgement and demonstration - on the typodont and in the patient's oral cavity - of the main and auxiliary means of oral hygiene.	Interactive discussions. Demonstrations on film. Presentations on the model.	Demonstration - on the typodont and in the patient's oral cavity - of the main and auxiliary means of oral hygiene.
6. Quantification methods for oral health condition. Determining oral hygiene indices (OHI-S), dental plaque indices (API, O' Leary), periodontal inflammation indices (BI, PBI, CPITN).	Interactive discussions. Demonstrations on the model.	Oral health assessment indices, clinically, on patients.
7. Assessing dental mobility by means of the periotest.	Interactive discussions. Demonstrations on the model. Demonstrations on a clinical case.	Assessing dental mobility by means of the periotest, clinically, on a patient.
8. Local administrations of fluorides. Professional fluoridation (fluoride pharmaceutical appearance, application methods, commercial products). Assessment of the fluoride pharmaceuticals. Sanitary education individualized on age groups and closely related to the existing dental and periodontal features and restorations.	Interactive discussions. Demonstrations on the model. Demonstrations on a clinical case.	Performing 2 topical fluoridation procedures, clinically, on a patient. Oral health education.
9. Primary prevention of dental caries. Preventive sealing.	Interactive discussions. Demonstrations on the model and on extracted teeth.	Performing the learned techniques on the model and performing the preventive sealing procedure, clinically on a patient.
10. Fissure caries prevention. Special prevention measures of fissure caries for patients with high carioreceptivity. Extensive sealing. Approximal caries prevention. Bitewing X-Rays for the assessment of the approximal caries in remineralization stage.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the learned techniques on the model and performing the invasive sealing procedure, clinically

		on a patient.
11. Carioreceptivity evaluation chart. Minimum invasive therapy protocol for carious lesions in precavitary, reversible stage.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Evaluate the level of carious risk, clinically on a patient.
12. Professional hygienization. Manual scaling, professional brushing.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the manual scaling procedure and professional brushing, clinically on a patient.
13. Mechanical scaling, professional brushing.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the ultrasound scaling procedure and professional brushing clinically, on a patient.
14. Iatrogenic prevention. Using doges, interdental matrices and wedges in accomplishing IInd, IIIrd and IVth class fillings.Polishing and brushing the dental fillings.	Interactive discussions. Demonstration on a model.	Performing the procedures on the model.
15. Oral cancer prevention and tracing precancerous lesions at the level of the oral mucosa. Oral hygiene for patients with general affections.	Interactive discussions. Demonstration on a clinical case.	Performing the procedures clinically, on a patient.
16. Sanitary education lessons in adult and elderly communities in Cluj.	Interactive discussions.	Each student will hold a presentation on oral health for a group of minimum 10 people.
17. Practical exam – The presentation of the dental prophylaxis project + interview	Knowledge evaluation by interview	Meeting the required number of performed procedures.

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1. Anderson M.H.,Brathall D.S. si colab.-*Professional Prevention in Dentistry*-Williams and Wilkins, 1994
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9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Establishing a permanent and constructive dialogue with the representatives of the dental community – in order to identify the future employers' needs and expectations and to adapt the analytical program to the requirements of nowadays' dental practice.
- The continuous participation of the department members to scientific conferences, to different forms of continuous medical education and dental devices and dental materials exhibits – in order to maintain the cutting edge quality of the theoretical and practical knowledge.
- Establishing and maintaining contact with other professors in the field, tenured at different universities in order to be able to coordinate the analytical program of our department with that of the programs thought at other universities.
- The studied notions are in concordance with the current regulations and are compatible with the applied activities at the national level concerning clinical dental medicine.

10.Evaluation

Activity type	10.1. Evaluation criteria	10.2. Evaluation	10.3 Percentage from the final grade
10.4. Lecture	General evaluation criteria (range and accuracy of accumulated knowledge, logical consistency, fluency of speech) The ability to understand the fundamental issues and customization.	6 open questions	30%
10.5. Practical Activity	Assessment of the theoretical knowledge and the practical abilities.	Oral examination project presentation	20% 10%

10.6. Activity during semester	Assessment of the theoretical knowledge and the practical abilities.	Required number of performed procedures Test during the semester	20% 20%
10.7. Minimum performance standard			
Acquiring the main caries prevention notions pertaining to the dental treatment speciality: • Cross-infection control • Main and auxiliary means of hygiene • Oral health status quantification methods • Topical fluoridation • Professional cleaning • The primary and secondary dental caries prophylaxis • Iartogeny prophylaxis • Oral hygiene in patients belonging to different age groups			

PREVENTION IN DENTISTRY 2

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	III, Oral Rehabilitation
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title			Preventive pediatric dentistry					
2.2. Responsible for lecture			Lecturer Dr. Iulia Badea					
2.3. Responsible for practical activity			Lecturer Dr. Iulia Badea Assist. Univ. Dr. Andrei Picos					
2.4. Year of study	III	2.5. Semester	II	2.6. Form of evaluation	Theoretical Exam + Practical Exam	2.7. Course type	DI	
							DS	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					10
Individual study using on-line platforms, field research					2
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					2
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				20	
3.9. Total hours/semester				90	
3.10. Number of credits				3	

4. Prerequisites (if needed)

4.1. Curriculum	Basic knowledge of anatomy, physiology and physiopathology of the oral cavity, dental propaedeutic and cariology.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projector system
5.2. For practical activities	Laboratories with specific requisites for the practical activities

6. Acquired specific competences

Professional competences	• The capacity of employing the specialty terminology in an adequate manner and in context • Acquire notions of dental prevention for adults and the elderly.

	• Knowing various dental diagnostic methods: clinical methods, visual methods (caries indices), paraclinical methods (diagnodent) and imagistic methods (radiography) • Obtaining knowledge of dental plaque control using different methods • Perfecting the capacity to assess the carious risk level. Modern carious detection and assessment methods (ICDAS II, Diagnodent) • Acquiring the practical experience necessary in order to be able to use correctly the appropriate instruments for performing the dental caries prophylaxis stages using different methods and materials. • Perfecting the capacity to render the theoretical knowledge of oral cancer prevention and the correct therapeutic conduct in respect to patients with general pathologies.
Transversal competences	• The capacity of employing the learned notions in a new context • To apply the theoretical knowledge in the practical activity • Establishing interdisciplinary correlations between the studied subjects

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Acquiring knowledge of dental pathology prophylaxis for adults and the elderly. Treating patients with general health concerns.
7.2. Specific objectives	• Acquiring knowledge of dental prevention for adults and the elderly. • The introduction of dental plaque control notions. • Acquiring knowledge of the auxiliary means of hygiene and personalizing their usage. • Determining the level of carious risk. Modern methods for the diagnosis of the incipient carious lesion (ICDAS II, Diagnodent). Salivary testing. • Aspects of minimally invasive dentistry • Chronic periodontal disease prevention (primary, secondary, tertiary) • Particularities of the prevention of oral pathologies in the elderly.

	• The prevention of the root caries. • Prevention of oral cancer • Prophylactic considerations for the therapeutic conduct in patients with general health concerns. • Cross-infection control in the dental office.

8. Content

Lecture	Teaching methods	Observations
1. Clinical considerations patients with general diseases. Dental prevention for adults and elderlies. General aspects.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
2. Prevention of the dental caries for adults. The concept of dispensarization for patients with carioreceptivity. Risk evaluation chart for dental caries.ICDAS	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
3. Periodontal disease prevention and management: The features of the mechanical control of the bacterial plaque for adults. The electrical and the sonic toothbrush. Individualizing the auxiliary means of oral hygiene. The chemical control of the bacterial plaque: toothpaste and other dentifrices.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
4. Supra and sub gingival scaling (manual and mechanical devices).	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
5. Isolation and soft tissue management	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
6. Fissure caries prevention. Special prevention measures for the fissure caries of patients with high carioreceptivity. Invasive Sealing. Indications, technique, commercial	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

products. Approximal caries prevention.		
7. Chronic marginal periodontitis : primary, secondary and tertiary prevention. Professional cleaning, plaque, gingival and periodontal indices. The practical assessment of the quality of the dental plaque removal. Plaque indices. Supra and sub gingival scaling (manual and mechanical devices).	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
8. The features of the orodental diseases prevention for elderlies. Root caries prevention and management: Definition, means of prevention. Xerostomia: definition, etiology, practical means of prevention.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
9. Oral cancer prevention and tracing pre-malignant lesions at the level of the oral mucosa.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
10. Halitosis. Etiology, means of prevention.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
11. Preventive attitude towards patients with general diseases. Cardiovascular diseases, blood disorders. Bacterial endocarditis prevention.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
12. Preventive aspects regarding the therapeutical behaviour towards patients with malignant diseases. The dental approach of the patients undergoing chemotherapy and radiotherapy. Aspects regarding oral hygiene for patients with malignant diseases.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations
13. Aspects regarding dental prevention for patients with endocrine disorders.Preventive dentistry in patients	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

with diabetes		
14. The cross-infection control in the dental office.	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

Bibliography

1. Anderson M.H.,Brathall D.S. si colab.-Professional Prevention in Dentistry-Williams and Wilkins, 1994
2. Badea ME, Avram R. Prophylaxie de la carie dentaire. Editura Medicală Universitară "Iuliu Haţieganu", 2007. ISBN 978-973-693-254-0
3. Bird D, Robinson D: Torres and Ehrlich Modern Dental Assisting. WB Saunders Company 1999.
4. Fischer, Dena Joi.-Pinto, Andrés.-Treister, Nathaniel S.,- Risk Assessment and Oral Diagnostics in Clinical Dentistry, John Wiley & Sons, Inc., 2013
5. Graham, J., Hume, M.W.R.: Preservation and Restauration of Tooth Structure. Mosby 1998
6. Lewis, Michael A. O.-Jordan, Richard C. K.,-Oral Medicine, Manson Publishing, Ltd., 2012
7. Limeback, Hardy.-Comprehensive Preventive Dentistry-John Wiley & Sons, Inc.,2012
8. Lockhart, Peter B. -Oral Medicine and Medically Complex Patients-. John Wiley & Sons, Inc., 2012
9. Patton, Lauren L. The ADA Practical Guide to Patients with Medical Conditions, John Wiley & Sons, Inc., 2012
10. Sturdevant CM, Robertson TM, Heymann HO, Sturdevant JR. The Art and Science of Operative Dentistry. Mosby 1995
11. Takahashi, Nobuhiro-Stashenko, P.-Sasaki, Keiichi.-Suzuki, O.,- Interface Oral Health Science 2011-Springer Science & Business Media, 20122011- Springer Science & Business Media, 2012
12. Ritter VA, Boushell LW, Walter R, Sturdevant CM -Sturdevant's art and science of operative dentistry, St. Louis, Missouri : Elsevier, [2019]

Practical Activities	Teaching Methods	Activity to be done by students
1. Preventing nosocomial infections. Means of transmitting infectious-contagious diseases in the dental office. Bacteremia beginning in the oral cavity. Preventing disease transmission. Pathogenictransmitting agents from the oral cavity.	Interactive discussions and demonstrations on film.	Demonstrations - cross-infection control in the dental office.
2. The acknowledgement and demonstration - on the typodont and in the patient's oral cavity - of the main and auxiliary means of oral hygiene.	Interactive discussions. Demonstrations on film. Presentations on the model.	Demonstration - on the typodont and in the patient's oral cavity - of the main and auxiliary means of oral hygiene.

3. Quantification methods for oral health condition. Determining oral hygiene indices (OHI-S), dental plaque indices (API, O' Leary), periodontal inflammation indices (BI, PBI, CPITN).	Interactive discussions. Demonstrations on the model.	Oral health assessment indices, clinically, on patients.
4. Assessing dental mobility by means of the periotest.	Interactive discussions. Demonstrations on the model. Demonstrations on a clinical case.	Assessing dental mobility by means of the periotest, clinically, on a patient.
5. Local administrations of fluorides. Professional fluoridation (fluoride pharmaceutical appearance, application methods, commercial products). Assessment of the fluoride pharmaceuticals. Sanitary education individualized on age groups and closely related to the existing dental and periodontal features and restorations.	Interactive discussions. Demonstrations on the model. Demonstrations on a clinical case.	Performing 2 topical fluoridation procedures, clinically, on a patient. Oral health education.
6. Primary prevention of dental caries. Preventive sealing.	Interactive discussions. Demonstrations on the model and on extracted teeth.	Performing the learned techniques on the model and performing the preventive sealing procedure, clinically on a patient.
7. Fissure caries prevention. Special prevention measures of fissure caries for patients with high carioreceptivity. Extensive sealing. Approximal caries prevention. Bitewing X-Rays for the assessment of the approximal caries in remineralization stage.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the learned techniques on the model and performing the invasive sealing procedure, clinically on a patient.
8. Carioreceptivity evaluation chart. Minimum invasive therapy protocol for carious lesions in precavitary, reversible stage.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Evaluate the level of carious risk, clinically on a patient.
9. Professional cleaning. Manual scaling, professional brushing.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the manual scaling procedure and professional brushing,

		clinically on a patient.
10. Mechanical scaling, professional brushing.	Interactive discussions. Demonstrations on the model. Demonstration on a clinical case.	Performing the ultrasound scaling procedure and professional brushing clinically, on a patient.
11. Iatrogeny prevention. Using doges, interdental matrices and wedges in accomplishing IInd, IIIrd and IVth class fillings.Polishing and brushing the dental fillings.	Interactive discussions. Demonstration on a model.	Performing the procedures on the model.
12. Oral cancer prevention and tracing precancerous lesions at the level of the oral mucosa. Oral hygiene for patients with general affections.	Interactive discussions. Demonstration on a clinical case.	Performing the procedures clinically, on a patient.
13. Sanitary education lessons in adult and elderly communities in Cluj.	Interactive discussions.	Each student will hold a presentation on oral health for a group of minimum 10 people.
14. Practical exam – The presentation of the dental prophylaxis project + interview	Knowledge evaluation by interview	Meeting the required number of performed procedures.

Bibliography:

1. Anderson M.H.,Brathall D.S. si colab.-Professional Prevention in Dentistry-Williams and Wilkins, 1994
2. Badea ME, Avram R. Prophylaxie de la carie dentaire. Editura Medicală Universitară “Iuliu Haţieganu”, 2007. ISBN 978-973-693-254-0
3. Bird D, Robinson D: Torres and Ehrlich Modern Dental Assisting. WB Saunders Company 1999.
4. Fischer, Dena Joi.-Pinto, Andrés.-Treister, Nathaniel S.,- Risk Assessment and Oral Diagnostics in Clinical Dentistry, John Wiley & Sons, Inc., 2013
5. Graham, J., Hume, M.W.R.: Preservation and Restauration of Tooth Structure. Mosby 1998
6. Lewis, Michael A. O.-Jordan, Richard C. K.,-Oral Medicine, Manson Publishing, Ltd., 2012
7. Limeback, Hardy.-Comprehensive Preventive Dentistry-John Wiley & Sons, Inc.,2012
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12. Ritter VA, Boushell LW, Walter R, Sturdevant CM -Sturdevant's art and science of operative

dentistry, St. Louis, Missouri : Elsevier, [2019]

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Establishing a permanent and constructive dialogue with the representatives of the dental community – in order to identify the future employers' needs and expectations and to adapt the analytical program to the requirements of nowadays' dental practice.
- The continuous participation of the department members to scientific conferences, to different forms of continuous medical education and dental devices and dental materials exhibits – in order to maintain the cutting edge quality of the theoretical and practical knowledge.
- Establishing and maintaining contact with other professors in the field, tenured at different universities in order to be able to coordinate the analytical program of our department with that of the programs thought at other universities.
- The studied notions are in concordance with the current regulations and are compatible with the applied activities at the national level concerning clinical dental medicine.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percentage from the final grade
10.4. Lecture	General evaluation criteria (range and accuracy of accumulated knowledge, logical consistency, fluency of speech) The ability to understand the fundamental issues and customization.	6 open questions	30%
10.5. Practical Activity	Assessment of the theoretical knowledge and the practical abilities.	Oral examination project presentation	20% 10%
10.6. Activity during semester	Assessment of the theoretical knowledge and the practical abilities.	Required number of performed procedures Test during the semester	20% 20%

10.7. Minimum performance standard
Acquiring the main caries prevention notions pertaining to the dental treatment speciality: • Cross-infection control • Main and auxiliary means of hygiene • Oral health status quantification methods • Topical fluoridation • Professional cleaning • The primary and secondary dental caries prophylaxis • Iartogeny prophylaxis • Oral hygiene in patients with general health concerns

MEDICAL SEMIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	5th - Internal Medicine
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title	Medical Semiology
2.2. Responsible for lecture	Sef. Lucrari Dr. Vlad Vasile Calin
2.3. Responsible for practical activity	Sef. Lucrari Dr. Vlad Vasile Calin Sef Lucrari. Dr. Teodora Alexescu

			Asist. Univ. Dr. Mircea Vasile Milaciu					
2.4. Year of study	III	2.5. Semester	5	2.6. Form of evaluation	Written examination + Oral Examination (practical + portfolio)	2.7. Course type	Mandatory	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					5
Individual study using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					4
Tutoring					
Examination/ semester					4
Other activities					1
3.8. Total hours of individual study (a+b+c+d)				19	
3.9. Total hours/semester				75	
3.10. Number of credits				3	

4. Prerequisites (if needed)

4.1. Curriculum	Notions of anatomy, physiology, physiopathology and biochemistry
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Amphiteheatre with projection system
5.2. For practical activities	Patient rooms with beds

6. Acquired specific competences

Professional competences	• Capacity of using the semiologic terminology in specific situations and diagnostic algorithm • Capacity of communication with the medical community • Critic evaluation, synthesis of disease manifestations • Learning the techniques of examining the patient • Gathering experience in using the medical instruments (eg. Stethoscope) • Correct interpretation of paraclinic examinations • The capacity to integrate the anamnestic findings, the objective data and the paraclinic data in the syndrome diagnosis

	• Development of the medical rationale • Learning notions needed to apply prevention in the stomatology field • Making the correct diagnosis of an emergency in the stomatology cabinet
Transversal competences	• Being able to apply the new findings into their future job routine • Applying the new theoretical knowledge in practical activity • Making new correlations in various fields

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Presenting the semiology data regarding the symptoms, signs, explorations, in order to create the correct clinical picture and to formulate the correct syndrome diagnosis • Creation of a precise, consistent and useful medical language
7.2. Specific objectives	• Learning the correct technique of anamnesis and clinical examination, conducting the future investigations and formulating the syndrome diagnosis • Development of the medical rationale for each case

8. Content

Lecture	Teaching methods	Observations
1. Introductory course. General notions of semiotics, symptom, sign, syndrome, diagnosis. Patient records, disease history. Particularities of the anamnesis in dental pathology	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
2. Clinical examination. Methods of examining the patient. Face, attitudes, constitution	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
3. Clinical examination. Skin, mucous and membrane colour changes and lesions; oedema. The importance of clinical examination in dentistry.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
4. Respiratory tract semiotics. Main symptoms: chest pain, dyspnea, cough, expectoration and haemoptysis. Physical examination of the respiratory system. Lab explorations in respiratory diseases.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours

5. Respiratory tract semiotics. Pulmonary condensation syndrome. Pleural fluid syndrome. Bronchitis syndrome. Mediasinal syndrome.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
6. Cardio-vascular semiotics. Symptoms: chest pain and vascular pain, cardiac dyspnea, palpitations. Physical examination of heart and vessels. Additional examinations in cardiovascular diseases.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
7. Cardio-vascular semiotics. Coronary syndrome. Valvular syndromes. Heart failure syndromes. Thrombotic syndromes. Rhytm and conduction disorders. Hypertensiona and hypotension semiology. Shock and syncope.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
8. Reno-urinary semiotics. Main symptoms: pain, reno-uretheral colic, dieresis and micturition disorders. Examination of the urinary system. Additional examinations in urinary system diseases.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
9. Reno-urinary semiotics. Nephitic syndrome, nephritic syndrome, renal failure syndrome.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
10. Digestive semiotics. Particularities of the anamnesis in the mouth and throat diseases. Symptoms and signs of special importance for dentists: the oral cavity pain, gum bleeding, halitosis, salivary secretion disturbances, changes of taste. Examination of the mouth.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
11. Digestive semiotics. Esophageal semiotics: symptoms, signs, lab exploration and the esophageal syndrome. Stomach and duodenum semiotics: main symptoms – pain, appetite change, nausea, vomiting. Examination of the stomach and duodenum. Additional explorations. Ulcer dyspepsia. Upper digestive bleeding.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
12. Digestive semiotics. Intestinal semiotics: symptomsand signs – intestinal pain,intestinal obstruction, disorders of transit. Abdominal examination in intestinal diseases. Additional explorations in bowel diseases. Diarrhea syndrome. Constipation syndrome. Acute peritonitis syndrome. Ano-recto-sigmoidian syndrome.	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours
13. Digestive semiotics. Liver and gallbladder semiotics: symptoms and signs. Physical examination and additional explorations. Jaundice syndrome. Ascites syndrome. Liver	Systematic, interactive lecture	Oral lecture, Power Point presentations

failure syndrome. Pancreas and spleen semiotics: pancreatic pain, general examination and additional explorations in pancreas and spleen pathology.		2 hours
14. Hematopoietic system semiotics. Symptoms and signs in blood diseases. Sundromes, anemia, bleeding syndrome, myeloproliferative syndrome and importance in dentistry	Systematic, interactive lecture	Oral lecture, Power Point presentations 2 hours

Bibliography

- The lecture
- Sâmpelean Dorel, Vlad Vasile-Călin, coordonatori. Clinical semiology. First english edition. Editura Bioflux Cluj-Napoca, 2019.
- D. Sâmpelean, sub redacția. MANUAL DE SEMIOLOGIE pentru Medicina Dentară Ediția a III-a. Ed. Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2018.
- Macleod's Clinical Examination, 14th Edition. Editors: J. Alastair Innes Anna Dover Karen Fairhurst. 2018.
- Bates' Guide to Physical Examination and History Taking. Lynn S. Bickley. Lippincott Williams and Wilkins, 2016.

Practical Activities	Teaching Methods	Activity to be done by students
1. Patient records. Classical examination method, diagnosis of acute or chronic disease and their importance in dental medicine. Anamnesis techniques.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
2. Physical examination techniques: inspection, palpations, percussion and auscultation	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
3. Attitude. Face. Constitutional type. Nutritional status.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
4. Pallor, cyanosis, particularly in the oral mucosa	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
5. Jaundice, dyschromatic features in the oral mucosa.		Anamnesis,

Edema, trophycity disorders, limph node pathology, febrile curve	Practical teaching near the patient`s bed	Clinical examination, Building a diagnosis
6. Main breathing symptoms. Physical examination of the chest	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
7. Assesement of acute and chronic respiratory diseases. Evaluation of a respiratory emergency – significance for the dentist	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
8. Major cardiac symptoms. Physical examination of heart and vessels.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
9. Diagnosis of cardiovascular emergencies in dental surgery. Complementary methods of investigation: blood pressure measurement, electrocardiography	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
10. Evaluation of a valvular patient – significance for the dental practice. Differential diagnosis significance in the coronary chest pain.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
11. Esophagus, stomach and bowel symptoms. Physical examination. Dyspeptic syndromes.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
12. Liver disease, bile duct and pancreatic symptoms and signs; physical exam. Jaundice syndrome, ascites and the liver failure.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
13. Characteristics of lumbar back pain, micturition and		Anamnesis,

dieresis disorders. Physical examination of the genitor-urinary system.	Practical teaching near the patient`s bed	Clinical examination, Building a diagnosis
14. Anemic syndrome – signs at the oral cavity. Leukemia syndrome – signs at the oral cavity. Haemostasis assesement. Emergency evaluation of a bleeding syndrome.	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
Bibliography: - The lecture - Sâmpelean Dorel, Vlad Vasile-Călin, coordonatori. Clinical semiology. First english edition. Editura Bioflux Cluj-Napoca, 2019. - D. Sâmpelean, sub redacția. MANUAL DE SEMIOLOGIE pentru Medicina Dentară Ediția a III-a. Ed. Medicală Universitară „Iuliu Hațieganu" Cluj-Napoca, 2018. - Macleod's Clinical Examination, 14th Edition. Editors: J. Alastair Innes Anna Dover Karen Fairhurst. 2018. - Bates' Guide to Physical Examination and History Taking. Lynn S. Bickley. Lippincott Williams and Wilkins, 2016.		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Active participation of the discipline`s members in scientific manifestations and continuous medical education, in order to maintain a high education standard
- Forging new contacts and relations with other teachers in this domain, in order to share experience and discuss the best ways in teaching the students
- The studied notions are in concordance with the current laws existing nation-wide

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria Capacity of understanding the semiotics in specific syndromes	Written exam	50%
10.5. Practical Activity	Evaluation of the theoretical knowledge applied in practical field	Oral exam	40%
10.6. Activity during semester	Evaluation of the portfolios created during the semester. Interactive discussion.	Portfolio	10%
10.7. Minimum performance standard			

- Correct technique of anamnesis and clinical evaluation
- Discussion of a case, presenting the case and argumentation of the clinical diagnosis
- Correct medical rationale and appropriate using of semiology notions

GENERAL SURGERY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Surgery
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			General Surgery					
2.2. Responsible for lecture			Conf. Dr. Sorin T. BARBU					
2.3. Responsible for practical activity			Sef Lucrari Dr. Traian Oniu Asist. Dr. Emilia Patrut Asist. Dr. Gabriel Petre					
2.4. Year of study	3	2.5. Semester	1	2.6. Form of evaluation	Written exam + Practical exam	2.7. Course type	Mandatory	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	2	3.3. Practical Activity	1

3.4. Total hours in the curriculum	42	3.5. Course	28	3.6. Practical activity	14
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					0.5
Individual study using on-line platforms, field research					
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					0.5
Tutoring					
Examination/ semester					
Other activities					
3.8. Total hours of individual study (a+b+c+d)				1 hour/week; 14hours/semester	
3.9. Total hours/semester				56 hours	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Students attending the course need to have successfully accomplished the courses of pathology, physiopathology and medical semiology.
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Students must be in time for the lectures. Use of mobile phone during the lectures is not accepted, being a disruptive issue.
5.2. For practical activities	Students must be in time for the clinical practice sessions. Use of mobile phone during the sessions is not accepted, being a diseruptive issue.

6. Acquired specific competences

Professional competences	At the end of the course, students are expected to be able to: - demonstrate in depth knowledge of surgical semiology, starting with asepsis and antisepsis, hemorrhage and hemostasis, treatment of wounds and surgical infections, first aid maneuvers in trauma, burns, fractures, and ending with hemorrhagic shock and cardiovascular resuscitation. - to discuss general notions about local, regional, general anesthesia, organ transplants, general oncology and principles of surgical treatment in cancer. Students who successfully complete the second part of the course (surgical diseases), are expected to be able to: - demonstrate the clinical skills and methods required to clinically define common surgical diseases. Students will have the ability - to adopt a problem solving approach to common surgical diseases. At the end of the Clinical Practice, students are expected to be able to present, discuss in detail (indications, technique, accidents, complications) and to perform:

	- injections, bandages, wound dressing, urinary bladder catheterization, gastric tube insertion, pleural and peritoneal punctures, biopsies; - first aid maneuvers in trauma, wounds, fractures, burns, surgical infections; - demonstrate appropriate skills to conduct comprehensive clinical examination of surgical patients. - demonstrate the appropriate ways to identify physical signs of common surgical diseases. - formulate a reasonable differential diagnosis of surgical problems based on history and physical examination. - demonstrate a basic knowledge of common and urgent surgical problems.
Transversal competences	Theoretical notions and practical maneuvers learned during the General Surgery course and practical sessions will be used in future disciplines, specifics for dental medicine (maxillo-facial surgery, anesthesiology, internal medicine) Correlations between different clinical courses are expected to be established. Skills for communication with the patient. Skills for examination of a patient. Appropriate use of information technology for obtaining medical information. Involvement in research activities (e.g. writing a medical paper)

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the course, students are expected to be able - to demonstrate in depth knowledge of surgical semiology - to demonstrate the clinical skills and methods required to clinically define common surgical diseases - students will have the ability to adopt a problem solving approach to common surgical diseases.
7.2. Specific objectives	At the end of the course, students are expected to be able to: - demonstrate in depth knowledge of surgical semiology, starting with asepsis and antisepsis, hemorrhage and hemostasis, treatment of wounds and surgical infections, first aid maneuvers in trauma, burns, fractures, and ending with hemorrhagic shock and cardiovascular resuscitation. - to discuss general notions about local, regional, general anesthesia, organ transplants, general oncology and principles of surgical treatment in cancer. Students who successfully complete the second part of the course (surgical diseases), are expected to be able to: - demonstrate the clinical skills and methods required to clinically define common surgical diseases. Students will have the ability - to adopt a problem solving approach to common surgical diseases. At the end of the Clinical Practice, students are expected to be able to present, discuss in detail (indications, technique, accidents, complications) and to perform: - injections, bandages, wound dressing, urinary bladder catheterization, gastric tube insertion, pleural and peritoneal punctures, biopsies;

	- first aid maneuvers in trauma, wounds, fractures, burns, surgical infections; - demonstrate appropriate skills to conduct comprehensive clinical examination of surgical patients. - demonstrate the appropriate ways to identify physical signs of common surgical diseases. - formulate a reasonable differential diagnosis of surgical problems based on history and physical examination. - demonstrate a basic knowledge of common and urgent surgical problems.

8. Content

Lecture	Teaching methods	Observations
1. Asepsis and antisepsis; sterilization, disinfection and operating room set-up. Wounds and wound healing. Skin and subcutaneous tissue wounds.	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
2. Hemorrhage, hemostasis. Blood products and transfusion. Shock and metabolic response to injury.	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
3. I.V. Fluids and acid base disorder; Nutrition of the surgical patient Cardio-pulmonary resuscitation.	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
4. Introduction to Anesthesiology (local, regional and general anesthesia)	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
5. Surgical infections and antibiotics.	Theoretical	Short videos

Injuries due to burn; Fractures.	lectures are exposed as Power Point interactive presentations, in a problem based approach.	illustrating maneuvers or surgical techniques may be inserted into the presentation.
6. Introduction to mechanisms of trauma and treatment Specific organ trauma	Theoretical lectures are exposed as Power Point interactive presentations, in a problem-based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
7. Principles of surgical oncology. Organs and tissues transplantation.	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
8. Surgical diseases of the thyroid (tiroiditis, goiter, cancer of the thyroid) Breast cancer. Acute mastitis	Theoretical lectures are exposed as Power Point interactive presentations, in a problem-based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
9. Vascular surgical diseases: a - arteries (atherosclerotic disease, acute ischemia); b - veins (varicose veins, acute thrombosis) Abdominal wall hernias	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
10. Acute and chronic abdominal pain; Peritonitis. Intestinal occlusion. Acute appendicitis.	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.

11. Surgical diseases of the oesophagus (achalasia, esophageal cancer, hiatus hernia) Surgical diseases of the stomach: peptic ulcer disease – complications; gastric cancer; Gastrointestinal hemorrhage (upper and lower)	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
12. Surgical diseases of the liver (hydatid cyst, hepatic tumors) Biliary stones; biliary obstruction; Obstructive jaundice;	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
13. Pancreatic diseases (acute and chronic pancreatitis, pancreatic cancer) Surgical diseases of the colon and rectum (ulcerative colitis, colorectal cancer) Perianal diseases (hemorrhoids, fistula in ano, perianal abscesses)	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.
14. General Urology. Urinary infections; renal stones; renal cancer	Theoretical lectures are exposed as Power Point interactive presentations, in a problem based approach.	Short videos illustrating maneuvers or surgical techniques may be inserted into the presentation.

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All students receive the Power Point presentations of the course on CD.

Practical Activities	Teaching Methods	Activity to be done by students
1. Asepsis and antisepsis; sterilization, disinfection and operating room set-up. Surgical equipment, the operating room. Surgical instruments. Wound dressing technique. Bandages.	Practical demonstration with interactive discussions	To recognize surgical instruments. Wound dressing and bandages.
2. Surgical suture; suture materials. Wounds treatment. Hemorrhage, hemostasis. Blood products and transfusion.	Practical demonstration with interactive discussions	Surgical sutures, testing blood groups compatibility
3. Injections; venous catheterization; perfusions; I.V. Fluids and solutions. How to take blood and urine samples for laboratory tests	Practical demonstration with interactive discussions	Injections, perfusions.
4. Local anesthesia (drugs, technique); Regional anesthesia; Oxygen-therapy; tracheal intubation; tracheostomy.	Practical demonstration with interactive discussions	To recognize anesthesiology instruments. Perform local anesthesia.
5. Surgical infections treatment – surgical drainage, percutaneous drainage. First aid measures in burns and trauma	Practical demonstration with interactive discussions	Dressing an incised abscess, a burn wound.
6. Cardio-pulmonary resuscitation (basic life support) Enteral and parenteral nutrition in the surgical patient – (indications, technique, complications.	Practical demonstration with interactive discussions	CPR exercises.
7. First aid treatment in fractures. Gastric drainage, gastric lavaje; Urinary bladder catheterization.	Practical demonstration with interactive discussions	Splinting exercises. Maintaining a gastric tube.
8. Rectal examination; enemas. Pleural puncture and pleural drainage.	Practical demonstration with interactive discussions	Rectal examination. Maintaining a pleural drainage.
9. Peritoneal puncture – examination of the peritoneal liquid. Biopsies.	Practical demonstration with interactive discussions	Maintaining a peritoneal tube. Preparing slides for cytological examination from biopsy material.
10. Monitoring of the surgical patient in critical condition.	Practical	What to observe

Postoperative complications in surgery	demonstration with interactive discussions	regarding drain tubes, patient's heart and breath rate.
11. Laboratory and imagistic methods used in surgical patients.	Practical demonstration with interactive discussions	Taking blood samples for lab exams. Interpretation of Rx, CT images.
12. Taking history and performing a physical examination in a surgical patient.	Practical demonstration with interactive discussions	Taking patient history. Physical exam of the pts.
13. Formulating a diagnosis according to the physical examination results, and laboratory and imagistic findings.	Practical demonstration with interactive discussions	Diagnosis according to history and physical exam.
14. Taking history and performing a physical examination in a surgical patient. Formulating a diagnosis according to the physical examination results, and laboratory and imagistic findings.	Practical demonstration with interactive discussions	Presenting a case-report.
Bibliography: - Bongard FS, Stamos MJ, Passaro E Jr, editors. Surgery: A Clinical Approach. New York: Churchill – Livingstone, 2007. - A. Andercou (sub redactia). Caiet de lucrari practice de chirurgie. Litografia UMF Cluj-Napoca. - A. Mironiuc (sub redactia). Caiet de lucrari practice de chirurgie. Litograifa UMF Cluj-Napoca.		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• Aiming to have a good content of the course and clinical sessions, and best methods of teaching / learning, discipline holders support a permanent and constructive dialogue with:
1. representatives of specialized departments of the Faculty of Dentistry (oral surgery, oral-maxillofacial surgery, anesthesiology, etc.), so that the theoretical and practical content of our discipline to be adapted to the future discipline specific specialties of dentistry, so when students will address those disciplines have acquired sufficient background (asepsis-antisepsis, true behavior in the operating room, first aid in traumatology, cardio-circulatory and respiratory resuscitation, etc.)
2. The other teachers in the field, holding the faculties of dental medicine from other universities to identify the needs and expectations of employers in the industry and coordination with similar programs in other faculties of dentistry.
3. Community representatives dentists (to identify the needs and expectations of employers in the industry and adapt curriculum to the needs of current practical activity)
• The concepts studied are consistent with the regulations and are consistent with ongoing activities

at national level in other Faculties of Dentistry.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Examination according to the general and specific objectives of the course. General criteria of evaluation: level of the knowledge, skills regarding coherent and fluent exposure, capacity of understanding and exemplification of the main issues.	Written exam (20 short topics)	50%
10.5. Practical Activity	Examination according to the specific objectives of the practical sessions. We are evaluating the level of knowledge for the practical skills.	Practical exam	30%
10.6. Activity during semester	- 2 written tests during the semester - practical activity during the semester		20%
10.7. Minimum performance standard			
Knowledge of the fundamental concepts of semiology and surgical pathology Demonstrate knowledge of maneuvers performed during the clinical sessions. Knowledge of patient examination, and to formulate a diagnostic and an indication for surgery.			

GYNECOLOGY

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Mother and Child
1.4. Domain of study	Health
1.5. Level of course	License (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title			**Obstetrics and Gynecology Course**					
2.2. Responsible for lecture			Sef Lucrari Dr. Caracostea Gabriela					
2.3. Responsible for practical activity			Sef Lucrari Dr. Caracostea Gabriela, As.Dr. Nemeti Georgiana, As. Dr. Preda Andreia					
2.4. Year of study	3	2.5. Semester	1	2.6. Form of evaluation	Written Exam	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	2	3.2. Course	1	3.3. Practical Activity	1
3.4. Total hours in the curriculum	28	3.5. Course	14	3.6. Practical activity	14
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					20
Individual study using on-line platforms, field research					20
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					15
Tutoring					3
Examination/ semester					2
Other activities					
3.8. Total hours of individual study (a+b+c+d)				58	
3.9. Total hours/semester				30	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge regarding Anatomy and Physiology from first and second year of faculty
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Video projection amphitheater
5.2. For practical activities	Video projection amphitheater Protection materials

6. Acquired specific competences

Professional competences	❖ Ability to adequately use the specialty terminology ➢ Interdisciplinary synthesis capacity development in order to comprehend and knowledge how to provide special care for pregnant women ➢ Assimilation of general information regarding pregnancy induced

	conditions ➢ Assimilation of general information regarding gynecological conditions
Transversal competences	Use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired specific competences)

7.1. General objectives	Knowledge regarding special obstetrical and gynecological features useful for the dentist in the daily practice
7.2. Specific objectives	➢ Assimilated knowledge regarding the emergency conditions during pregnancy ➢ Assimilated knowledge regarding the most important gynecological conditions ➢ Assimilated knowledge regarding the oncologic screening in gynecology ➢ Exercising the synthesis ability and bibliographical research

8. Content

Lecture	Teaching methods	Observations
1. Diagnosis of pregnancy. Antepartum care. High risk pregnancy – details important for the well-being of the pregnancy	Interactive systematic lectures	Power-Point oral presentations
2.Labor mechanisms. Normal labor in the occiput presentation.	Interactive systematic lectures	Power-Point oral presentations
3. Antepartum bleeding (Causes of hemorrhage during the first of pregnancy) – details concerning the main causes of hemorrhage during pregnancy: spontaneous abortion, ectopic pregnancy, molar pregnancy	Interactive systematic lectures	Power-Point oral presentations
4. Antepartum bleeding (Causes of hemorrhage during the second half of pregnancy) – details concerning the main causes of hemorrhage during pregnancy: placenta praevia, abruptio placentae, uterine rupture and vasa praevia	Interactive systematic lectures	Power-Point oral presentations
5. Third and fourth period of birth – details about normal puerperium and its complications. Maternal and fetal obstetrical trauma – details about the traumatic complications of labor upon the mother and the fetus	Interactive systematic lectures	Power-Point oral presentations
6. Uterine myomas – incidence, physiopathology, specific management. Cervical neoplasia - incidence, physiopathology, specific management.	Interactive systematic lectures	Power-Point oral presentations
7. Female sterility– causes, symptoms, methods of investigation, therapeutic posibilities	Interactive systematic lectures	Power-Point oral presentations

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   - Obstetrică şi Ginecologie. Ginecologie, vol.3 Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2014

Practical Activities	Teaching Methods	Activity to be done by students
1. Gynecological examination, obstetrical examination.	Interactive teaching activities	Participation during practical examinations
2. Ectopic pregnancy, spontaneous abortion – case presentation	Interactive teaching activities	Participation during practical examinations
3. Normal and pathologic puerperium	Interactive teaching activities	Participation during practical examinations
4. Malign tumors – cervical cancer, ovarian cancer – presentation of the most frequent cancers	Interactive teaching activities	Participation during practical examinations
5. Neonatal care in the delivery room	Interactive teaching activities	Participation during practical examinations
6. Placenta praevia. Placental abruption – case presentation	Interactive teaching activities	Participation during practical examinations
7. Ovarian cysts. Causes of amenorrhea – case presentation	Interactive teaching activities	Participation during practical examinations

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   - Obstetrică şi Ginecologie. Ginecologie, vol.3 Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2014

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, medical continuing education forms and exhibitions of medical devices in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure.
- Maintain of contact with other teachers from different medical institutions for coordination of taught content with similar curricula.

  The studied concepts are in accordance with valid regulations and are compatible with similar preclinical dental activities developed at the national level.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2 Evaluation	10.3 Percent from the final grade
10.4. Lecture	General criteria evaluations (the coverage area and precision of assimilated knowledges, logical coherence, fluency of speech) Ability to understand fundamental problems and particular ones.	Written and multiple choice questions exam	100%
10.5. Practical Activity			
10.6. Activity during semester			
10.7. Minimum performance standard			
Acquire of main Obstetrical & Gynecologycal concepts: • Specific terminology • Features of a pregnant patient • Features of emergency conditions in obstetrics&gynecology • Features of neoplasia in gynecology			

ANESTHESIA IN DENTAL MEDICINE

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	**"Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca**
1.2. Faculty	Dental Medicine
1.3. Department	I – Maxillofacial Surgery and Radiology
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			ANESTHESIA IN DENTAL MEDICINE					
2.2. Responsible for lecture			Assoc. Prof. Rotar Horatiu, MD, DMD, PhD					
2.3. Responsible for practical activity			Moldovan Mădălina MD, DMD, PhD Ostaş Daniel MD, DMD,PhD student					
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	70	3.5. Course	28	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					31
Individual study using on-line platforms, field research					17
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					16
Tutoring					13
Examination/ semester					3
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				80	

3.9. Total hours/semester	150
3.10. Number of credits	6

4. Prerequisites (if needed)

4.1. Curriculum	Head and neck anatomy. Physiology. Physiopathology. General Semiology and the semiology of the dental-maxillary system. Pharmacology.
4.2. Competences	The ability to analyze anatomic-clinical parameters in the study of clinical cases. Critical analysis and the interpretations of laboratory tests. The correct writing of therapeutic prescriptions.

5. Requisites (if applicable)

5.1. For lectures	- the lecture takes place in an amphitheater with a projection system -students will attend lectures with their mobile phones turned off. Phone calls during lectures will also not be tolerated, nor will leaving the lecture room in order to receive personal phone calls. - the consumption of food or beverages during lecture will not be allowed - tardiness will not be tolerated as it is disruptive towards the learning process
5.2. For practical activities	- laboratories with specific features geared towards practical activities - offices with dental units, wards, operating rooms - Students will attend seminars with their mobile phones turned off. Phone calls during seminars will also not be tolerated, nor will leaving the practical activities laboratory in order to receive personal phone calls - the consumption of food or beverages during practical activities will not be allowed - tardiness will not be tolerated as it is disruptive towards the learning process - ethical behavior towards the patient, clinic staff and teaching staff.

6. Acquired specific competences

Professional competences	• Acquiring theoretical and practical notions for specialty-specific examination; • Acquiring theoretical and practical notions for local and loco-regional anesthetic techniques currently utilized in dental practice. • Performing a critical analysis and a correct therapeutic management of patients with afflictions of the oral cavity. • To efficiently indicate the adequate anesthetic techniques for the specific terrain of each patient. • To be able to correctly interpret laboratory test results. • TO efficiently monitor the efficiency and adverse reactions for applied anesthetic techniques. • To monitor the treatment of potential accidents and complications for anesthetic techniques. • To be able to efficiently use available information sources about local anesthetics. • Solving clinical exercise problems.
Transversal competences	• Utilizing the acquired notions in new contexts • Applying theoretical notions in practical activities. • Establishing interdisciplinary correlations within the studied fields. • To have the ability to effectively communicate with the patient. • To demonstrate an interest towards professional improvement towards the constant training of analytic and synthetic thinking abilities. • To demonstrate involvement in research activities such as the elaboration of scientific articles. •

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The course offers III rd year Medical Dentistry students of the Dental Medicine Faculty the theoretical notions linked with specialty-specific examinations and the theoretical learning of local and loco-regional anesthetic techniques Currently used in dental medicine. Practical activities are geared towards acquiring practical notions of specialty examination; the practical learning of local and loco-regional anesthetic techniques currently utilized in dental medicine.
7.2. Specific objectives	Acquiring theoretical and practical notions of specialized examination; Acquiring theoretical and practical knowledge of the various local and loco-regional anesthetic techniques currently used in dental medicine; Exercising the bibliographic synthesizing and documentation and abilities.

8. Content

Lecture	Teaching methods	Observations
1. Clinical examination of the Maxillofacial surgery patient; patient history; subjective examination	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
2. Clinical examination of the Maxillofacial surgery patient: objective examination	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
3. Peculiarities of clinical and para-clinical examinations in Maxillofacial surgery. Specific methods of diagnosis and the integration of the oral-maxillofacial examination in the complex dental treatment and the general examination of the patient.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
4. Asepsis and antisepsis in dental medicine and oral-maxillofacial surgery. Peculiarities of the operating field in dentistry. Peculiarities of the dental practice. Sterilization in dentistry. Heat sterilization, gas sterilization, radiation sterilization. Antiseptics and disinfectants: alcohols, halogens, oxidizing antiseptics, acids, phenol derivatives, biguandine derivatives, aldehydes, heavy metal salts, detergents, colorants.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
5. Anesthesia in dental medicine: the pre-anesthetic evaluation, basic anesthesia, premedication, strengthened anesthesia.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
6. The anatomical bases of local and regional anesthesia. Local anesthesia: indications, limits, techniques.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
7. Local and regional anesthesia: advantages, indications.	Lecture,	Oral

	systematic, interactive presentation	presentations, Power-Point Presentations.
8. Anesthetic and adjuvant substances. Action mechanisms of local and regional anesthesia.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
9. Peripheral troncular anesthesia for branches of the superior maxillary nerves, intraoral approach.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
10. Peripheral troncular anesthesia for branches of the superior maxillary nerves, cutaneous approach.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
11. Peripheral troncular anesthesia for branches of the mandibular nerves, intraoral approach.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
12. Peripheral troncular anesthesia for branches of the mandibular nerves, cutaneous approach.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
13. Basal troncular anesthesia. Anesthesia of the ganglia. The anesthesia of the superficial cervical plexus.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations.
14. Accidents and complications of local and regional anesthesia.	Lecture, systematic, interactive	Oral presentations, Power-Point

	presentation	Presentations.

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a. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Topographic division of the face. Presentation of the superficial and deep regions of the face. The topographic division of the neck: region limits, applying this knowledge in Oral-Maxillofacial surgical practice. The presentation of topographic anatomy schematically on skull models.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers

		for local and regional anesthesia on teaching models and patients.
2. Means of anesthetic and surgical access on head and neck regions. Painful sensitivity in the head and neck territory. The trigeminal nerve and the superficial cervical plexus: means of anesthetic approach.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
3. Asepsis and antisepsis in dental medicine. Sterilization, preparation of instruments for sterilization. Operating room, operator preparation as well as the preparation of sterile materials for surgery.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
4. Acquiring local dental medicine anesthetic techniques by practicing on teaching models.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers

		for local and regional anesthesia on teaching models and patients.
5. Acquiring local dental medicine anesthetic techniques for the upper jaw by practicing on teaching models.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
6. Acquiring local dental medicine anesthetic techniques for the lower jaw by practicing on teaching models.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
7. Acquiring local dental medicine simultaneous anesthetic techniques for the lower jaw by practicing on teaching models.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers

		for local and regional anesthesia on teaching models and patients..
8. Acquiring local dental medicine anesthetic techniques by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
9. Acquiring local dental medicine anesthetic techniques for the upper jaw (anesthesia of the Posterior superior alveolar nerves and the Infra-orbital nerve) by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients..
10. Acquiring local dental medicine anesthetic techniques for the upper jaw (anesthesia of the great palatine nerve and of the nasal-palatine nerve) by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers

		for local and regional anesthesia on teaching models and patients.. Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
11. Acquiring local dental medicine anesthetic techniques for the lower jaw (anesthesia of the lower alveolar nerve by oral and cutaneous approach) by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
12. Acquiring local dental medicine anesthetic techniques for the lower jaw (anesthesia of the mental nerve, incisive nerve and buccal nerve) by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers

		for local and regional anesthesia on teaching models and patients.
13. Acquiring local dental medicine simultaneous anesthetic techniques for the lower jaw by practicing on patients.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients.
14. Oral-Maxillofacial clinical examination. Clinical observation chart: demonstrations based on the observation charts of patients with various dental and maxilla-facial afflictions.	Power-Point Presentations, interactive teaching	Scheduled interactive teaching. Practical activities with the showcasing of techniques and maneuvers for local and regional anesthesia on teaching models and patients..
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- R. Rahn, “ZAHNÄRZTLICHE LOKALANÄSTHESIE”,2003; Cevey Concept Communication in Wort und bild; Offenbach am Main
- N. L. Rowe, J. Le. Williams: “Maxillofacial injuries” vol. I si II – Churchill Livingstone Edinburgh London Melbourne and New York 1986;
- Lucia Hurubeanu, Horaţiu Rotar: “Curs de Anestezie Locală şi Locoregională în Medicinătroncular Dentară” –script-, Editura Universitară UMF “Iuliu Haţieganu” Cluj-Napoca, 2009.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives from the dental medicine communities – in view of identifying the needs and expectations of potential employers in the field and of adjusting the analytical curricula to the current necessities of active practice.
- Permanent participation from department members in scientific manifestations, forms of continual medical education, dental materials and equipment exhibits for current dental practice – in view of maintaining any theoretical and practical information included in the course structure as current as possible..
- Maintaining contact with other teaching staff members from the field, within similar departments from other teaching institutions, in order to coordinate the curricula with other similar programs within other institution of higher learning..
- The studied notions are in accordance with current rules and regulations and are compatible with all dental medicine activities, nation-wide, on the pre-clinical dental medicine segment.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent

			from the final grade
10.4. Lecture	General evaluation criteria(covering area and the correctness of acquired knowledge, logical coherence) Understanding ability for fundamental problems and particularization	Written examination with multiple answer-type questions	40%
10.5. Practical Activity	Evaluation of theoretical knowledge	Oral presentation in the form of a case study relating to the lecture and seminar curricula	60%
10.6. Activity during semester			
10.7. Minimum performance standard			
The ability to aptly utilize specialized terminology in context. The acquiring of theoretical and practical notions of specialized examination; The acquiring of theoretical and practical knowledge about local and loco-regional anesthetic techniques currently utilized in dental medicine. Knowledge relating to the anatomy and physiology of the dental-maxillary apparatus Acquiring the necessary knowledge for the socio-professional integration as a future doctor.			

CARIOLOGY 1

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy ”Iuliu Haţieganu”, Cluj-Napoca
1.2. Faculty	Dental Medicine Faculty
1.3. Departament	Dental Medicine 2

1.4. Domain of study	Health
1.5. Level of course	Licence
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program i

2. Information about the discipline

2.1. Course title			Preclinical Cariology I					
2.2. Responsible for lecture			Ass.Prof. Dr. Ada Delean					
2.3. Responsible for practical activity			Teach.Assist.Dr. Corina Ionescu Lecturer Dr. Radu Chisnoiu					
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content / Mandatory	DS / DI

3.Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	3.2. Course	2	3.3. Practical Activity	4
3.4. Total hours in the curriculum	84	3.5. Course	28	3.6. Practical activity	56
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					3
Individual study using on-line platforms, field research					3
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					5
Tutoring					2
Examination/ semester					3
Other activities					-
3.8. Total hours of individual study (a+b+c+d)			16		
3.9. Total hours/semester			100		
3.10. Number of credits			4		

4. Prerequisites (if needed)

4.1. curriculum	Notions of tooth morfology and TMJ

4.2. compentences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Laboratories with specific facilities for the practical courses

6.Acquired specific competences

Professional competences	**1.** The capacity of using the appropiate terminology • To know the examination instruments and the instrument used for the preparation of different types of tooth cavities • Knowing and choosing the proper direct odontotherapy methods indicated in differnt clinical situations • Aquiring the notions of coronal restaurations, through different methods and matherials • Developing the ability to syntethise in an interdisciplinary manner the notions of aesthetic and functional restorative methods in order to understand and restore the main functions of the dento-maxillary apparatus:mastication, swallowing , phonation, physionomic function • Improving the theoretical knowledge of cavity preparation and cavity filling, by model and phantom preparation • Aquiring the practical experience needed to use the instruments and different matherials in order to be able to perform coronal restaurations
Transversal competences	**2.** Use of assimilated notions in new contexts **3.** Applying theoretical notions in the practical work **4.** Establishing interdisciplinary correlations within studied domains

2.1. General objective of the discipline	• Knowledge of the clinical forms of tooth cavities, positive and differential diagnosis and treatment of a simple tooth cavity
2.2. Specific objectives	• Aquiring the notions of normal and pathological hard tooth strucure • Introduction of the notions of clinical odontal examinations in order to establish a positive diagnosis • Assimilation of the notions of the differential diagnosis and in which conditions is realised • Theoretical study of the dentinal plague and it's treatment in order to restore damaged missing tooth structure and DMA functions • Detailed study of cavity preparation steps and cavity preparation using non-physionomic matherials by working on artificial teeth on model or phantoms • Detailed study of cavity preparation steps and cavity preparation using physionomic matherials by working on artificial teeth on

	model or phantoms • Developing the ability to apply the theoretical knowledge by preparing and filling tooth cavities **5.** Performing bibliografic documentation

3. Content

3.1. Lecture	Teaching methods	Observations
1.Instruments used in the treatment of the carious lesions. Manual and rotary instruments used for cavity preparation and cavity filling and for finishing the restaurations	Lecture, systematic interactive exposure	Oral and Power-Point presentation
2. Principles of cavity preparation for amalgam filling. Black clasification and Black cavity preparation steps- general notions	Lecture, systematic interactive exposure	Oral and Power-Point presentation
3. Class I and class II Black cavity preparation. Definition. Cavity preparation steps and instruments used for preparation	Lecture, systematic interactive exposure	Oral and Power-Point presentation
4. Class III, IV and V Black cavity preparation. Definition. Cavity preparation steps and instruments used for preparation	Lecture, systematic interactive exposure	Oral and Power-Point presentation
5. Dental amalgam. Amalgam aplication in tooth cavities. Definition, properties, matrix systems for amalgam filling, cavitypreparation steps and amalgam filling phases	Lecture, systematic interactive exposure	Oral and Power-Point presentation
6. Positive diagnosis of the carious lesions. Performing the subjective, objective and complementary examinations in order to establish the positive diagnosis of a simple carious lesion.	Lecture, systematic interactive exposure	Oral and Power-Point presentation
7. Establishing the differential diagnosis of the simple carious lesion.	Lecture, systematic interactive exposure	Oral and Power-Point presentation

8.Clasification of the carious lesions according to it's location and depth. Characteristics of the carious lesions according to it's location:fissure and pits lesions, smooth tooth surfaces lesions and cervical lesions	Lecture, systematic interactive exposure	Expuneri orale, prezentari Power-Point
9.Treatment of the dentinal plague. Temporary filling matherials. Matherials used for dentinal wound protection depending on the depth of the cavity and depending on the aspect of the dentine located on the cavity floor	Lecture, systematic interactive exposure	Oral and Power-Point presentation
10. Treatment of the dentinal plague. Pulp capping techniques. Indirect pulp capping:definition, indications, matherials used, working technique and follow-up.	Lecture, systematic interactive exposure	Oral and Power-Point presentation
11.Management of the accidental opening of the pulp chamber.Direct pulp capping:definition, indications, matherials used, working technique and follow-up.	Lecture, systematic interactive exposure	Oral and Power-Point presentation
12. Principles of cavity preparation for composite resin filling. SISTA clasification. SISTA 1 cavities-tooth preparation technique and restauration methods .	Lecture, systematic interactive exposure	Oral and Power-Point presentation
13. SISTA 2 cavities-preparation of tunnel, slot and henisphere cavities for SISTA 2.1, 2.2, 2.3, 2.4. SISTA 3-preparation and restauration techniques.	Lecture, systematic interactive exposure	Oral and Power-Point presentation
14. Composite resin matherials.adhesive systems, matrix systems used, stratification technique on anterior and posterior teeth.	Lecture, systematic interactive exposure	Oral and Power-Point presentation

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Summitt J.; Robbins W.; Schwartz R. : Fundamentals of operative Dentistry ; Ed. Quintessence 2000
Iliescu A.; Gafar M. : Caria dentara; Ed. Medicala Bucuresti 2002
Alexandra Roman : Caria dentara de la teorie la practica : Ed. Dacia Cluj-Napoca 2000

Andreescu I.; Gafar M.: Metode si tehnici curente in Odontologie Ed. Medicala ; Bucuresti; 1980 Mount G.; Hume W.R.: Preservation and restoration of the tooth structure; Ed. Mosby 1998		
3.2. Practical work	Teaching methods	Practical work done by students
Presentation of the instruments and the devices needed for the treatment of the carious lesions	Power-Point and interactive presentation	Exercises of instruments recognision and description
Class I Black cavity preparation realised on the model	Interactive discussions and filmed demonstrations	Class I Black cavity preparation realised on the model
Class II Black cavity preparation realised on the model	Interactive discussions and filmed demonstrations	Class II Black cavity preparation realised on the model
Preparation of reduced class II, class III and classIV on the model	Interactive discussions and filmed demonstrations	Preparation of reduced class II, class III and classIV on the model
Preparation of class V on the model.Test.	Syntesis on the preparation of Black cavities	Preparation of class V on the model.Test.
Aplication of the cement base and pulp capping on the cavities prepared	Interactive discussions and demonstrations on the model	Aplication of glassionomer and Zn phosphate cement base. Realising the indirect pulp capping using Ca

		hidroxyde and ZOE.
Filling the cavities on molars with amalgam	Interactive discussions and demonstrations on the model	Aplicarea matricei metalice,a icului si a obturatiei de amalgam
Preparation of SISTA 1.2 AND 2.1- slot and tunnel cavities on the model	Interactive discussions and filmed demonstrations	Preparation of SISTA 1.2 AND 2.1- slot and tunnel cavities on the model
Prepararation of SISTA 2.2 and 3.3 on molars and 2.2, 2.3 on frontals on the model	Interactive discussions and filmed demonstrations	Prepararation of SISTA 2.2 and 3.3 on molars and 2.2, 2.3 on frontals on the model
Aplication of the composite resin on the Sista 2.2 on posterior and Sista 2.3 anterior cavities	Interactive discussions and demonstrations on the model	Aplication of the matrix system and filling the Sista 2.2 and 2.3 cavities with composite resin.
Prepararation of class I, II, V cavities after Black on the phantom	Interactive discussions and demonstrations on the phantom	Prepararation of class I, II, V cavities after Black on the phantom
Prepararation of a MOD cavity on the phantom and filling it with amalgam	Interactive discussions and demonstrations on the phantom	Prepararation of a MOD cavity on the phantom and filling it with amalgam
Prepararation of a sista 2.4 cavity on the phantom and filling it with composite resin	Interactive discussions and demonstrations on the phantom	Prepararation of a sista 2.4 cavity on the phantom

		and filling it with composite resin
Practical exam- cavity preparation on the model, interview	Testing the knowledge through interviewing	Recognising the instruments and cavity prepararation on the model

Bibliography:

Summitt J.; Robbins W.; Schwartz R. : Fundamentals of operative Dentistry Ed. Quintessence 2000
Iliescu A.; Gafar M. : Caria Dentara Ed. Medicala Bucuresti 2002
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Andreescu I.; Gafar M.: Metode si tehnici curente in OdontolgieE Ed. Medicala ; Bucuresti; 1980
Sanda Cimpean:Ghid practice de odontologie si endodontie; Ed.UMF Cluj-Napoca 2012

4. *Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field*

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work
- Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education institutions, to coordinate the content taught with other similar programs within other higher education institutions.
- The concepts studied are in line with current regulations and are consistent with national activities in the preclinical dentistry segment.

5. *Evaluation*

Activity type	5.1. Evaluation criterias	10.2. evaluation methods	Procent of the final mark
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and	Oral exam	70%

	customization		
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills	Practical exam	15%
10.6. Activity during semester	Continuity of training during the semester	Tests	15%
10.7. Minimum performance standard			
Acquiring the main concepts of cavity preparation and cavity filling in simple dental caries - Cavity preparation for Black - Preparation of SISTA cavities for composite closure - Treatment of dental plaque - Achievement of amalgam filling - Application of matrix systems and composite filling - Making the scale			

ENDODONTICS 1

1. **Information about the program**

1.1. Institution	University of Medicine and Pharmacy ”Iuliu Haţieganu”, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Departament	Conservative Odontology
1.4. Domain of study	Health
1.5. Level of course	Licence
1.6 Academic degree	Dental Medicine in English
1.7 Qualification	Doctor –Dental Medicine (Dentistry)
1.8 Form of education	Full-time program

2. **Information about the discipline**

2.1. Lecture title			Endodontics I				
2.2. Responsible for lecture			Assos. Prof. Dr. Ada Delean				
2.3. Responsible for practical activity			Teach. Assist. Dr. Ionescu Corina Lect. Dr Colceriu Loredana Teach. Assist. Dr. Hrab Dana				
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	disciplina obligatorie

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	3.2. Course	2	3.3. Lucrări practice	4
3.4. Total hours in the curriculum	84	3.5. Course	28	3.6. Lucrări practice	56
3.7. Distribution of time needed/week					hours
Study using text books, lecture notes, references					30
Individual study using on-line platforms, field research					22
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					40
Tutoring					6
Examination/ semester					18
Other activities					-
3.7. Total hours of individual study (a+b+c+d)			116 sem I		
3.8. Total hours per semester			200 (sem. I)		

3.9. Number of credits	5

4. Preconditions (where applyable)

4.1. Of curriculum	Notions of anatomy and histology of teeth and pulp, notions of physiology and physiopathology of dental pulp, notions of pathological anatomy.
4.2.Of competences	-

5. Conditions (where appyable)

5.1. Lecture	Amphitheater with projection system
5.2. Practical work	Laboratories with specific facilities for the practical courses

6. Acumulated specific skills

Professional skills	**1.** The ability to use the terminology as appropriate and in the context **2.** Understanding the notions of morphology and physiology of dental pulp **3.** Understanding the notion of etiopathogenesis, pathophysiology and dental pulp morphopathology **4.** The ability to synthesize the notions of subjective and objective examination of the patient in order to establish a correct diagnosis in the case of pulp inflammation **5.** Acquiring the notions of isolation of the operator field in endodontics **6.** Understanding the concepts of manual, rotatory and antiseptic root canal treatment **7.** Understanding the notions of root canal filling **8.** Improving the rendering capacity, by modeling, of the theoretical and practical knowledge of pulp inflammation and its treatment **9.** Acquiring the necessary practical experience for the use of specialized instruments in order to achieve the correct endodontic treatment.
Cross skills	• Use of assimilated notions in new contexts • Applying theoretical notions in practical work

	• Establishing interdisciplinary correlations within studied domains

7. Objectives of the discipline (based on the specific skills grid)

7.1. General objective of the discipline	6. Knowing some notions of morphophisiology and inflammation of the dental pulp and the means of treatment necessary for these diseases
7.2. Specific objectives	⅄ Acquiring the notions of morphophysiology and inflammation of the dental pulp. ⅄ The ability to establish a correct diagnosis of inflammatory diseases of the dental pulp by knowing the subjective and objective signs of these diseases ⅄ Detailed study of manual and rotary root canal treatment. ⅄ Detailed study of root canal irrigation principles and application of antiseptic medication ⅄ Detailed study of the root canal filling ⅄ Acquiring the knowledge of the instruments used in endodontics, their characteristics and how to use them. ⅄ Deactivation of instrumentation capacity and root canal filling. Practical exercise on extracted teeth ⅄ Exercise of synthesis and bibliographic documentation

8. Contents

8.1. Lecture	Teaching methods	Observations
1.Endodontic anatomy: dental pulp structure, root canal configuration, notions of curvature, physiological and pathological changes of the endodontic space.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
2. Inflammation of the pulp: etiopathogenesis, pathophysiology of pulp inflammation, classification of pulp inflammation, reversible pulpitis	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
3.Dental Pulp Inflammation: Acute and Chronic Pulpitisis: Subjective signs, objective signs, treatment plan	Lecture, systematic, interactive	Oral displays, Power-Point

	exposure	presentations
4.Isolation of the operation field in endodontics: rubber dam system, components, application techniques, advantages.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
5. Possibilities of preserving the dental pulp vitality: vital pulpotomy, indications, technique, matherials	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
6.Endodontic instruments: description, mode of use	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
7. Creation of the access cavity: instruments used, objectives, preendodontic reconstruction, access cavity preparation on frontal teeth	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
8. Creation of the access cavity: access cavity preparation on premolars and molars	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
9 . Manual root canal preparation: catheterization of the root canals, determination of the working length of the root canal: , working lenght determination devices, principles of operation	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations

10. Manual preparation of the root canal: manual instruments, principles of the step-back preparation technique.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
11. Rotary root canal preparation: rotary instruments, continuous rotation techniques	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
12. Antiseptic treatment of the root canal: root canal irrigation: principles, irrigation solutions	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
13. Root canal obturation: matherials used, properties, preparation	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
14. Root canal fillig: cold lateral guttapercha condensation technique	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations

Bibliography:

1.Sanda Cimpean –Ghid practic de Odontologie si Endodontie, Editura Medicala Universitara “Iuliu Hatieganu” Cluj-Napoca 2012

2.Stephen Cohen, Kenneth M.Hargreaves – Pathways of the Pulp, editura Mosby Elsevier 2006

3. Arnaldo Castellucci – Endodontics – voll si II, editura ILTridente

4. Stephane Simon, Pierre Machtou, Wilhem-Joseph Pertot – Endodontie, Editions CdP, 2012 5. M.Gafar, Andrei Ileiscu – Endodontie clinica si practica, Editura Medicala, Bucuresti 2010		
8.2. Practical work	Teachinf methos	Practical work done by the students
Rubber dam system: presentation of the component elements and application techniques on the dental arches	Power-point interactive teaching presentations.	Exercises of applying the rubber dam system on artificial arches
Instruments used for the endodontic treatment Making radiographs of teeth to be used for endodontic treatment Analyzing X-rays	Instrument recognition exercises. Knowledge of radiology device and radiotechnics	Exercises to recognize the instruments and how to use them
Creating the access cavity to the monoradicular teeth and premolars	Interactive demonstrations in real time	Acces cavity preparation
Acces cavity preparation on inferior and superior molars	Interactive demonstrations in real time	Acces cavity preparation
Catheterization of the root canals in the monoradicular teeth and determination of the real working length by radiological examination and the use of the electronic apex locator	Interactive teaching Demonstration on extracted teeth	Exercises of catheterisation of the root canal and real working lenght determination
Mechanical and antiseptic root canal treatment on frontal teeth	Interactive teaching Demonstration on extracted teeth	Exercises of root canal treatment

Mechanical and antiseptic root canal treatment on premolars	Interactive teaching Demonstration on extracted teeth	Exercises of root canal treatment
Endodontic treatment of frontal teeth and premolars-recap	Synthesis on the specificity of the root canal treatment of frontal teeth and premolars	Test
Mechanical ans antiseptic root canal treatment on maxillary and mandibular molars	Interactive teaching Demonstration on extracted teeth	Exercises of root canal treatment
Rotatory root canal preparation on monoradicular teeth	Interactive teaching Demonstration on extracted teeth	Exercises of root canal treatment
Rotatory root canal preparation on pluriradicular teeth	Synthesis on the specificity of the root canal treatment of molars	Test
Performing the endodontic filling by lateral condensation at the frontal teeth and premolars	Interactive teaching Demonstration on extracted teeth	Exercises for endodontic filling
Performing the endodontic filling by lateral condensation at the molars	Interactive teaching Demonstration on extracted teeth	Exercises for endodontic filling
Endodontic treatment -recap	Synthesis on the specificity of endodontic treatment	Test

Bibliography

1.Sanda Cimpean –Ghid practic de Odontologie si Endodontie, Editura Medicala Universitara “Iuliu Hatieganu” Cluj-Napoca 2012

2.Stephen Cohen, Kenneth M.Hargreaves – Pathways of the Pulp, editura Mosby Elsevier 2006

3. Arnaldo Castellucci – Endodontics – voll si II, editura ILTridente

4. Stephane Simon, Pierre Machtou, Wilhem-Joseph Pertot – Endodontie, Editions CdP, 2012

5. M.Gafar, Andrei Ileiscu – Endodontie clinica si practica, Editura Medicala, Bucuresti 2010

9. Corroborating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field of the program

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work
- Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education institutions, to coordinate the content taught with other similar programs within other higher education institutions.

The notions studied are consistent with the regulations in force and are compatible with the national activities in the preclinical dentistry segment.

10. Evaluation

Tip de activitate	10.1. Criterii de evaluare	10.2. Metode de evaluare	Pondere din nota finală
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization	Multiple choise and editorial questions exam	60%
10.5. Practical work	Assessment of theoretical knowledge and practical skills	Practical exam	30%

10.6. Activity during the semester	Continuity of training during the semester	Verification tests	10%
10.6. Minimum performance standard			
Acquiring the main notions of pulp pathology and achieving endodontic treatment - Subjective and objective symptomatology in pulp inflammation - Characteristics of endodontic instruments - Principles of achieving manual and rotary root canal treatment - Principles of irrigation of the endodontic space Notions on filling of the endodontic space			

PROSTHETIC DENTISTRY – SINGLE UNIT RESTORATIONS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 4
1.4. Domain of study	Prosthodontics
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title	**Single-tooth fixed prosthodontics**
2.2. Responsible for lecture	Assistant Prof. Dr. Raluca Cosgarea- unpayed leave Lecturer. Dr. Andreea Kui
2.3. Responsible for practical activity	Lecturer. Dr. Andreea Kui Assistant dr. Roxana Triștiu

2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical and practical exam	2.7. Course type	Content: practical	**DS**
							Mandatory	**DI**

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					12
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					20
Tutoring					4
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				66 (sem. II)	
3.9. Total hours/semester				150 (sem. II)	
3.10. Number of credits				6	

4. Prerequisites (if needed)

4.1. Curriculum	- Knowledge of the morphology of the teeth and dental arches - Knowledge of the technology needed in order to achieve single-tooth fixed prosthetic crowns (from preclinical years)
4.2. Competences	- practical abilities for different types of crown-preparations for single-tooth fixed prosthetic crowns

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with computer and projector system
5.2. For practical activities	Laboratories with simulators, dental micro-motors and hand pieces

6. Acquired specific competences

Professional competences	• Clinical evaluation of patients with dental crowns destructions • Correct interpretation of additional elements provided by complementary examinations (especially for substitution crowns) • Knowledge of all types of single tooth fixed prosthesis: by reconstruction method, coverage and substitution method

	• Acquiring general knowledge of the maxillary system which provides information needed for the design of single-tooth fixed prosthesis type indicated in the treatment plan. • Knowledge of the clinical and technical stages for the execution of a single-tooth fixed prostheses
Transversal competences	• The use of notions acquired in different clinical situations • Application of the theoretical knowledge in practice • Establish interdisciplinary correlations allowing a complete treatment of clinical cases, according to current aesthetic and functional requirements.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of all types of single-tooth fixed prosthesis (reconstitution, coverage and substitution) and gaining the necessary practical skills for tooth preparation for each type of dental crown
7.2. Specific objectives	• Knowledge of the objectives and contingencies in fixed prosthodontics. • Study of dental crowns destructions that may benefit from treatment with single-tooth fixed prosthetic crowns • Presentation of general principles: ergonomic, biomechanical and bio-functional for single-tooth fixed prosthetic crowns • Presenting all types of single-tooth fixed prosthetic crowns: rebuilding and replacement coverage. • Knowledge of all maneuvers included in the clinical and laboratory sequence for the execution of single-tooth fixed prosthetic crowns • Winning the necessary practical skills for tooth preparation, taking into account the general principles of preparation: ergonomic, biomechanical and bio-functional (through dental preparations in the laboratory, on simulators). • Practicing the ability of synthesis and reference documentation

8. Content

Lecture	Teaching methods	Observations
1. Dental prosthetics: contents, objectives. Distructions of dental crowns: ethiology, symptoms, clinical exam, diagnostic, evolution and complications. Clinical forms.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
2. General notions about prosthetic treatment in crown destruction.Clasification of single-tooth crowns. Basic principles in the preparation of teeth (ergonomic, biomechanical and bioprofilactic).	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
3.Crown restoration by inlay (indications, contraindications, advantages, disadvantages). Preparing teeth for inlays. Accidents and complications after the application of inlays.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
4. Dental crowns (indications, contraindications, advantages, disadvantages). Metal crowns. Preparing teeth to for metal crown. Errors, accidents, complications.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
5. Tooth preparation in the cervical area: level of the cervical limit of the preparation; configuration of the preparation limit. Access techniques to the undergingival limits.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
6. All ceramic dental crowns. Ceramic crown: advantages, disadvantages. General priciples in preparing teeth for full ceramic crowns. Full ceramic systems. Choosing dental colours.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
7. Polymeric dental crowns. Veneering of the teeth: indications, contraindications, advantages, disadvantages. Preparation for veneers.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
8. Mixed crowns: indications, contraindications, advantages, disadvantages. Preparing teeth to achieve mixed crown covering. Types of mixed crowns.	Lectures, systematic oral	Oral exposure, Power Point

	exposure, interactive	presentations
9. Impression taking. Materials. Techniques.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
10. Provisional crowns: objective classification. Prefabricated temporary crowns and made. Testing and adaptation of crown cover.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
11. Metallic partial crown = metallic onlay: indications, contraindications, advantages, disadvantages. Onlay preparation..	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
12. Partial crown with dentinal posts = pinledge. Partial crowns and adhesive bridges	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
13. Crown substitution: indications, contraindications. Teeth preparations. Reconstructions with metallic and carbon fiber post-cores and composite resins. Sample and cementing pivots.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations
14. Crown cementation. Complication after cementing single-tooth fixed prosthetic crowns. Damage, repair and removal of single-tooth fixed prosthetic crowns.	Lectures, systematic oral exposure, interactive	Oral exposure, Power Point presentations

Bibliography

1. LASCU LIANA, MITITEANU CONSTANTIN ,, Proteze fixe unidentare “ Ed. Med. Univ. ,,I. Haţieganu “ Cluj- Napoca , 2002.

2. POPA SEVER ,,Protetica dentară ” Edit. Medicală, S.A 2001, vol. I şi II.

3. SHILLIGBURG T.H., HOBO S., WHITSETT L.D ,,Fundamentals of fixed prosthodontics” Quint. Publ. Co. Chicago-Tokyo, 1981.

4. ROSENSTIEL S.F., LAND M.F., FUJIMOTO J. ,,Contemporary fixed prosthodontics”, Mosby Co: St.Louis, 1988.

6. EXBRAYAT, J.; SCHITTLY, J; BOREL, J.C. ,,Manuel de Prothèse fixée unidentaire". Masson, Paris-Milan-Barcelone-Bonn, 1992

Practical Activities	Teaching Methods	Activity to be done by students
1. Knowledge of counseling and abrasive instruments. Work safety instructions. Training for use of laboratory engine. Distribution of the simulators.	Presentation of the abrasive instruments and dental examination kit. Presentation of the protection rules for laboratory activity. Distribution of the simulators.	Knowledge o the abrasive rotary instruments. Instructions for the use of dental hand piece and micro-motor Instructions of the safety rules.
2. Preparation of M3 for a cast metallic crown without precise limits.	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
3. Preparation of M2 for a cast metallic crown	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
4. Preparation of M1 for inlay	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.

	tooth preparation maneuvers.	
5. Revision of the teeth preparation dressings. Restore the preparations. Assessment of current knowledge and practical work.	Verifying teeth preparations. Instructions in order to restore the incorrect preparations. Seminar activities.	Restore incorrect preparations on back-up simulators or reshaping the preparations.
6. Preparation of PM2 for mixed metal-ceramic crown.	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
7. Preparation of CI for full ceramic crown.	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
8. Preparation of LI for indirect veneers.	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
9. Preparation of PM1 for metallic onlay. Assessment of current knowledge and practical work.	Acquaintance of the maneuvers to be executed; conversation,	Preparation of the simulating tooth, in order to apply a particular type of

	illustration by drawing, demonstrations of the tooth preparation maneuvers. Seminar activities	single-tooth fixed prosthetic crown.
10. Preparing the canine for metallic onlay. Knowledge evaluation.	Acquaintance of the maneuvers to be executed; conversation, illustration by drawing, demonstrations of the tooth preparation maneuvers.	Preparation of the simulating tooth, in order to apply a particular type of single-tooth fixed prosthetic crown.
11. Presentation of clinical stages for dental crown replacement. Framework for the direct method. Impression and framework for indirect method.	Acquaintance of the impression methods, discussions for the quality of impression, with examples.	Execution of impressions on the simulator: direct and indirect method. Discussions for the quality of impression
12. Partial impressions (dental office). Patient examination, examination of static and dynamic occlusion.	Presentation and discussion of complete arch and partial impressions; demonstrations and clinical examination.	Examination of complete arch and partial impressions; Clinical examination carried out among students.
13. Preparation of practical examination. Revising the knowledge and rotary instruments.	Acquaintance of the maneuvers executed. Seminar activities	Reevaluation of the preparations and final retouch
14. Practical exam.	Assessment of the knowledge achieved.	To evaluate the information obtained. To recognize the

		rotary instruments. Discussions over impressions.

Bibliography:

1. LASCU LIANA, MITITEANU CONSTANTIN ,, Proteze fixe unidentare " Ed. Med. Univ. ,,I. Haţieganu " Cluj- Napoca , 2002.
2. POPA SEVER ,,Protetica dentară " Edit. Medicală, S.A 2001, vol. I şi II.
3. SHILLIGBURG T.H., HOBO S., WHITSETT L.D ,,Fundamentals of fixed prosthodontics" Quint. Publ. Co. Chicago-Tokyo, 1981.
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5. BRATU D., NUSSBAUM R. ,,Bazele clinice şi tehnice ale protezării fixe " Ed. Signata, Timişoara 2001.
6. EXBRAYAT, J.; SCHITTLY, J; BOREL, J.C. ,,Manuel de Prothèse fixée unidentare". Masson, Paris-Milan-Barcelone-Bonn, 1992

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, dental continuing education forms and exhibitions of medical devices and dental materials in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure.
- Maintain of contact with other teachers from different dental institutions for coordination of taught content with similar curriculae.

The studied concepts are in accordance with valid regulations and are compatible with similar preclinical dental activities developed at the national level.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General criteria evaluations (the coverage area and precision of assimilated knowledge, logical coherence, fluency of speech)	Multiple choice questions exam	66%

	Ability to understand fundamental problems and particular ones.		
10.5. Practical Activity	Evaluation of theoretical knowledge and practical abilities, related to teeth preparation on the simulator for single-tooth dental prosthetic crowns.	Practical exam (preparation of a tooth)+ activity during semester	33%
10.7. Minimum performance standard			
Acquire the main concepts of treatment of diseases with single-tooth dental fixed prosthesis: • Clinical evaluation of patients with dental crowns destructions • Correct interpretation of additional elements provided by complementary examinations (especially for substitution crowns) • Knowledge of all types of single tooth fixed prosthesis: by reconstruction method, coverage and substitution method • Acquiring general knowledge of the maxillary system which provides information needed for the design of single-tooth fixed prosthesis type indicated in the treatment plan. • Knowledge of the clinical and technical stages for the execution of a single-tooth fixed prostheses			

DENTAL MATERIALS

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)

1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Dental Materials**					
2.2. Responsible for lecture			Assistant Lecturer dr. Jiglău-Labuneț Anca					
2.3. Responsible for practical activity			Assistant Lecturer dr. Rusu Laura Assistant Lecturer dr. Vigu Alexandra Assistant Lecturer dr. Lupu Alexandra					
2.4. Year of study	3	2.5. Semester	5	2.6. Form of evaluation	Theoretical examination+practical examination	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**4**	3.2. Course	**1**	3.3. Practical Activity	3
3.4. Total hours in the curriculum	**56**	**3.5. Course**	**14**	**3.6. Practical activity**	**42**
3.4. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					15
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					20
Tutoring					2
Examination/ semester					2
Other activities					2
3.7. Total hours of individual study (a+b+c+d)				69	
3.8. Total hours/semester				125	
3.9. Number of credits				5	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of the properties that characterize dental materials
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Video projection amphitheater
5.2. For practical activities	Laboratories with specific practical activity equipment

6. Acquired specific competences

Professional competences	• Ability to adequately use the specialty terminology • Acquiring knowledge about the composition, properties and indications for use of dental restorative materials, focusing on practical applications • Inproving the capacity to reproduce the theoretical knowledge, trouhg preparation and use of the dental materials • Acquisition of the necessary practice for the preparation and use of different types of dental restorative materials • Acquisition of the necessary practice in order to choose the optimum material for a given clinical situation
Transversal competences	• Use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Knowledge of fundamental notions of composition, properties and indications for use of restorative dental materials, focusing on practical applications
7.2. Specific objectives	• Acquiring knowledge about the composition, properties and indications for use of dental materials, with an emphasis on practical applications • Detailed study of the preparation and manipulation of dental materials, used directly by the dentist in the dental office • Acquiring basic knowledge in the formulation and use of dental science. • Theoretical necessary and a logical algorithm of choice of the most suitable material for a particular clinical situation • Capacity exercition and bibliographic documentation summary

8. Content

8.1 Lecture	Teaching methods	Observations
1. Adhesion. Principles, mechanisms - resume	Lecture, systematic, interactive exposition	Oral presentation, powerpoint

		presentation
2. Adhesion to the hard dental tissues. Principles	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
3. Etch and rinse adhesive systems - mechanisms of action	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
4. Self-etch adhesive systems - mechanisms of action	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
5. Composite Diacrylic Resins- Clasification, composition	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
6.Composite Diacrylic Resins. Physical and mechanical properties	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
7. Composite Diacrilyc Resins. Chemical and biological properties. Adhesion	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
8. Self-curing versus light-curing	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation

9. Glass ionomer cements and resin -modified glass ionomer cements	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
10. Ceromers, ormocers, compomers.	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
11. Luting cements used in dental prosthetics	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
12.Dental amalgam	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
13. Liners. Bases.	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation
14.Sealing materials	Lecture, systematic, interactive exposition	Oral presentation, powerpoint presentation

Bibliography

1. NICOLA C şi colab. – MATERIALE DENTARE – CONSIDERAŢII CLINICE ŞI TEHNOLOGICE, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009.

2. ROMINU M. ŞI colab - MATERIALE DENTARE. NOTIUNI TEORETICE SI APLICATII CLINICE, Ed. Brumar, Timişoara, 2003.

3. McCABE, J. F., WALLS, A. W. G. – APPLIED DENTAL MATERIALS, Blackwell Science Ltd., 1998.

4. GLADWIN, M., BAGBY, M. – CLINICAL ASPECTS OF DENTAL MATERIALS, Lippincott Williams Wilkins, 2000.

5. Van Noort R. INTRODUCTION TO DENTAL MATERIALS. 3rd edition. Mosby Elsevier, 2008

8.2 Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Principles of the adhesion. Resume	Interactive discussions	Checking procedures for testing the knowledge and principles of adhesion
2. Adhesion to the hard dental tissues	Interactive teaching	Performing cavities on acrylic teeth.
3. Etch and rinse adhesive systems	Presentation of etch and rinse adhesive systems in 2 steps and in 3 steps. Presentation of the working techniques	The practical use of etch and rinse adhesive systems in 2 steps and in 3 steps
4. Self-etch adhesive systems	Presentation of self-etch adhesive systems in 2 spteps and 1 step. Presentation of the working techniques	The practical use of self-etch adhesive systems in 2 steps and in 1 step.
5. Self-curing diacrylic composite resins	Presentation of the self-curing diacrylic composite resins and of the working techniques	The practical use of the self-curing diacrylic composite resins on acrylic teeth.

6. Light-curing diacrylic composite resins	Presentation of the light-curing diacrylic composite resins and of the working techniques	The practical use of the light-curing diacrylic composite resins on acrylic teeth.
7. Glass ionomer cements and resin -modified glass ionomer cements	Presentation of the glass ionomer cements and resin -modified glass ionomer cements. Presentation of the working techniques	The practical use of glass ionomer cements and resin -modified glass ionomer cements on acrylic teeth.
8. Recapitulation of the esthetic filling materials	Synthesis of the esthetic filling materials	Knowledge testing
9. Luting of the non-esthetic prosthetic works	Presentation of the cements used for luting non esthetic prosthetic works. Presentation of the working techniques	Preparation of the temporary and permanent luting cements, used for fixing non esthetic prosthetic works.
10. Luting of the esthetic prosthetic works	Presentation of the cements used for luting esthetic prosthetic works. Presentation of the working techniques.	Preparation of the temporary and permanent luting cements, used for fixing esthetic prosthetic works.
11. Bases, liners	Presentation of the materials used as liners and bases. Presentation of the	Practical use of different types of bases and liners on acrylic

	working techniques	teeth.
12. Materials used as sealers	Presentation of the different types of sealing materials. Presentation of the working techniques	Practical use of the sealing materials on acrylic teeth.
13. Dental amalgam	Presentation of dental amalgam. Presentation of the working technique.	Practical use of the dental amalgam on acrylic teeth.
14. Practical examination	Virtual clinical cases	Practical use of one or more dental materials studied this semester, on acrylic teeth, based on virtual clinical cases.

Bibliography:

1. NICOLA C şi colab. – MATERIALE DENTARE – CONSIDERAŢII CLINICE ŞI TEHNOLOGICE, Ed. Casa Cărţii de Ştiinţă, Cluj-Napoca, 2009.

2. ROMINU M. ŞI colab - MATERIALE DENTARE. NOTIUNI TEORETICE SI APLICATII CLINICE, Ed. Brumar, Timişoara, 2003.

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4. GLADWIN, M., BAGBY, M. – CLINICAL ASPECTS OF DENTAL MATERIALS, Lippincott Williams Wilkins, 2000.

5. Van Noort R. INTRODUCTION TO DENTAL MATERIALS. 3rd edition. Mosby Elsevier, 2008

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with the dental community representatives - to identify the needs and expectations of employers in the industry and adapt the curriculum to the needs of current practical activity
- Permanent participation of our teaching staff to scientific forms of continuing medical education

and exhibitions, devoted to practical work equipment and dental equipment- to maintain theoretical and practical information entered in the discipline structure at a high level of current

• Maintain contact with other teachers in the dentistry field, holding other higher education institutions, in order to coordinate the content with similar programs in other higher education institutions.
The studied concepts are consistent with the regulations and with the ongoing activities, at a national level,in the preclinical dentistry segment.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (range and accuracy of acquired knowledge, logical consistency , fluency of speech) The ability to understand the fundamental and customization issues	Written examination – multiple choice questions and written questions	**33%**
10.5. Practical Activity	Evaluation of the theoretical knowledge and practical skills. Continuity of training throughout the semester	Practical examination Periodical tests	**33%** **33%**
10.6. Activity during semester	General evaluation criteria (range and accuracy of acquired knowledge, logical consistency , fluency of speech) The ability to understand the fundamental and customization issues	Written examination – multiple choice questions and written questions	**33%**
10.7. Minimum performance standard			
• Learning the main concepts of restorative dental materials • Principles of adhesion and adhesive systems in use today • Characteristics of esthetic direct restauration dental materials • Characteristics of luting cements used in dental prosthetics • Characteristics of dental materials used as liners and bases • Notions of sealing materials			

GENERAL RADIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Maxilo-facial Surgery and Radiology
1.4. Domain of study	Radiology 3rd year
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**General Radiology**					
2.2. Responsible for lecture			Prof. dr. Mihaela Hedeşiu					
2.3. Responsible for practical activity			Asist. univ. dr. Raluca Roman					
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	3.5. Course	14	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					14
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					16
Tutoring					12

Examination/ semester	2
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	58
3.9. Total hours/semester	100
3.10. Number of credits	4

4. Prerequisites (if needed)

4.1. Curriculum	- Basic notions in the field of physics - elementary particles of the atom, the electric charge of atomic particles, atomic models, atomic number, mass number; - Notions of electricity and electromagnetism, forces and fields - Notions of dento-alveolar anatomy and skull
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projector
5.2. For practical activities	Laboratories with specific equipment for practical activities in the field of radiology

6. Acquired specific competences

Professional competences	The ability to use specialized terminology, properly and contextually • Acquire the knowledge of the concepts of radiological dental-alveolar and maxillofacial anatomy • Acquiring the concepts of radiation physics • Acquiring the experience and practical skills necessary to use the radiological equipment for performing radiographies • Gain experience in interpreting the quality of radiographs, detecting errors and their repair techniques • Gain experience in recognizing radiological and imaging exams in the dental and maxillofacial regions
Transversal competences	Using assimilated notions in new contexts • The application of theoretical notions in practical activity • personal professional development • Establishing interdisciplinary correlations in the fields studied

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Theoretical and practical knowledge of the radiological equipment in dental radiology and its use, detecting and repairing the errors, notions of radioprotection in the dental radiology office, knowledge of the dental-periodontal and maxillofacial radiological anatomy
7.2. Specific	Acquiring the concepts of radiation physics, radiological image,

objectives	• Knowledge of the general notions of radioprotection and radiobiology as well as of the concepts of radioprotection applied in the dental radiology office; • The ability to use the specialized terminology properly and contextually • Acquire the knowledge of the concepts of radiological dento-alveolar and maxillofacial anatomy • Acquiring the experience and practical skills necessary in the use the radiological equipment for performing the radiographs • Gain experience in interpreting the quality of radiographs, detecting errors and their repairment • Gain experience in recognizing the aspect of radiological and special imaging in dental and maxillofacial regions • Understanding the principles of the technique in computer tomography, magnetic resonance imaging and CBCT

8. Content

Lecture	Teaching methods	Observations
1. General radiology concepts. Radiation physics: how to produce X-radiation, the properties of X-radiation and their interaction with matter	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
2. Radiation physics: The radiological image, the plan for examining a radiological image	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
3. Notions of radioprotection: Notions of radiobiology and dosimetry. General notions of radiation protection	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
4. Notions of radioprotection in the dental radiology office	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
5. Radiological equipment used in the diagnosis of dento-periodontal lesions: dental radiography equipment, orthopantomograph	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
6. Radiological film, types of films, sensors, development, classical, digital image formation, radiological film processing - Manual, automatic development; Development times; The dark room	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
7. Quality Assurance in dental radiology	Lecture, systematic, interactive	Expuneri orale, prezentari

	presentation	Power-Point
8. Infection control in the radiology departments: Risks of infections, measures for the control of infections in the dental radiology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
9. Intra-oral radiography technique: periapical radiography - isometric and paralleling technique, bitewing radiography, occlusal radiography; technical errors	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
10. Extra-oral radiography technique: panoramic radiography, principles, quality criteria, technique errors, skull radiographs	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
11. Intra and extra-oral digital radiology, components, sensors, technical principles of digital imaging, quality parameters of digital imaging	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
12. Normal radiological anatomy of intra- and extra-oral radiographs, radiological diagnostic algorithm in dento-alveolar pathology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
13. The physical principles of ultrasound, CT and MRI techniques	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
14. Dental volumetric tomography (CBCT) technical principles comparative with medical CT, practical guide of recommendations	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point

Bibliography

1.Whaites E. Essentials of Dental Radiography Churchill Livingstone, 2003

2. White CS, Pharoah MJ. Oral radiology. Principles and interpretation. Fourth edition, Mosby 2000

4. Goaz PW, Whaite CS. Oral Radiology: principles and interpretation. 1999

5. Fildan F,Hedesiu M., Radiologie stomatologica, notiuni de fizica si tehnica radiologica, Editura Medicala Universitara Iuliu Hatieganu Cluj-Napoca,2003

6. www.radiologieorală.ro

f. Practical Activities	Teaching Methods	Activity to be done by students
1. Structure of the radiological equipment (rontgen tube, control table, examination parameters). How to organize a dental radiography laboratory Demonstration of radiation protection measures in the dental radiology office	Systematic presentation, conversation, problematization	Oral exposures doubled by PowerPoint presentations
2. The dark room. The radiological film. Radiological film processing - manual and automatic development	Systematic presentation, real-time demonstrations	Practical implementation
3. Radiological equipment used in the diagnosis of dento-periodontal lesions: dental roentgen, orthopantomograph; demonstration of operating principles	Systematic presentation, real-time demonstrations	Practical implementation
4. Processing errors. Radiological film quality. Plan to examine a radiological image	Systematic presentation, conversation, problematization	Oral exposures doubled by PowerPoint presentations
5. Performing intra-oral radiographs using isometric technique-technique errors	Systematic presentation, real-time demonstrations	Practical implementation
6. Performing intra-oral radiographs using paralleling technique - technique errors	Systematic presentation, real-time demonstrations	Practical implementation
7. Performing intra-oral radiographs with digital systems	Systematic presentation, real-time demonstrations	Practical implementation
8. Technique of bitewing radiographs, occlusal film technique; technical errors	Systematic presentation, real-time demonstrations	Practical implementation
9. The technique of extra-oral radiography: panoramic radiography; principles of technical functioning	Systematic presentation, real-time demonstrations	Practical implementation
10. Recognition and correction of technical errors in orthopantomography	Systematic presentation, conversation,	Oral exposures doubled by

	problematization	PowerPoint presentations
11. Technique of skull radiographs: errors in technique	Systematic presentation, real-time demonstrations	Practical implementation
12. Normal radiological anatomy of intra-oral radiographs	Systematic presentation, conversation, problematization	Radiography viewing and interpretation
13. Normal radiological anatomy of extra-oral radiographs	Systematic presentation, conversation, problematization	Radiography viewing and interpretation
14. Presentation of the imaging systems: ultrasound, CT and CBCT, MRI; notions of imaginary semiology	Systematic presentation, conversation, problematization	Oral exposures doubled by PowerPoint presentations

Bibliography:

1.Whaites E. Essentials of Dental Radiography Churchill Livingstone, 2003

2. White CS, Pharoah MJ. Oral radiology. Principles and interpretation. Fourth edition, Mosby 2000

4. Goaz PW, Whaite CS. Oral Radiology: principles and interpretation. 1999

5. Fildan F,Hedesiu M., Radiologie stomatologica, notiuni de fizica si tehnica radiologica, Editura Medicala Universitara Iuliu Hatieganu Cluj-Napoca,2003

6. www.radiologieorală.ro

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dental practitioners community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical activity
- Permanent participation of the discipline members in scientific manifestations, continuous medical education and technical exhibitions for equipment and materials dedicated to the practical activity of dental medicine and radiology - in order to maintain the theoretical and practical level of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, graduates in other higher education institutions, for coordinating the content presented with other similar programs within other higher education institutions in the world.

• The concepts studied are in accordance with the regulations and are compatible with the activities carried out at national level in the segment of dental radiology.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (degree of coverage, correctness of knowledge, logical coherence, fluency of expression, ability to make argumentation) Discipline-specific criteria Ability to understand fundamental problems and to customize	written	**40%**
10.5. Practical Activity	Practical skills in coordination with theoretical knowledge		**50%**
10.6. Activity during semester	Seminars during the practical activities		**10%**
10.7. Minimum performance standard			
The ability to properly understand and use specialized terminology in context • To acquire the theoretical and practical notions specific to radiology • To acquire the knowledge necessary to perform dental radiographs and to correct errors • Acquiring knowledge about radiobiology and radioprotection			

HYGIENE

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	IV Community Medicine
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English

1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Hygiene**					
2.2. Responsible for lecture			Conf. Dr. Lucia Lotrean					
2.3. Responsible for practical activity			Prof. Dr. Monica Popa Conf. Dr. Lucia Lotrean Șef lucr. Dr. Bogdana Năsui					
2.4. Year of study	III	2.5. Semester	VI	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					4
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
Tutoring					2
Examination/ semester					4
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				30	
3.9. Total hours/semester				58	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Use of mobile phone during the lectures is not accepted, being a disruptive issue. Students must be in time for the lectures.
5.2. For practical activities	Use of mobile phone during the practical activities is not accepted, being a disruptive issue. Students must be in time for the practical activities.

6. Acquired specific competences

Professional competences	- Critical analyses of the quality of the environment from medical institutions (water, air, surfaces) in relationship with the main health risks for the patients and the health staff from medical institutions in the field of dentistry - Efficient use of measures for prevention and control of nosocomial infections through appropriate management of the environmental factors from dental medical institutions (microbiological contamination of air and surfaces, hygiene conditions and functional structure, water use in dental practice, management of solid and liquid waste resulting from medical activities) and medical staff hygiene - Correct interpretation and use of the knowledge of human nutrition (diet, food products, health status) with a special focus on the oral health. Teaching patients about healthy nutrition and healthy lifestyle.
Transversal competences	- Skills for communication with patients - Involvement in research activities (e.g. writing a medical article) - Appropriate use of information technology for medical information - Awareness and involvement in pro-ecological activities associated with preventive medicine

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	- At the end of the courses the students will be capable to design, use and justify in a correct manner measures for health promotion and disease prevention in the dentistry field both at individual and community level
7.2. Specific objectives	At the end of the courses the students will be capable to: - To explain the complex relationship between environmental pollution and population health - To identify correctly health dangers from the environment and dental medical institutions and to categorise them (physical, chemical, biological, irradiation dangers) - To use the principles of food and nutrition hygiene (diet, food products, relationship with health) in the dentistry field - To propose and justify recommendations for prevention and control at individual and population level in order to minimise the risk on human health, with a special focus on oral health

8. Content

Lecture	Teaching methods	Observations
The objective and the role of Hygiene- essential component of Primary Assistance of Health. The concept of health and prophylaxis in dentistry.	Lecture, interactive presentation	Oral presentations, power point presentations
Assessment of the infectious and chemical risk in dental practice.	Lecture, interactive presentation	Oral presentations, power point presentations
Physical dangers- ionising radiations: sources, ways of exposure and effects on human health. Prophylaxis measures.	Lecture, interactive presentation	Oral presentations, power point presentations
Physical dangers- non-ionising radiations: sources, ways of exposure and effects on human health. Prophylaxis	Lecture, interactive presentation	Oral presentations, power point

measures.		presentations
Toxicology of the environment in dental practice. Risks on human health- Heavy metals.	Lecture, interactive presentation	Oral presentations, power point presentations
Toxicology of the environment in dental practice. Risks on human health- synthetic chemical compounds.	Lecture, interactive presentation	Oral presentations, power point presentations
Fundamental conditions of the human habitat hygiene in the medical field.	Lecture, interactive presentation	Oral presentations, power point presentations
Indoor pollution in relation with human health.	Lecture, interactive presentation	Oral presentations, power point presentations
Chemical dangers generated by water consumption and their effects on oral health**.**	Lecture, interactive presentation	Oral presentations, power point presentations
Microbiological dangers generated by water consumption and their effects on oral health**.**	Lecture, interactive presentation	Oral presentations, power point presentations
Alimentary behaviour and the nutritional requirements at individual level.	Lecture, interactive presentation	Oral presentations, power point presentations
The study of nutrients and the relationship between nutrition and oral health.	Lecture, interactive presentation	Oral presentations, power point presentations
The diet and the carries: the role of macro and micronutrients in the development of carries.	Lecture, interactive presentation	Oral presentations, power point presentations
The diet and the carries: vulnerable population groups. Prophylaxis and control measures at population level.	Lecture, interactive presentation	Oral presentations, power point

		presentations

Bibliography

Popa Monica «Food Hygiene - Textbook for Medical Students», Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2016, ISBN 978-973-693-672-2

Popa Monica «Environmental Hygiene - Textbook for Medical Students», Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2016, ISBN 978-973-693-671-5Sîrbu Dana, Curșeu Daniela, Popa Monica – „Igienă – suport de curs pentru studenții Facultății de Medicină Dentară", Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2014, ISBN 978-973-693-563-3.

Wood P.R. - "Cross Infection Control in Dentistry. A practical Illustrated guide" Wolfe Publishing Ltd, 1992.

Yassi A., Kjellstrom T., de Kok T., Guidotti T.L. - "Basic environmental health", Oxford Univ. Press, 2001.

Curşeu Daniela – „Curs de igienă spitalicească", Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2007.

Ionut Carmen, Curseu Daniela, Sirbu Dana - "Notiuni de Igiena în profil stomatologic", Editura Medicala Univ. "I.Hatieganu" Cluj-Napoca, 2002

Monica Popa – „Poluarea interioară şi sănătatea umană – expunere, efecte, control", Editura Quo Vadis Cluj-Napoca, 2000.

Hygiene – Lecture materials in electronic format for students from Dental Medicine

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Assessment of microclimate conditions in medical institutions and their relationship with human health. Norms and recommendations in medical institutions.	Power point presentation. Interactive teaching Guided practice	Exercises for assessing and characteriza-tion of the microclimate in medical institutions in relation with

		human health
Case study regarding the microclimate conditions in dentistry medical institutions.	Recorded demonstrations Power point presentation.	Identification of the danger in relationship with the presented situations, use of appropriate measures for prophylaxis and control
Assessment of air and surfaces contamination in dental practice. Measures for prophylaxys and control. Legislative measures.	Power point presentation. Interactive teaching Guided practice	Microbiology sample collection from the air and surfaces. Exercises for using the methods for prophylaxis and control in relationship with air contamination
Study case regarding the risks of contamination of air and surfaces in dental practice	Recorded demonstrations Power point presentation.	Identification of the danger in relationship with the presented situations, use of appropriate

		measures for prophylaxis and control
Hygiene of dental institutions: equipment, functionality, medical staff hygiene	Power point presentation. Interactive teaching	Identification of the requirements in different presented situations
Hygiene of dental medical institution: legislative issues. Measures for safety in dental practice.	Power point presentation. Observations based on medical articles.	Identification of dangers and the behaviour for prophylaxes and control based on medical articles presentation.
Solid waste from medical practice: classification, origin, risks of exposure, management, legislative measures	Power point presentation. Exercises for risk assessment	Identification of dangers and management of risks in different presented situations
Liquid waste from medical practice: classification, origin, risks of exposure, management, legislative measures	Power point presentation. Exercises for risk assessment .	Identification of dangers and management of risks in different presented situations
Antiseptics and disinfectants: definition, classification, conditions for use, indications and contraindications in dental practice.	Power point presentation. Practical demonstration	Identification of requirements in different presented

		situations
The active chlorine - indicator of the disinfectant potential of disinfectant chlorine based substances in dental practice	Power point presentation. Practical demonstration	Practical exercises for assessment of active Chlorine in the lab and in the field (with a portable device)
The water from medical institutions: type, nature, origin and evaluation of risks.	Power point presentation. Observations based on medical articles.	Identification of dangers and the behaviour for prophylaxes and control based on medical articles presentation.
Study case regarding the role of water from dental institutions in relation with human health	Recorded demonstrations Power point presentation.	Identification of dangers and management of risks in different presented situations. Use of appropriate measures for prophylaxis and control.
Methods for assessment of food intake at individual and group level with applications in the field of dentistry	Power point presentation. Presentation of questionnaires	The use of questionnaires and assessment of the risk for oral health.
Study case: quantitative and qualitative assessment of the diet of a children group in relationship with the risk for caries.	Practical demonstration	Performing of food intake assessment , identification of

		dangers, use of appropriate measures for prophylaxis for carries through diet and alimentary habits

Bibliography:

Popa Monica. Environmental Hygiene - Practical Guide for Medical Students Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2018, 150p .

Năsui Bogdana, Food Hygiene and nutrition – Practical guide for medical students, Editura Medicala Universitara Iuliu Hatieganu, 2015, ISBN 978 – 973-693-638-8

Năsui Bogdana, Lotrean Lucia - Igiena alimentatiei si nutritiei. Lucrari practice pentru studentii la Medicina. Editura Medicala Universitara Iuliu Hatieganu, 2014.

Wold Health Organization. Prevention of hospital acquired infections. A practical guide. World Health Organization, Geneva, 2002.

World Health Organization. Management of solid health care waste at primary health care centres. A Decision Making guide. World Health organization, Geneva, 2005.

World Health Organization. Health promotion and oral health. http://www.who.int/oral_health/strategies/hp/en/

Mahan K, Escott-Stump S. Krause's Food & The Nutrition Care Process, 13th edition, Ed. Saunders-Elsevier, USA, 2012

Varkey P. Mayo Clinic Preventive Medicine and Public Health Board Review (Mayo Clinic Scientific Press), Oxford University Press, 2010.

Hygiene – Materials for practical stages in electronic format for students from Dental Medicine

Monica Popa – „Apele reziduale din unităţi medico-sanitare – ghid metodologic", Editura Medicală Universitară „Iuliu Haţieganu"Cluj-Napoca, 2006.

Ionut Carmen, Curseu Daniela, Sirbu Dana - "Notiuni de Igiena în profil stomatologic", Editura Medicala Univ. "I.Hatieganu" Cluj-Napoca, 2002

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialog with representatives of the community of dentists in order to identify the needs and expectations of the employers from the field and shaping the academic curricula according to the needs of the practical activity.
- Participation of the members of the department to scientific meetings and continuing medical education in order to keep the level of the theoretical and practical knowledge at a high standard of relevance.
- Networking with teaching staff from this field from other higher education institutions in order to exchange information and make similar the content of the teaching material from different higher education institutions.
- The information which are included in the teaching material are based on recommendations provided by World Health Organization and are compatible with the activities developed at national and international level in the field of Preventive Medicine.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General criteria of evaluation (the level of the knowledge, skills regarding coherent and fluent exposure). Capacity of understanding and exemplification of the main issues.	Written exam	**50%**
10.5. Practical Activity	Evaluation of the theoretical knowledge and practical skills.	Practical exam	**50%**
10.6. Activity during semester			
10.7. Minimum performance standard			

Acquiring the basic knowledge of hygiene in the field of dentistry by using: - The conclusion and the synthesis from the end of each lecture - The key messages from the practical stages

INTERNAL MEDICINE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	5th Department- Internal Medicine
1.4. Domain of study	Medicine
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Internal Medicine**					
2.2. Responsible for lecture			Sef. Lucrari Dr. Teodora Gabriela Alexescu					
2.3. Responsible for practical activity			Sef. Lucrari Dr. Vlad Vasile Calin Sef Lucrari. Dr. Teodora Alexescu Asist. Univ. Dr. Mircea Vasile Milaciu					
2.4. Year of study	III	2.5. Semester	6	2.6. Form of evaluation	Written examination + Oral Examination (practical + portfolio)	2.7. Course type	**Mandatory**	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**3**	3.2. Course	**1**	3.3. Practical Activity	2
3.4. Total hours in the curriculum	**42**	**3.5. Course**	**14**	**3.6. Practical activity**	**28**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					16
Individual study using on-line platforms, field research					16
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					18
Tutoring					
Examination/ semester					4
Other activities					4
3.8. Total hours of individual study (a+b+c+d)					58
3.9. Total hours/semester					100
3.10. Number of credits					4

4. Prerequisites (if needed)

4.1. Curriculum	Notions of anatomy, physiology, physiopathology and biochemistry
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projection system
5.2. For practical activities	Patient rooms with beds

6. Acquired specific competences

Professional competences	• Capacity of using the semiologic terminology in specific situations and choosing the correct diagnostic algorithm • Capacity of communication with the medical community • Critic evaluation, synthesis of disease manifestations • Applying the already learned techniques of examining the patient • Gathering experience in using the medical instruments (eg. Stethoscope) • Correct interpretation of paraclinic examinations • The capacity to integrate the anamnestic findings, the objective data and the paraclinic data in the syndrome diagnosis • Discussing the differential diagnosis • Development of the medical rationale • Learning notions needed to apply prevention in the stomatology field • Making the correct diagnosis of an emergency in the stomatology cabinet
Transversal competences	• Being able to apply the new findings into their future job routine • Applying the new theoretical knowledge in practical activity • Making new correlations in various fields

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Presenting the data regarding the symptoms, signs, explorations, in order to create the correct clinical picture • To be able to conduct the further investigations in order to reach the final diagnosis • Creation of a precise, consistent and useful medical language Learning the basic concept of internal medicine, in close relationship with the dental pathology
7.2. Specific objectives	• Applying the correct technique of anamnesis and clinical examination, conducting the future investigations and formulating the syndrome diagnosis, the differential diagnosis and the final diagnosis • Development of the medical rationale for each case

8. Content

Lecture	Teaching methods	Observations
1. Acute trachea-bronchitis, chronic bronchitis, pulmonary emphysema, chronic obstructive pulmonary disease (COPD)	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
2. Asthma, pneumonia, pleurisy, lung cancer	Systematic,	Oral lecture, Power

	interactive lecture	Point presentations 1 hour
3. Valvular diseases, infectious endocarditis	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
4. Ischemic heart disease, cardiomyopathy, angina pectoris, myocardial infarction	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
5. Hypertension, heart failure	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
6. Atherosclerosis, artery disease, venous disease, pulmonary thrombo embolism, chronic pulmonary heart disease	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
7. Kidney disease: acute and chronic glomerulonephritis, pyelonephritis, kidney stones, kidney failure	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
8. Gastroesophageal reflux disease, reflux oesophagitis, oesophageal cancer, gastritis, gastric ulcer, duodenal ulcer, gastric ulcer	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
9. Inflammatory bowel disease, colorectal cancer, irritable bowel syndrome	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
10. Chronic hepatitis, liver cirrhosis, liver cancer	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
11. Gallbladder stones, acute cholecystitis, angiocolitis, acute and chronic pancreatitis, pancreatic cancer	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
12. Diabetes mellitus	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
13. Obesity, Dyslipidemia	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
14. Metabolic syndrome, Anemia	Systematic, interactive lecture	Oral lecture, Power Point presentations 1 hour
Bibliography • Lectures • Teodora Alexescu, sub redacția. Internal Medicine Pocket Book. Editura Casa Cărții de Știință, Cluj-Napoca, 2018. ISBN: 978-606-17-1280-9. • Vlad Vasile Călin, sub redacția Dorel Sâmpelean, Vasile Negrean. Manual de medicină internă pentru Medicina Dentară. Ed. Medicală Universitară „Iuliu Hațieganu" Cluj-Napoca, 2017. ISBN: 978-973-693-788-0. • Cecil – Textbook of Medicine, 26th edition, 2019		

• Harrison principle of Internal Medicine, 20th edition		
Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Objectives and importance of internal medicine for dentistry practice. Clinical cases presentation with acute and chronic tracheobronchitis, pulmonary emphysema, chronic obstructive pulmonary disease (COPD)	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
2. History and physical examination in asthma, pneumonia, pleurisy	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
3. Acute rheumatic fever, valvular diseases, infectious endocarditis – clinical presentation, preventive therapy of infectious endocarditis for patients with valvular diseases or bleeding in dental surgery	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
4. Clinical discussions and presentations of ischemic heart diseases, cardiomyopathy	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
5. Hypertensive emergencies – the attitude of the dentist	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
6. Lung thromboembolism, chronic pulmonary heart diseases – emergency diagnosis and therapeutic conduct	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
7. Kidney disease – clinical discussion	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
8. Oeso-gastro-intestinal diseases, case presentations, emergencies, therapeutic attitude	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
9. Upper digestive bleeding,lower digestive bleeding – clinical discussions, management of patient in emergency	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
10. Chronic hepatitis, liver cirrhosis: aetiology, ways of transmission, complications – the dentist`s attitude in viral liver disease	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
11. Biliary and pancreatic pathology – presentation of clinical cases, discussions	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
12. Diabetes mellitus: overview, case presentations	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis

13. Diabetes mellitus: complications, importance in dentistry	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis
14. Anaemia, leukocytosis, disorders of haemostasis, importance in dental practice	Practical teaching near the patient`s bed	Anamnesis, Clinical examination, Building a diagnosis

Bibliography:

- Lectures
- Teodora Alexescu, sub redacția. Internal Medicine Pocket Book. Editura Casa Cărții de Știință, Cluj-Napoca, 2018. ISBN: 978-606-17-1280-9.
- Vlad Vasile Călin, sub redacția Dorel Sâmpelean, Vasile Negrean. Manual de medicină internă pentru Medicina Dentară. Ed. Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca, 2017. ISBN: 978-973-693-788-0.
- Cecil – Textbook of Medicine, 26th edition, 2019
- Harrison principle of Internal Medicine, 20th edition

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Active participation of the discipline`s members in scientific manifestations and continuous medical education, in order to maintain a high education standard
- Forging new contacts and relations with other teachers in this domain, in order to share experience and discuss the best ways in teaching the students
- The studied notions are in concordance with the current laws existing nation-wide

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Evaluation of theoretical knowledge Capacity of using the medical language The correct clinical judgement	Written exam	**60%**
10.5. Practical Activity	Evaluation of the theoretical knowledge applied in the medical practice Discussion at a case, evaluating the correct assesement of a case	Oral exam	**30%**
10.6. Activity during semester	Evaluation during the semester and of the final portfolio with clinical cases	Portfolio	**10%**

10.7. Minimum performance standard

- Correct technique of anamnesis and clinical evaluation in patients with internal medicine pathology
- Discussion of a case, presenting the case and argumentation of the clinical diagnosis
- Correct using of the complementary tests in order to establish the final diagnosis
- Correct medical rationale and appropriate using of medical notions

SOCIAL ASPECTS OF ODONTOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca

1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 2
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Social aspects of odontological practice**					
2.2. Responsible for lecture			Senior Lecturer PhD Moga Radu-Andrei					
2.3. Responsible for practical activity								
2.4. Year of study	3	2.5. Semester	1	2.6. Form of evaluation	Theoretical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	0
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**0**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					18
Individual study using on-line platforms, field research					17
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					0
Tutoring					0
Examination/ semester					1
Other activities					
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	Creating an overview of the socio-economic environment and of the legislative framework in which the dentist / dentist will practice his / her profession • Obtaining general information on health and public and private health insurance. • To obtain general information on the legal framework in which the dental practitioner operates.

	• Getting general information about the professional career management of the young graduate. • Obtaining general information on the various aspects related to the establishment and functioning of the dental practice / practice • Obtaining general information on the marketing and management modalities of dental practice • Gathering general information on issues related to physician-patient disputes (malpractice) • Developing the capacity for synthesis in an interdisciplinary manner • Improving the theoretical knowledge and rendering capability • Achieving the practical experience necessary to practice the profession of dentist
Transversal competences	• Using assimilated notions in new contexts • Applying theoretical notions in practical work • Establishing interdisciplinary correlations within the studied domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowing the general notions of the socio-economic environment and of the legal framework in which the dentist / dentist will practice his / her profession
7.2. Specific objectives	• Obtaining general information on health and public and private health insurance. • To obtain general information on the legal framework in which the dental practitioner operates. • Getting general information about the professional career management of the young graduate. • Obtaining general information on the various aspects related to the establishment and functioning of the dental practice / practice • Obtaining general information on the marketing and management modalities of dental practice • Getting general information on issues related to doctor-patient disputes (malpractice) • Getting general information about the malpractice insurance system • Increasing the ability to play the theoretical knowledge • Exercising the ability of synthesis and bibliographic documentation

8. Content

Lecture	Teaching methods	Observations
1. Medical profession reported to modern society.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
2. Health and public and private health insurance	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
3. The legislative framework in which the dental practitioner operates.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
4. Management of the professional career of the young graduate.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
5. Various aspects related to the establishment and functioning of the dental office / praxis	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations

6. The ways of marketing and management of dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
7. Medical responsibility (I)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
8. Medical responsibility (II)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
9. Legislation on the rights of the doctor and the patient (I)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
10. Legislation on the rights of the doctor and the patient (II)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
11. Issues related to physician-patient disputes (malpraxisul/malpractice)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
12. Management of a malpractice situation	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
13. Doctor and malpractice insurance system (I)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
14. Doctor and malpractice insurance system (II)	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations

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3. **Moga R.A.,** Mureşanu L., *Guiding lines for the study of the social aspects of the dental practice*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.202, 2011
4. **Moga R.A.,** Mureşanu L., *Lignes directrices nécessaire pour l’étude des aspects sociaux de la pratique d’odontologie*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.216, 2011
5. **Moga R.A.,** Mureşanu L., *Aspecte socio-deontologice ale practicii odonto-stomatologice*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.199, 2010
6. **Moga R.A.,** Mureşanu L., *Les aspects socio-éthiques de la pratique d’odonto-stomatologie*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.207, 2010
7. Muresanu L., Aspecte sociale ale practicii odontologice, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.175, 2004

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1. **Moga R.A.,** Mureşanu L., *Ghid de studiu- Aspecte sociale ale practicii odontologice*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.391, 2011
2. **Moga R.A.,** Mureşanu L., *Study guide- Social aspects of odontological practice*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.387, 2011
3. **Moga R.A.,** Mureşanu L., *Guide d’étude- Des aspects sociaux de la pratique d’odontologie*, Editura Medicală Universitară ”Iuliu Haţieganu”, pg.392, 2011

Practical Activities	Teaching Methods	Activity to be done by students
-	-	-

9. Connecting the course content with the demands of the academic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work
- Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education institutions, for coordinating the content taught with other similar programs within other higher education institutions.
- The studies are in accordance with the regulations in force and are compatible with the activities carried out at national level in the preclinical and clinical dental segment.

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization	Written type exam: evaluation and writing of a written report handed over by each participant	**90%**
10.5. Practical Activity		-	**-**
10.6. Activity during semester		The presence in the didactic activities	**10%**
10.7. Minimum performance standard			
Understanding of the overall concepts of the socio-economic environment and of the legislative framework in which the dentist / dentist will practice his / her profession: • Health and public and private health insurance • The legal framework in which the dental practitioner operates • Career management • Various aspects related to the establishment and functioning of the dental office/ practice • The ways of marketing and management of dental practice. • Medical responsibility • Legislation on the rights of the doctor and the patient • Issues related to physician-patient disputes • Management of a malpractice situation • The doctor and the malpractice insurance system			

21.THE CURRICULA OF THE 4TH YEAR

CARIOLOGY 2

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Conservative Odontology
1.4. Domain of study	
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Lecture title			**Clinical Cariology II**					
2.2. Responsible for lecture			Sef lucrari dr. Radu Chisnoiu					
2.3. Responsible for practical activity			Sef lucr. Dr. Radu Chisnoiu Sef lucr. Dr. Doina Rotaru Asist. Dr. Lucia Timis Asist. Dr. Diana Florea CD asoc. Dr. Mara Rusnac					
2.4. Year of study	4	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using textbooks, lecture notes, references					30
Individual study using on-line platforms, field research					22
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					40
Tutoring					6
Examination/ semester					18
Other activities					
3.8. Total hours of individual study (a+b+c+d)				116	
3.9. Total hours/semester				200	
3.10. Number of credits				5	

4. Prerequisites (if needed)

4.1. Curriculum	Simple dental caries diagnosis notions, odontal treatment methods and endodontic treatment steps knowledge
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Lecture hall with projection system
5.2. For practical activities	Dental offices with dental units needed for practical activities on patients

6. Acquired specific competences

Professional competences	• The capacity to use correctly the theoretical and practical cariology notions on models and phantoms • Knowing the examination instruments and the instruments used for different cavities preparation • Knowing and choosing the odontal treatment options for direct restoration methods, depending on clinical situation • Learning the odontal restoration notions by different methods, depending on the used materials and their practical appliance on patients • Developing synthesis capacity of aesthetic and functional odontal restoration notions in order to understand and restore the principal functions of the dento-maxillary apparatus: mastication, deglutition, phonation, physiognomic function • Improving the theoretical knowledge of cavity preparation and obturation skills • Acquiring the practical experience needed to use the specialized instruments to achieve the coronary restoration stages using different materials
Transversal competences	• The use of assimilated notions in particular contexts, specific to each case • Applying theoretical notions in practical activities • Establishing interdisciplinary correlations regarding the complex patient treatment

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Improvement of knowledge about etiology, clinical forms of dental caries, positive and differential diagnosis, the treatment of simple dental caries and their application to patient practice
7.2. Specific objectives	• Patient examination, diagnosis decision and treatment plan • Filling in the patient's record with data obtained during the odontal examination in order to establish a positive diagnosis and a suitable therapeutic plan. • Assimilation of differential diagnosis notions and the conditions in which it is achieved. • Applying the theoretical notions of dentinal wound treatment and methods of restoration for restoring damaged dental tissues and ADM functions. • Practical application of the preparation steps for cavities in order to be restored with non-aesthetic materials. • Practical application of the preparation steps for cavities in order to be restored with aesthetic materials. • Developing the ability to replicate the theoretical knowledge by preparing the cavities and filling them depending on each clinical situation • Exercise of synthesis and bibliographic documentation

8. Content

Lecture	Teaching methods	Observations
1. Infection control in the dental office	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
2. Complete patient examination. Anamnesis, Objective extra-oral clinical examination.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
3. Complete patient examination. Complex intra-oral examination: oral mucosa, dental arches, periodontal, complementary examinations in order to establish a complete and correct diagnosis.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
4. Dental caries etiopathogenesis. Favorable conditions (enamel quality and buccal fluid) and diet.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
5. The importance of biofilm presence and bacterial flora in the etiopathogenesis of dental caries. Time factor.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
6. Anatomo-clinical forms of dental caries; enamel, dentinal and cementum caries.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
7. Dental hyperesthesia and hypersensitivity: definition, etiology, positive and differential diagnosis, treatment.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
8. Cervical lesions of non-carious etiology: positive and differential diagnosis.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
9. Restoring cervical lesions by direct methods, using modern filling materials, their properties and indications	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
10. Actual and modern methods for composite obturations. Anterior restorations.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
11. Aesthetic posterior restorations using direct and indirect techniques.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
12. Coronal restorations in case of extensive carious lesions.	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
13. Modern tendencies in direct pulp capping-calcium hydroxide or dentinal adhesives?	Lecture, systematic, interactive exposure	Oral explanations, Power-point presentations
14. Case presentation.	Lecture, systematic, interactive exposure	Interactive discussions

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Iliescu A.; Gafar M.: Caria dentara; Ed. Medicala Bucuresti 2002
Alexandra Roman: Caria dentara de la teorie la practica: Ed. Dacia Cluj-Napoca 2000
Alexandra Roman; Andrada Popovici; O.Pastrav;Daniela Condor: Odontologie restaurativa:ghid

teoretic si clinic; Ed.UMF Cluj-Napoca; 2006
Mount G.; Hume W.R.: Preservation and restoration of the tooth structure; Ed. Mosby 1998

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Dental office presentation, dental unit functions.	Interactive practical activities.	Exercises for instruments recognition and description.
Dental office circuit for instruments; cleaning and sterilization methods for dental instruments. Working surfaces disinfection.	Interactive discussions and demonstrations	Realizing the preparations procedures for instrument sterilization.
Patient examination in the dental office, filling the patients record.	Interactive discussions and demonstrations	Patient examination and data record
Proper isolation achievement –rubber dam application	Interactive discussions and demonstrations	Rubber dam application on patient.
Dentinal wound treatment and application of filling materials in cavities: varnishes, bases, liners.	Interactive discussions and demonstrations	Treatments on patients.
Preparation and application of filling materials in cavities. Pulp capping.	Interactive discussions and demonstrations	Pulp capping using calcium hydroxide and zinc oxid eugenol on patient
Complex restorations- silver amalgam	Interactive discussions and demonstrations	Metal matrix application on patient
Cervical lesions restorations using modern materials	Interactive discussions and demonstrations	Procedure on patient
Conservative preparation of cavities and application of light curing composite materials.	Interactive discussions and demonstrations	Procedure on patient
Anterior teeth restauration using light curing composite materials.	Interactive discussions and demonstrations	Procedure on patient
Posterior teeth restauration using light curing composite materials.	Interactive discussions and demonstrations	Procedure on patient
Practical exam- examination+ interview	Knowledge testing by interview	Examination, diagnosis and therapeutical plan establishment on patient.

References:
Summitt J.; Robbins W.; Schwartz R.: Fundamentals of operative Dentistry ; Ed. Quintessence 2013
Iliescu A.; Gafar M. : Caria dentara; Ed. Medicala Bucuresti 2002
Alexandra Roman : Caria dentara de la teorie la practica : Ed. Dacia Cluj-Napoca 2000

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Sanda Cimpean:Ghid practice de odontologie si endodontie; Ed.UMF Cluj-Napoca 2012
Ada Gabriela Delean, Refacerea aspectului estetic în zona frontală cu ajutorul materialelor compozite, Ed. Alma Mater, Cluj-Napoca; 2007
Mount G.; Hume W.R.: Preservation and restoration of the tooth structure; Ed. Mosby 1998

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with the dentist community members- in order to identify the employers needs and expectations and to adapt the analytical program to the necessities of current activities.
- Permanent participation of discipline members at scientific meeting, continuous education sessions and expositions with devices and materials used in dentistry- in order to maintain the high level of novelty for all theoretical and practical information introduced in discipline structure.
- Maintaining contacts with other teachers in the field, from similar universities, in order to coordinate the contents of lectures with other programs from dental schools.

All information is in concordance with current laws and compatible with the national activities in preclinical dentistry.

10.Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization for each case	Oral evaluation	**70%**
10.5. Practical Activity	Evaluation of theoretical knowledge and practical abilities	Practical evaluation	**15%**
10.6. Activity during semester	Continuity of training during the semester	Evaluation of practical activities during the semester	**15%**
10.7. Minimum performance standard			
Acquiring the main concepts of cavity preparation and cavity obturation in simple dental caries • Patient examination, diagnosis and treatment plan establishment • Cavities preparations for amalgam obturations • Minimum invasive cavities preparation for composite obturations • Dentinal wound treatment • Amalgam obturation • Matrix systems application and composite obturation • Achieving the quota			

ENDODONTICS 2

1. Information about the program

1.1. Higher Education Institution	**Universitatea de Medicina și Farmacie ”Iuliu Hațieganu”, Cluj-Napoca**
1.2. Faculty	**Dental Medicine**
1.3. Department	**Dental Medicine 2**
1.4. Field of study	**Health**
1.5. Study cycle	**License**
1.6. Study program	**Dental Medicine**
1.7. Qualification	**Dentist**
1.8. Form of education	**Day**

1. Information about the discipline

2.1. Name of the discipline			**Endodontics 2**				
2.2. Course holder			Sef.lucr. dr. Sanda Ileana Cimpean				
2.3. The holder of practical works			Asist dr. Lucia Timis Sef Lucr. dr. Radu Chsnoiu Asist dr. Rusnac Mara				
2.4. Year of study	**4**	**2.5. Semester**	**2**	**2.6. Type of evaluation**	**Theoretical exam + Practical exam**	**2.7. The discipline regime**	**Mandatory discipline**

1. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Out of which: lecture	**2**	3.3. Practical work	4
3.4. Total hours of the curriculum	**84**	**3.5**. Out of which: lecture	**28**	**3.6.** Practical work	**56**
3.7. **Distribution of time/week fund**					Ore
Study, course support, bibliography and notes					30
Additional documentation in the library, on the specialized electronic platforms and on the field					22
Training seminars / laboratories, themes, papers, portfolios and essays					40
Tutorial					6
Examination/ semester					18
Other activities-					-
3.7. Total hours of individual study (a + b + c + d)			116 sem I		
3.8. Total hours per semester			200 (sem. I)		
3.9. Number of credits			5		

4.Prerequisites (if needed)

4.1. The curriculum	Notions of anatomy and histology of the teeth , dental pulp, alveolar bone, notions of pathological anatomy.

4.2. Skills	-
5.1Running the lectures	Amphitheater with projection system
5.2. Practical work	Cabinets with facilities specific to practical activities

5.Requisites (if applicable)

5.1. For lectures	• The ability to use the terminology as appropriate and in the context • Knowledge of the notions of morphology and physiology of dental pulp and alveolar bone • Understanding the notion of etiopathogenesis, pathophysiology and morphopathology of dental pulp and alveolar bone • The ability to synthesize the notions of subjective and objective examination of the patient in order to establish a correct diagnosis in the case of endodontic and periradicular space • acquiring the notions regarding the mechanized root canal treatment and endodontic space disinfection • Understanding the notions of new root canal obturation techniques • Familiarizing with the notions of root resorption and radicular traumatisms • Improving the reproduction capacity of the theoretical and practical knowledge regarding pulp mortification and periapical inflammation and their treatment • Acquiring the necessary practical experience, in order to use the specialized tools in order to achieve the correct endodontic treatment.
5.2. For practical activities	• Use of assimilated notions in new contexts • Applying the theoretical notions in practical work • Establishing interdisciplinary correlations within the studied domains

7. Course objectives (derived from the acquired specific competences)

1.1. General objectives of the discipline	• Knowing the notions of morpho-physiology and inflammation of the apical periodontium and the treatment possibility for these diseases
1.2. Specific Obiectives	• Acquiring the notions of morphophysiology and inflammation of the apical periodontium and infected endodontic space, the root canal biofilm • The ability to establish a correct diagnosis of inflammatory diseases of apical periodontium and pulp mortification based on knowing the subjective and objective signs of these diseases • Detailed study of mechanized root canal treatment. • Detailed study of the thermocompaction technique, used in root canal obturation • Knowledge of dental trauma, root resorption, dental cracks • Acquainting techniques of root canal instrumentation and obturation, practical exercises on patients

8. Content

a. Lecture	Metode de predare	Observații

1. Pulp necrosis and pulp gangrene: notions regarding endodontic biofilm, subjective and objective symptomatology, diagnosis and treatment.	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
2. Inflammation of the apical periodontium: acute apical periodontitis. Subjective and objective symptomatology, diagnosis and treatment.	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
3. Inflammation of the apical periodontium: chronic apical periodontitis. Subjective and objective symptomatology, diagnosis and treatment.	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
4. Diagnosis in Endodontic, treatment plan and prognosis	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
5. Root canal disinfection: antiseptic treatment, antiseptic substances, mode of use	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
6. Mechanized preparation of endodontic space: treatment principles, classification of existing systems, rules of use of rotating systems. Sistrem 2Shape: description, rules of use	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
7 . ProTaper, ProTaper Gold, ProTaper Next System: description, rules of use, presentation of clinical cases.	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
8. Root canal obturation, using McSpaden thermal compaction technique, and Combined technique: description of the method and instruments	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
9. Endodontic retreatment: indications and contraindications, principles of treatment	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
10 . Dental Cracks: subjective and objective symptomatology, diagnosis and treatment	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
11. Root resorbtion: etiopathogenesis, subjective and objective symptomatology, diagnosis and treatment	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
12. Dental trauma: etiopathogenesis, subjective and objective symptomatology, diagnosis and treatment	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
13. Endodontic surgical treatment: indications and contraindications, instruments, surgical techniques	Lecture, systematic interactive exposure,	Oral displays, Power-Point presentation
14. Coronal reconstruction of endodontically treated teeth	Lecture, systematic interactive exposure	Oral displays, Power-Point presentation
Bibliography: 1.Sanda Cimpean –Ghid practic de Odontologie si Endodontie, Editura Medicala Universitara “Iuliu Hatieganu” Cluj-Napoca 2012 2.Stephen Cohen, Kenneth M.Hargreaves – Pathways of the Pulp, editura Mosby Elsevier 2006		

3. Arnaldo Castellucci – Endodontics – vol I si II, editura ILTridente
4. Stephane Simon, Pierre Machtou, Wilhem-Joseph Pertot – Endodontie, Editions CdP, 2012
6.James L. Gutmann, Thom Dumsha, Paul E. Lovdahl – Problem solving in endodontics, editura Mosby Elsevier,2006

b. Practical work	**Methods of teaching**	**Practical activity performed by students**
1Consultation, x-ray examination, dignostic setting and treatment plan	Interactive discussions on endodontic diagnosis, treatment plan and working technique	Establishing the diagnosis and elaborating the treatment plan
2. Anesthesia, access cavity and preendodontic reconstruction	Interactive Discussion regarding Working Techniques	Practical activity performed on patient
3.Root canal preparation, rott canal irrigation, provisional antiseptic dressing	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
4. Removal of antiseptic dressing and obturation of radicular space using lateral condensation technique	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
5. Coronadicular restoration of endodontical treated teeth	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
6. Consultation, examination of radiographs, dignosis and treatment plan for acute apical periodontitis	Interactive discussions on endodontic diagnosis, treatment plan and working technique	Practical activity performed on patient
7. Performing emergency treatment in case of acute apical periodontitis (endodontic drainage)	Interactive discussion regarding working techniques	Practical activity performed on patient
8. Performing preendodontic reconstruction	Interactive discussion regarding working techniques	Practical activity performed on patient
9. Carrying out mechanized treatment with the 2 Shape system and endodontic irrigation. Applying an antiseptic dressing with calcium hydroxide	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
10. Removal of antiseptic dressing and performing root canal filling using thermomechanical condensation technique	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
11. Corono-radicular restoration of the endodontically treated teeth, using a fiber pivot	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient
12. The specificity of endodontic treatment for teeth showing internal and external resorption	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient, or assisting the assistant performing the work

13. The specificity of endodontic treatment in the case of teeth who have suffered dental trauma	Interactive discussions about the working technique and the difficulties that may arise	Practical activity performed on patient, or assisting the assistant performing the work
Assessment of endodontic treatment	Interactive discussions on criteria for evaluation of endodontic treatment	Analysis of the endodontic treatments performed

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field of dentistry,and to adapt the analytical program to the needs of the current practical work
• Permanent participation of the members of the department at scientific events, forms of continuous medical education, and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
• Maintaining contacts with other teachers in the field, titled in other higher education institutions, for coordinating the content taught with other similar programs within other higher education institutions.
• The studied concepts are in accordance with the regulations in force and are compatible with the activities carried out at national level in the preclinical dentistry segment.

10. Evaluation

Type of activity	**a. Evaluation criterias**	**10.2. evaluation methods**	**Weight of the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems	Written exam: multi choice questions and editorial questions	**60%**
10.5. Practical work	Assessment of theoretical knowledge and practical skills	Practical exam	**30%**
10.6. Activitatea din timpul semestrului	Continuity of training during the semester	Evaluation performed by the group assistant	**10%**
10.6. Minimum performance standard			
Acquisition of the main notions regarding the endodontic treatment in apical periodontitis, trauma and root resorption • Subjective and objective simtomatology in pulp mortification and in the inflammation of the apical periodontium • Carry out endodontic mechanized treatment with ProTaper, 2 Shape, ProTaper Next • Acquiring notions regarding endodontic retreatment and surgical treatment in endodontics • Acquiring notions regarding the diagnosis and treatment of dental cracks, root resorption and dental trauma			

• Recognizing the rehabilitation of teeth treated endodontically

PROSTHETIC DENTISTRY – FIXED PARTIAL DENTURES I

1. Information about the program

1.1. 1.2. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu", Cluj-Napoca
1.3. Faculty	Dental Medicine
1.4. Department	IV
1.5. Study domain	Medicine
1.6. Course level	License – undergraduate students
1.7. Academic degree	Dental Medicine in English
1.8. Qualification	Doctor – Dental Medicine (Dentistry)
1.9. Form of education	Full-time program

2. Information about the discipline

2.1. Course Title			**Fixed partial dental prosthesis I**					
2.2. Responsible for the lecture			Lecturer dr. Andreea Kui					
2.3. Responsible for practical activity			Lect. Dr. Andreea Kui Asist. Dr.Manuela Manziuc Asist. Dr. Bacali Cecilia					
2.4. Year of study	4	2.5. Semester	7	2.6. Form of evaluation	Written exam + practical exam	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1.Total hours/week	4	3.2. Course	1	3.3. Practical activity	3
3.4. Total hours in the curriculum	56	3.5. Course	14	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					10
Preparing seminars/laboratory activities, homework, projects, portfolios, essays					12
Tutoring					2
Examinations/ semester					4
Other activities					2
3.7. Total hours of individual study (a+b+c+d)			38		
3.8. Total hours/semester			94		
3.9. Number of credits			4		

4. Prerequisites (if needed)

4.1. Curriculum	Elementary knowledge of teeth morphology, dental materials, occlusion and single-tooth fixed prosthesis
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with video projector
5.2. For practical activities	Dental offices with dental units and all the specific equipment and materials for prosthodontic activity

6. Acquired specific competences

Professional competences	• Ability to adequately use the specialty terminology • Knowledge regarding the etiology, complications and evolvement of partial edentulism • Appling previous theoretical knowledge in order to correctly establish a complete diagnostic and a treatment plan for a particular case • Knowledge regarding the indications and contra-indications of fixed partial dentures for partial edentulism • Understanding the principles of treatment when manufacturing a fixed partial denture • Developing the practical abilities when preparing one or several abutments for a fixed partial denture • Understanding the technical processes for manufacturing a fixed partial denture • Knowing and understanding the clinical steps in performing a fixed partial denture • Knowing and understanding the impression methods used in fixed prosthodontics as well as the bite registration techniques • Knowledge of the theoretical aspects on esthetic analysis of a case and of the methods used in prosthodontics for a complete esthetic rehabilitation
Transversal competences	• The use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired competences)

7.1. General objectives	• Acquiring theoretical and practical notions in order to perform fixed partial dentures to patients with partial edentulism
7.2. Specific objectives	• Practicing the synthesis capacity that a future dentist should have by using also the references in this domain • Acquiring the notions needed to establish a complete diagnosis and a complete treatment plan for a patient with partial edentulism, using a fixed partial denture • Practical application of the principles used in establishing a treatment plan with a fixed partial denture. • Understanding the interdisciplinary nature of a prosthetic treatment plan • Establishing a complete treatment plan, depending on the type of edentulism • Clinical study of different types of prosthetic restorations • Attending during the practical activity to all the clinical steps required to perform a fixed partial denture, in correlation with acquiring practical skills needed to execute all the clinical stages needed for a particular case

8. Content

a. Lecture	Teaching methods	Observations
1. **Partial edentulism** – definition, clinical aspects, etiology, symptoms.	Interactive systematic lectures	Power-Point oral presentations
2. **Complications of partial edentulism** – local complications, regional complications, systemic complications.	Interactive systematic lectures	Power-Point oral presentations
3.**Classification of partial edentulism**	Interactive systematic lectures	Power-Point oral presentations
4. **Examination of a patient with partial edentulism**. **Complete diagnosis**.	Interactive systematic lectures	Power-Point oral presentations
5. **Biomechanical principles** for the design of a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
6. **Biodynamic principles** when designing a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
7. **Functional considerations** in designing a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
8. **Biological and prophylactic considerations** when designing a fixed partial denture	Interactive systematic lectures	Power-Point oral presentations
9. **Theoretical aspects regarding fixed partial dentures**: indications and contra-indications of FPDP; FPDP's objectives; classification of fixed partial dentures. Selection the abutments for a fixed partial dentures.	Interactive systematic lectures	Power-Point oral presentations
10. **Selection of the retainers** for a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
11. **Selection of the pontic** for a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
12. **Selection of the connectors** for a fixed partial denture.	Interactive systematic lectures	Power-Point oral presentations
13. **Treatment planning in case of partial edentulism**: objectives, sequences of a treatment plan. **Removal of a single-tooth fixed denture/fixed partial denture**: mechanisms and systems used to remove a fixed prosthetic restoration.	Interactive systematic lectures	Power-Point oral presentations
14. **Provisional prosthetic restorations**: functions, classification of the provisional restorations, procedures in manufacturing a provisional prosthetic restoration.	Interactive systematic lectures	Power-Point oral presentations

References

1. Boucheionaler L, Renner R. Treatement of partialy edentulous patients. The C.V. Mosby Co. Saint Louis, 1982: 11-18.
2. de Baat C, Witter DJ, Meijers CC, Vergoossen EL, Creugers NH Loading and strength of single- and multi-unit fixed dental prostheses. 1. Retention and resistance. Ned Tijdschr Tandheelkd. 2014 Mar;121(3):165-72.
3. Contrepois M, Soenen A, Bartala M, Laviole O Marginal adaptation of ceramic crowns: a

systematic review. J Prosthet Dent. 2013 Dec;110(6):447-454.e10.
4. Dhingra K. Oral rehabilitation considerations for partially edentulous periodontal patients.J Prosthodont. 2012 Aug;21(6):494-513.
5. Fradeani M: Esthetic rehabilitation in fixed prosthodontics, Quintesence Pub 2004
6. Haddad MF, Rocha EP, Assunção WG. Cementation of prosthetic restorations: from conventional cementation to dental bonding concept. J Craniofac Surg. 2011 May;22(3):952-8
7. Raut A, Rao PL, Ravindranath T. Zirconium for esthetic rehabilitation: an overview. Indian J Dent Res. 2011 Jan-Feb;22(1):140-3
8. Rosenstiel S F, Land MF, Fujimoto J : Contemporary fixed prosthodontics 4th edition. Ed. Mosby. 2001
9. Schwass DR, Lyons KM, Purton DG. How long will it last? The expected longevity of prosthodontic and restorative treatment. N Z Dent J. 2013 Sep;109(3):98-105
10. Shillingburg TH, Hobo S, Whitsett L O : Fundamentals of fixed prosthodontics, Ed Quintessence1981

b. Practical activities	**Teaching methods**	**Activity to be done by students**
1. The components and the use of a dental unit. The use of dental instruments. Presentation of the instruments used for examination.	Interactive teaching activities	Identifying dental instruments presented by the teacher; exercises in order to understand how the dental unit works as well as the use of hand-pieces and their maintenance.
2. Evaluation of the partial edentulism complications.	Interactive teaching activities	Model analysis – students will identify the local complications
3. Evaluation of the type of edentulism.	Interactive teaching activities	Model analysis- students will identify the class of edentulism according to two classification systems – Kennedy and Costa
4. Examination of a patient	Interactive teaching activities	The students will also perform a complete examination on a patient.
5. Interpretation of additional examination in correlation with the patient examination.	Interactive teaching activities	X-ray analysis of a particular case in addition to model analysis and to the examination;
6. Analyzing the models of a patient with a partial edentulism mounted in an articulator – occlusal plan analysis, considerations regarding the mastication rehabilitation. 1^{ST} TEST	Interactive teaching activities	Model analysis is performed while the models are mounted into an articulator, in order to evaluate the occlusal contacts, to identify eventual occlusal issues as well functions affected by the partial edentulism. 1^{st} TEST

7. Evaluation of the prosthetic restorations already present.	Interactive teaching activities	When evaluating an old prosthetic restoration the student will keep in mind several factors: - Morphology of the retainers, pontic and connectors; - Morphology of the axial surfaces and how the proximal contacts are restored; - Marginal adaptation of the retainers on the abutment teeth.
8. Establishing a complete diagnosis based on the data obtained so far.	Interactive teaching activities	Students will establish a complete diagnosis on a particular case: - Etiological diagnosis - Morphological diagnosis - Functional diagnosis - Prognosis
9. Removal of an old fixed prosthetic restoration	Interactive teaching activities	The students will remove an old fixed prosthetic restoration using one of the techniques presented.
10. Establishing a complete treatment using a fixed prosthetic restoration.	Interactive teaching activities	The students will establish a complete treatment plan on a particular case – for the prosthetic treatment plan they will have to select the abutments needed to support a fixed partial denture, as well as the retainers, pontic and connectors.
11. Establishing the sequences of a complete treatment plan – pre-prosthetic treatments and prosthetic treatment. 2nd TEST	Interactive teaching activities	The students will establish the treatment plan sequences for a particular case – pre-prosthetic non-specific treatments, pre-prosthetic specific treatments and prosthetic treatments. 2nd TEST
12. Pre-prosthetic non-specific treatments.	Interactive teaching activities	The student will decide what pre-prosthetic non-specific treatments are needed for a particular case. During this phase is important for them to understand the inter-disciplinary quality of a complete treatment plan.
13. Pre-prosthetic specific treatments. Post and core restorations versus dowel-core restorations – saving from extraction a residual using a direct or indirect	Interactive teaching activities	The students will restore a residual root using a direct method or an indirect method.

restoration technique		
14. Performing a provisional prosthetic restoration using a direct method or an indirect-direct method.	Interactive teaching activities	The students will manufacture, using either a direct or an indirect-direct method, a provisional fixed partial denture.

1. Rosenstiel SF, Land MF, Fujimoto J : « Contemporary fixed prosthodontics » Mosby, St Louis 1998
2. Shillingburg T H, Hobo S, Whitsett L O: "Fundamentals of fixed prosthodontics< Quin. Publ, Chicago-Tokio, 1981
3. Fradeani M: Esthetic rehabilitation in fixed prosthodontics, Quintesence Pub 2004

9. Connecting the course content with the demands of the epistemic community, professional associations and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, dental continuing education forms and exhibitions of medical devices and dental materials in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure..
- Maintaining contact with other academic from different dental institutions in order to coordinate the curricula.
- The studied concepts are in accordance with valid regulations and they are compatible with similar clinical and preclinical dental activities developed at the national level.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation	10.3 Percent from the final grade
10.4 Lecture	General criteria evaluation (the coverage are and precision of assimilated knowledge, logic coherence, fluency of speech) Ability to understand fundamental problems and particular ones	**Written exam** Multiple choice questions	**70%**
10.5 Practical activity	Evaluation of theoretical knowledge and practical ability Permanent training during the semester	**Practical exam** Model analysis (establishing a complete diagnosis and a treatment plan)	**30%**
10.6 Activity during	Evaluation of the practical activities performed during the labs		**10%**

semester			
10.7 Minimum performance standard			
• Each student should acquire the main concepts of Fixed Prosthodontics - Identifying the class of edentulism (after Kennedy's and Costa's classification); - Model analysis - Establishing a complete diagnosis - Establishing a complete treatment plan (with interdisciplinary approach)			
• Final grade = (activity during the semester x 0.1)+ (practical exam grade x 0.3)+(written exam grade x 0,6). There is no situation in which any 0.50 points will be awarded in order to round scores between 4.5 and 5. Written exam is considered eliminatory.			
• Students who obtained a grade lower than 5 at one of the exams (written or practical) will be considered NOT-PASSED.			

PROSTHETIC DENTISTRY – FIXED PARTIAL DENTURE II

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu", Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	IV
1.4. Study domain	Medicine
1.5. Course level	License – undergraduate students
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course Title	**Fixed partial dental prosthesis II**							
2.2. Responsible for the lecture	Lecturer dr. Andreea Kui							
2.3. Responsible for practical activity	Lect. Dr. Andreea Kui Asist.Tişler Corina Asist. Bacali Cecilia							
2.4. Year of study	4	2.5. Semester	8	2.6. Form of evaluation	Written exam + practical exam	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1.Total hours/week	4	3.2. Course	1	3.3. Practical activity	3
3.4. Total hours in the curriculum	56	3.5. Course	14	3.6. Practical activity	42
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					10
Preparing seminars/laboratory activities, homework, projects, portfolios, essays					8

Tutoring	2
Examinations/ semester	4
Other activities	2
3.7. Total hours of individual study (a+b+c+d)	44
3.8. Total hours/semester	100
3.9. Number of credits	4

4. Prerequisites (is needed)

4.1. Curriculum	Elementary knowledge of teeth morphology, dental materials, occlusion and single-tooth fixed prosthesis
4.2. Competences	-

5. Requisites (is applicable)

5.1. For lectures	Amphitheater with video projector
5.2. For practical activities	Dental offices with dental units and all the specific equipment and materials for prosthodontic activity

6. Acquired specific competences

Professional competences	• Ability to adequately use the specialty terminology • Knowledge regarding the etiology, complications and evolvement of partial edentulism • Appling previous theoretical knowledge in order to correctly establish a complete diagnostic and a treatment plan for a particular case • Knowledge regarding the indications and contra-indications of fixed partial dentures for partial edentulism • Understanding the principles of treatment when manufacturing a fixed partial denture • Developing the practical abilities when preparing one or several abutments for a fixed partial denture • Understanding the technical processes for manufacturing a fixed partial denture • Knowing and understanding the clinical steps in performing a fixed partial denture • Knowing and understanding the impression methods used in fixed prosthodontics as well as the bite registration techniques • Knowledge of the theoretical aspects on esthetic analysis of a case and of the methods used in prosthodontics for a complete esthetic rehabilitation
Transversal competences	• The use of assimilated information in new contexts • Application of theoretical concepts in the practical activity • Interdisciplinary correlations within the study domains

7. Course objectives (derived from the acquired competences)

7.1. General objectives	•Acquiring theoretical and practical notions in order to perform fixed partial dentures to patients with partial edentulism
7.2. Specific objectives	•Practicing the synthesis capacity that a future dentist should have by using also the references in this domain

	•Acquiring the notions needed to establish a complete diagnosis and a complete treatment plan for a patient with partial edentulism, using a fixed partial denture •Practical application of the principles used in establishing a treatment plan with a fixed partial denture. •Understanding the interdisciplinary nature of a prosthetic treatment plan •Establishing a complete treatment plan, depending on the type of edentulism •Clinical study of different types of prosthetic restorations • Attending during the practical activity to all the clinical steps required to perform a fixed partial denture, in correlation with acquiring practical skills needed to execute all the clinical stages needed for a particular case

8. Content

Lecture	Teaching methods	Observations
1. **Treatment configuration in partial edentulism** –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces – part I	Interactive systematic lectures	Power-Point oral presentations
2. **Treatment configuration in partial edentulism** –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces – part II	Interactive systematic lectures	Power-Point oral presentations
3. **Clinical and laboratory stages for performing a FPDP –** similarities and differences between several types of FPDPs – porcelain fused to metal, metal-composite, metal-resin, all ceramic, etc	Interactive systematic lectures	Power-Point oral presentations
4. **Clinical and laboratory stages for performing a FPDP –** impression taking	Interactive systematic lectures	Power-Point oral presentations
5. **Clinical and laboratory stages for performing a FPDP –** inter-occlusal records for FPDP	Interactive systematic lectures	Power-Point oral presentations
6. **Clinical and laboratory stages for performing a FPDP –** try-in procedures for a FPDP	Interactive systematic lectures	Power-Point oral presentations
7. **Clinical and laboratory stages for performing a FPDP –** cementation of a FPDP	Interactive systematic lectures	Power-Point oral presentations
8. **Maintaining the results obtained after the prosthesis restoration**	Interactive systematic lectures	Power-Point oral presentations
9. **Full arch fixed prosthesis –** indications, contra-indications, clinical and technological steps	Interactive systematic lectures	Power-Point oral presentations

10. **Esthetic analysis in partial edentulism.** Case analysis for esthetic rehabilitation. Esthetic principles in fixed prosthodontics.	Interactive systematic lectures	Power-Point oral presentations
11. **All ceramic fixed partial dentures** - indications, contra-indications, clinical and technological steps	Interactive systematic lectures	Power-Point oral presentations
12. **The combination of fixed and removable prosthesis** – combined fixed and removable prosthetic restorations	Interactive systematic lectures	Power-Point oral presentations
13. **Implant supported prosthetic restorations -** indications, contra-indications, advantages, clinical and technological steps	Interactive systematic lectures	Power-Point oral presentations
14. **Special fixed partial dentures –** characteristics, indications,etc.	Interactive systematic lectures	Power-Point oral presentations

References

1. Boucheionaler L, Renner R. Treatement of partialy edentulous patients. The C.V. Mosby Co. Saint Louis, 1982: 11-18.
2. de Baat C, Witter DJ, Meijers CC, Vergoossen EL, Creugers NH Loading and strength of single- and multi-unit fixed dental prostheses. 1. Retention and resistance. Ned Tijdschr Tandheelkd. 2014 Mar;121(3):165-72.
3. Contrepois M, Soenen A, Bartala M, Laviole O Marginal adaptation of ceramic crowns: a systematic review. J Prosthet Dent. 2013 Dec;110(6):447-454.e10.
4. Dhingra K. Oral rehabilitation considerations for partially edentulous periodontal patients.J Prosthodont. 2012 Aug;21(6):494-513.
5. Fradeani M: Esthetic rehabilitation in fixed prosthodontics, Quintesence Pub 2004
6. Haddad MF, Rocha EP, Assunção WG. Cementation of prosthetic restorations: from conventional cementation to dental bonding concept. J Craniofac Surg. 2011 May;22(3):952-8
7. Raut A, Rao PL, Ravindranath T. Zirconium for esthetic rehabilitation: an overview. Indian J Dent Res. 2011 Jan-Feb;22(1):140-3
8. Rosenstiel S F, Land MF, Fujimoto J : Contemporary fixed prosthodontics 4th edition. Ed. Mosby. 2001
9. Schwass DR, Lyons KM, Purton DG. How long will it last? The expected longevity of Prosthodontic and Restorative treatment. N Z Dent J. 2013 Sep;109(3):98-105
10. Shillingburg TH, Hobo S, Whitsett L O : Fundamentals of fixed prosthodontics, Ed Quintessence1981

Practical activities	Teaching methods	Activity to be done by students
1. Model analysis – diagnosis and different prosthetic therapies in partial edentulism - maxillary arches	Interactive teaching activities	Model analysis – students will identify the therapeutically possibilities in particular cases Argumentation of each treatment possibility

2. Model analysis – diagnosis and different prosthetic therapies in partial edentulism - mandibular arches	Interactive teaching activities	Model analysis – students will identify the therapeutically possibilities in particular cases Argumentation of each treatment possibility
3. Clinical and technical steps in performing a fixed partial denture (depending on the materials used)	Interactive teaching activities	The students will examine and evaluate different types of fixed partial dentures. Students will visit the dental laboratory in order to observe the technological steps in performing a fixed partial denture and correlate that information with the clinical steps.
4. Model analysis –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces –for maxillary arches	Interactive teaching activities	Model analysis –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces –for maxillary arches.
5. Model analysis –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces –for mandibular arches 1st TEST	Interactive teaching activities	Model analysis –fixed partial denture configuration and implant configuration as treatment possibilities in different types of edentulous spaces –for mandibular arches 1st TEST
6. Teeth preparation	Interactive teaching activities	Preparing the abutment teeth selected for sustaining a fixed partial denture (establishing the future gingival limit – exact/feather edge – depending on the clinical situation
7. Impression taking	Interactive teaching activities	The students will prepare the prosthetic field for impression taking – displacement of the gingival sulcus; impression of the working arch, impression of the antagonist arch; inter-occlusal records
8. Try-in procedures of the fixed partial denture	Interactive teaching activities	The students will perform the try-in of the metallic core (in case of porcelain fused to metal/metal-composite/metal-resin prosthetic restorations) of the FPDP;
9. Try-in procedures of the fixed partial denture	Interactive teaching activities	The students will perform the try-in of the metallic core on which the esthetic layer was applied (either ceramic, composite or resin);

10. Try-in procedures of the fixed partial denture 2nd TEST	Interactive teaching activities	The students will perform another try-in of the FPDP before the cementation; Temporary or definite cementation of the FPDP 2nd TEST
11. Esthetic analysis in the context of a prosthetic restoration. Wax-up analysis.	Interactive teaching activities	Facial analysis on a particular case; Identifying the esthetic deficiencies - labial analysis, dental analysis, gingival analysis – in a particular case
12. Case analysis for implant supported prosthetic restorations	Interactive teaching activities	The students will examine the case from several points of view, they will establish a complete diagnosis and a complete treatment plan which will include implant supported prosthetic restorations
13. Conceiving complex prosthetic treatment plans - involving fixed and removable dentures	Interactive teaching activities	The students will establish complex prosthetic treatment plans (with both fixed and removable dentures) for complex cases
14. Maintaining the results after performing the treatments	Interactive teaching activities	The students should understand the importance needed to be given to maintain the results after the treatment has finished. This aspect includes – recalling the patient periodically, clinical examination, X-rays, etc.
3. Rosenstiel SF, Land MF, Fujimoto J : « Contemporary fixed prosthodontics » Mosby, St Louis 1998 4. Shillingburg T H, Hobo S, Whitsett L O: "Fundamentals of fixed prosthodontics< Quin. Publ, Chicago-Tokio, 1981 3. Fradeani M: Esthetic rehabilitation in fixed prosthodontics, Quintesence Pub 2004		

9. Connecting the course content with the demands of the epistemic community, professional associations and representative employers in the field

- Permanent and constructive dialog with dental medicine community representatives in order to identify the needs and expectations of the dental area employers and adaptation of the syllabus to current practical activity needs.
- Permanent participation of the department staff members to different scientific conferences, dental continuing education forms and exhibitions of medical devices and dental materials in order to maintain the theoretical and practical information introduced at a high level of novelty in the discipline structure..
- Maintaining contact with other academic from different dental institutions in order to coordinate the curricula.
- The studied concepts are in accordance with valid regulations and they are compatible with similar clinical and preclinical dental activities developed at the national level.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation	10.3 Percent from the final grade
10.4 Lecture	General criteria evaluation (the coverage are and precision of assimilated knowledge, logic coherence, fluency of speech) Ability to understand fundamental problems and particular ones	**Written exam** Multiple choice questions	**45%**
10.5 Practical activity	Evaluation of theoretical knowledge and practical ability Permanent training during the semester	**Practical exam** Power-point presentation of the clinical cases treated during the semester	**55 %**
10.6 Activity during semester	Evaluation of the practical activities performed during the labs		
10.7 Minimum performance standard			
• Each student should acquire the concepts of conceiving a complete and complex treatment plan, along with the knowledge of the clinical steps in performing a fixed partial denture; • For this reason, the exam will test the student's capacity to identify the patient's needs, in case of partial edentulism associated or not with complications, but also to be able to perform a fixed partial denture as a prosthetic treatment.			
• Final grade = (practical exam grade x 0.55)+(written exam grade x 0,45). There is no situation in which any 0.50 points will be awarded in order to round scores between 4.5 and 5. Practical exam is considered eliminatory.			
• Students who obtained a grade lower than 5 at one of the exams (written or practical) will be considered NOT-PASSED.			

PEDODONTICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 2 (Conservative Odontology)
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine (DMD)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title	**Pedodontics**
2.2. Responsible for lecture	Șef Lucr.Dr. Meda-Romana Simu
2.3. Responsible for	Conf. Dr. Alexandrina Muntean

practical activity			Șef Lucr.Dr. Meda-Romana Simu Asist. Univ. Dr. Raluca Diana Ghiran (Șuhani) Asist. Univ. Irina Lupșe Asist. Univ. Lavinia-Luminița Cosma					
2.4. Year of study	**4**	2.5. Semester	**VII**	2.6. Form of evaluation	**Theoretical exam+ Practical exam**	2.7. Course type	Content	Specialty Discipline
							Obligativity	Obligatory Discipline

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	**4**
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					5
Individual study in the library, using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					12
Tutoring					1
Examination/ semester					18
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				41/semVII	
3.9. Total hours/semester				125 sem VII	
3.10. Number of credits				5 sem VII	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of the anatomy and physiology of dento-maxillary system.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system.
5.2. For practical activities	Cabinets with dental units.

6. Acquired specific competences

Professional competences	• Knowledge of the development of the dento-maxillary system during childhood • Particularities of clinical and complementary examination in pediatric dental medicine • Behavioral particularities of the child and adolescent patient • Normal and pathological development of the dento-maxillary apparatus • Dynamics of dental eruption • Specific dental pathology, with emphasis on the particularities of carious lesions of temporary and young permanent teeth • Complications of carious lesions • Etiopathogenesis and prophylaxis of dental caries in children and young people
Transversal	• Using similar concepts in new contexts

competences	• Application of theoretical concepts in practical activity • Establish interdisciplinary correlations in the studied areas.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Acquiring notions of normal and pathological development of the dento-maxillary system. • Psychology and approach to the child in the dental office. • Particularities of diagnosis and treatment of odon lesions in children and young people.
7.2. Specific objectives	• Developing knowledge about the development of the dento-maxillary system during childhood • Particularities of clinical and complementary examination in children and young people • Techniques of communication and approach of the child and adolescent patient • Normal and pathological development of the dento-maxillary apparatus • Dynamics of dental eruption • Diagnosis and treatment of simple and complicated odor lesions of temporary and permanent immature teeth • Etiopathogenesis and prophylaxis of dental caries in children and young people • Exercise of synthesis and bibliographic documentation

8. Content

Theoretical course 1st semester of 4th year	**Teaching methods**	**Observations**
1. Introduction, notions of psychology necessary for collaboration with the child patient.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations.
2. Clinical examination of the patient in the pediatric dental office.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
3. Complementary examinations, factors that may influence the development of the dento-maxillary system.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
4. Functional examination, functions of the dento-maxillary system, factors that can influence the development of dento-maxillary system.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
5. The dental anomalies, dystrophies.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
6. Dental eruption. Accidents and eruption disorders.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
7. Evolution of normal occlusion relationships.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations

8. Morphological and structural particularities of temporary and permanent teeth during growth.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
9. Etiopathogenesis of dental caries in children; epidemiological data, intensity index, frequency, caries rate.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
10. Prophylaxis of dental caries during childhood and adolescence.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
11. Simple decay of temporary teeth.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
12.Complicated decay of temporary teeth.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
13. Simple decay of young permanent teeth.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
14. Complicated decay of young permanent teeth.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
8.2 Practical activity	**Teaching methods**	**Practical work done by students**
1. Complex clinical examination	Practical demonstration, interactive dialogue	Performing complex clinical examinations
2. Complex clinical examination	Practical demonstration, interactive dialogue	Performing complementary examinations: Radiographies study models
3. Complex clinical examination	Practical demonstration, interactive dialogue	Performing complementary examinations: Radiographies study models
4. Complex clinical examination	Practical demonstration, interactive dialogue	Follow the dental eruption process
5. Complex clinical examination	Practical demonstration, interactive dialogue	Diagnosis of dental anomalies
6. Dental lesions of temporary teeth	Practical demonstration, interactive dialogue	Development of positive / differential diagnosis
7. Dental lesions of temporary teeth	Practical demonstration, interactive dialogue	Development of positive / differential diagnosis
8. Dental lesions of young permanent teeth	Practical demonstration, interactive dialogue	Development of positive / differential diagnosis
9. Dental lesions of young permanent teeth	Practical demonstration, interactive dialogue	Development of positive / differential diagnosis
10. Complementary examinations	Practical demonstration, interactive dialogue	Examinations based on study model, Rx and photomontages

11. Complementary examinations	Practical demonstration, interactive dialogue	Examinations based on study model, Rx and photomontages
12. Anesthesia in children and young people	Practical demonstration, interactive dialogue	Perform loco regional anesthesia for children
13. Prophylaxis of tooth decay	Practical demonstration, interactive dialogue	Applying methods of dental caries prophylaxis according to dentition and dentition
14. Develop a treatment plan	Practical demonstration, interactive dialogue	Staging treatment according to dentition

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  TARMURE V, Hipodontia . Diagnostic si posibilitati terapeutice, Ed. Med. Univ. "Iuliu Hatieganu", 2006

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• Permanent and constructive dialogue with community representatives dentists - to identify needs and expectations of employers in the field and adapt curriculum to the needs

of current practical activity. • Permanent participation of the members of the discipline at scientific manifestations forms of continuing medical education and exhibition of equipment and materials for practical dental activity – in order to maintain theoretical and practical information entered in the discipline structure at current high levels. • Maintain contact with other teachers in the field, from other universities, to coordinate content taught of similar programs. • The concepts studied are consistent with the regulations and with the ongoing activities at national level preclinical dentistry segment.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (range and accuracy of accumulated knowledge, logical consistency, fluency of speech). The ability to understand the fundamental issues and customization.	Oral, presentation of an essay.	**60%**
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills	Practical exam.	**40%**
10.6. Activity during semester	The continuity of training throughout the semester.	Check tests. **30% from the practical exam mark**	
10.7. Minimum performance standard			
• Diagnosis and treatment of simple and complicated decays of temporary and permanent young teeth. • Prevention and prophylaxis of dental lesions and dento-maxillary anomalies during childhood and adolescence. • Diagnosis and treatment of simple and complicated odon lesions of temporary and permanent young teeth • Prevention and prophylaxis of odontous lesions and dento-maxillary anomalies during childhood and adolescence			

ORAL SURGERY

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I Maxillofacial Surgery and Radiology
1.4. Domain of study	Dentistry
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. **Information about the discipline**

2.1. Course title			**ORAL SURGERY**					
2.2. Responsible for lecture			**Assoc. Prof. ROTAR HORAŢIU, MD, DMD, PhD**					
2.3. Responsible for practical activity			**Moldovan Mădălina MD, DMD, PhD** **Ostaş Daniel MD, DMD, PhD student**					
2.4. Year of study	4	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**5**	3.2. Course	**2**	3.3. Practical Activity	**3**
3.4. Total hours in the curriculum	**70**	**3.5. Course**	**28**	**3.6. Practical activity**	**42**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					30
Individual study using on-line platforms, field research					11
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				**55**	
3.9. Total hours/semester				**125**	
3.10. Number of credits				**5**	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of head and neck anatomy, physiology, morpho-pathology, pathophysiology. Anesthesia in dental medicine.
4.2. Competences	The ability to analyse anatomic-clinical parameters in the clinical study-case. Critical analysis and interpretation of laboratory tests. Correct writing of therapeutic prescriptions. The capability to perform local and loco-regional anesthesia in maxillofacial territory.

5. Requisites (if applicable)

5.1. For lectures	- amphitheatre with projection system - students will not attend classes with mobile phones other than in silent mode. Also, telephone conversations will not be tolerated during the course, nor do students leave the classroom to take over personal phone calls without permission - eating and drinking is not allowed during the course - delays will not be tolerated as this is disruptive to the educational process
5.2. For practical activities	- laboratories with facilities specific to practical activities - offices with dental units, wards, surgery rooms - students will not attend clinical practice sessions with mobile phones other than in silent mode, nor do students leave the laboratory to take over personal phone calls without permission

	- eating and drinking is not allowed during clinical practice sessions - delays at clinical practice sessions will not be tolerated as this is disruptive to the educational process.

6. Acquired specific competences

Professional competences	Acquisition of theoretical and practical notions about examinations, specific to the specialty Understanding basic notions of oral (dentoalveolar) surgery
Transversal competences	• Using assimilated notions in new contexts • Applying the theoretical notions in the practical activity • Establishing interdisciplinary correlations within the studied domains • Ability to communicate effectively with the patient • Demonstration of the preoccupation for professional development through the training of the analytical and synthetic thinking skills • Demonstrate involvement in research activities, such as the development of scientific articles

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The course offers students of the fourth year of the Dental Faculty the basic notions of oral (dentoalveolar) surgery, which is the theoretical and practical basis of all the other surgical disciplines in dental training. Clinical practice sessions aim at acquiring basic knowledge in the anatomy of the head and neck, focusing on the dentomaxillary complex, acquiring the necessary skills in the diagnosis and treatment of dentoalveolar diseases and practicing oral surgery.
7.2. Specific objectives	Understanding the basic notions in oral surgery, with emphasis on the principles of simple and surgical dental extraction, endodontic surgery, periodontal and proprosthetic surgery, as well as on the diagnosis and treatment of dental eruption disorders, dental inclusion, dentoalveolar injuries, infections of the periosseous soft tissues and superficial facial spaces, maxillary bones cysts and odontogenic maxillary sinusitis. Demonstration and practice of oral surgery techniques during clinical practice sessions.

8. Content

Lecture	Teaching methods	Observations
1. Introduction. Patient evaluation. Management of co-morbidities. Particularities of oral surgery.	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
2. General principles of oral surgery. The instruments used in oral surgery.	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
3. Simple dental extraction of temporary and permanent teeth	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
4. Surgical dental extraction	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
5. Endodontic surgery	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations

6. Proprosthetic surgery	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
7. Dental eruption pathology	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
8. Dental inclusion	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
9. Surgical treatment of periodontal diseases	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
10. Dentoalveolar injuries	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
11. Infections of periosseous soft tissues	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
12. Infection of the superficial spaces of the face	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
13. Cysts of the jaw bones	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
14. Dental-related pathology of the maxillary sinus	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations

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Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Illustration of clinical exam features and associated examinations in patients with oral and maxillofacial disorders. Assessing co-morbidities and establishing therapeutic attitude.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
2. Illustration of the general principles of oral surgery. Presentation of the surgical instruments used in oral	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the

surgery		courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
3. Demonstration of dental extraction with the dental forceps and elevators. Assisted practice of dental extraction.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
4. Demonstration of dental extraction with root separation and alveolotomy. Demonstration of alveoloplastic dental extraction.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
5. Diagnosis establishment and indication of surgical treatment for endodontic therapeutic methods. Demonstration and participation in apical resection surgery.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
6. Establishing the indication and therapeutic principles for proprosthetic surgery interventions. Demonstration of proprosthetic surgery interventions on soft parts and alveolar bone.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
7. Physiological and pathological aspects of dental eruption. Establishing the therapeutic indication.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging

		investigations, exemplification of pathology with clinical cases, oral surgery treatments.
8. Diagnosis establishment and treatment indications for dental inclusion. Demonstration and participation in the surgical extraction of the impacted 3rd molar and / or impacted upper canines.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
9. Periodontal disease - diagnostic and treatment principles. Illustration and demonstration of periodontal surgery.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
10. Diagnosis establishment and therapeutic indication for dentoalveolar injuries. Illustration and demonstration of methods of treatment.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
11. Diagnosis establishment and therapeutic indication in case of periosseous infections in oral and maxillofacial area.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
12. Diagnosis establishment and therapeutic indication for infections of superficial spaces of the face.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral

		surgery treatments.
13. Odontogenic and non-ontogenetic cysts of the jaw bones - diagnosis and treatment	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
14. Diagnosis establishment and treatment indications in maxillary odontogenic sinusitis. Elements of diagnosis and treatment of the oroantral fistula	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of clinical imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.
1. Illustration of clinical exam features and associated examinations in patients with oral and maxillofacial disorders. Assessing co-morbidities and establishing therapeutic attitude.	Power-point presentations, interactive teaching.	Interactive programmed education. Clinical practice sessions with practical application of knowledge gained during the courses; Study on models and analysis of imaging investigations, exemplification of pathology with clinical cases, oral surgery treatments.

Bibliography:

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- Burlibasa C: *Chirurgie orala si maxilofaciala,* Editura Medicala, Bucuresti, 2007.
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- Fragiskos DF: *Oral surgery,* Springer, Berlin, 2011.
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- Guyot L, Seguin P, Benateau H: *Techniques en chirurgie maxillo-faciale et plastique de la face*, Springer Verlag France, 2010.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dentist community - in

order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work conditions

- Permanent participation of the members of the discipline in scientific manifestations, forms of continuous medical education, exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other education institutions, for coordinating the content taught with other similar programs within other education institutions.
- The studied notions are in accordance with the regulations in force and are compatible with the activities carried out at national level on the preclinical dentistry segment.

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence) Ability to understand fundamental problems and customization	Written test with multiple choice questions	**50%**
10.5. Practical Activity	Evaluation of theoretical knowledge	Oral presentation in the form of case presentation from the subjects presented in the courses and clinical practice sessions. Discussions based on clinical images	**50%**
10.6. Activity during semester		Written tests. Case presentations.	
10.7. Minimum performance standard			
The ability to use the specialty terminology as well as understanding the theoretical and practical notions of examination; Theoretical and practical acquaintance of local anesthesia techniques and loco-regional anesthesia used in dental practice. Knowledge related to the anatomy and physiology of the dentomaxillary apparatus. Acquiring the knowledge necessary for socio-professional integration as a future physician.			

ENDOCRINOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I– Maxillofacial Surgery and Radiology

1.4. Domain of study	Endocrinology
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**ENDOCRINOLOGY IVth YEAR**					
2.2. Responsible for lecture			Prof. Dr. Cristina Ghervan					
2.3. Responsible for practical activity			Vacancy					
2.4. Year of study	4	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DO

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					2
Individual study using on-line platforms, field research					1
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					2
Tutoring					1
Examination/ semester					2
Other activities					
3.8. Total hours of individual study (a+b+c+d)				6	
3.9. Total hours/semester				86	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Accomplishment of the years I-III of study
4.2. Competences	The ability to perform anamnesis and clinical exam in a patient.

5. Requisites (if applicable)

5.1. For lectures	- Amphitheatre with projection system - Students will not attend classes with mobile phones other than in silent mode. Also, telephone conversations will not be tolerated during the course, nor do students leave the classroom to take over personal phone calls without permission. - Eating and drinking is not allowed during the course - Delays will not be tolerated as this is disruptive to the educational process
5.2. For practical activities	- Laboratories with facilities specific to practical activities - Patient rooms of the Endocrinology department - The students will wear protection equipment and will have stethoscope and clinical stage note-book

	- Students will not attend clinical practice sessions with mobile phones other than in silent mode, nor do students leave the laboratory to take over personal phone calls without permission - Eating and drinking is not allowed during clinical practice sessions - Delays at clinical practice sessions will not be tolerated as this is disruptive to the educational process.

6. Acquired specific competences

Professional competences	Acquisition of theoretical notions and practical skills about the diagnosis, treatment and follow-up of endocrine diseases. The ability to evaluate the impact of endocrine diseases upon the oral and dental pathology.
Transversal competences	The ability to perform in a correct manner the anamnesis and the clinical exam of a patient. • Using assimilated notions in new contexts • Applying the theoretical notions in the practical activity • Establishing interdisciplinary correlations within the studied domains • Ability to communicate effectively with the patient • Demonstration of the preoccupation for professional development through the training of the analytical and synthetic thinking skills • Demonstrate involvement in research activities, such as the development of scientific articles

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The course offers to the students of the fourth year of the Dental Faculty the basic notions of endocrinology, the ability to establish the diagnosis of an endocrine disorder and to evaluate the impact of glandular dysfunction upon oral and dento-alveolar pathology.
7.2. Specific objectives	Theoretic knowledge of endocrine pathology. Abilities concerning the anamnesis and clinical exam in endocrine patient. Demanding and interpreting hormonal dosages in a patient. Understanding the treatment of endocrine diseases, the follow-up and the impact of hormonal dysfunction upon oral and dental pathology.

8. Content

Lecture	Teaching methods	Observations
1. **General introduction to Endocrinology** • The hypothalamus-pituitary system • Hypothalamic-pituitary syndromes • Precocious puberty • Diabetes insipidus	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
2. **The pituitary tumoral syndrome** • Prolactinoma • Acromegaly • Pituitary insufficiency	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
3**. The thyroid gland**, • Iodine deficiency,	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations

• Hyperthyroidism		
4. **Hypothyroidism and thyroiditis**	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
5. **The parathyroid glands**, • Hyperparathyroidism, • Hypoparathyroidism, **Osteoporosis**.	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
6. **Adrenal glands**, • Cusing's syndrome, • Addison's disease	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations
7. **The gonads**, • Ovarian failure, • Testicular failure	Lecture, systematic exposure, interactive	Oral lecture, Power-Point presentations

Bibliography

Cristina Ghervan „HAND-OUT FOR ENGLISH STUDENTS - ENDOCRINOLOGY" Editura Medicală Universitară "Iuliu Haţieganu" Cluj-Napoca, 2002 (Biblioteca UMF)
Endocrinologia Clinică în Medicina Dentară, Carmen Georgescu, Ed Med Univ "Iuliu Haţieganu" Cluj-Napoca, 2009 (Biblioteca UMF)

Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Endocrine semiology: particular aspects of anamnesis and clinical exam in endocrinology	Power-point presentations, Clinical cases demonstration	Practical application of knowledge gained during the courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,.
2. Pituitary tumoral syndrome: elements of anamnesis and clinical exam. Elements of hormonal and imaging diagnosis. Therapeutic solutions and follow-up. Interactions with oral pathology	Power-point presentations, Clinical cases demonstration	Practical application of knowledge gained during the courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,
3. Thyroid pathology - elements of anamnesis and clinical exam. Elements of hormonal and imaging diagnosis. Therapeutic solutions and follow-up. Interactions with oral pathology	Power-point presentations, Clinical cases demonstration	Practical application of knowledge gained during the courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,.
4. Parathyroid glands pathology and osteoporosis - elements of anamnesis and clinical exam. Elements of hormonal and imaging diagnosis. Therapeutic solutions and follow-up. Interactions with oral pathology	Power-point presentations, Clinical cases demonstration	Practical application of knowledge gained during the courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,.
5. Adrenal glands pathology - elements of anamnesis and clinical exam. Elements of	Power-point presentations,	Practical application of knowledge gained during the

hormonal and imaging diagnosis. Therapeutic solutions and follow-up. Interactions with oral pathology	Clinical cases demonstration	courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,.
6. Ovarian and testicular failure - elements of anamnesis and clinical exam. Elements of hormonal and imaging diagnosis. Therapeutic solutions and follow-up. Interactions with oral pathology.	Power-point presentations, Clinical cases demonstration	Practical application of knowledge gained during the courses; Study on clinical imaging investigations, exemplification of pathology with clinical cases,.
7. Synthesis session, clinical cases evaluation and discussions.	Clinical cases presentation by the students	Clinical cases presented by the students
Bibliography: Cristina Ghervan „HAND-OUT FOR ENGLISH STUDENTS - ENDOCRINOLOGY" Editura Medicală Universitară "Iuliu Haţieganu" Cluj-Napoca, 2002 (Biblioteca UMF) Endocrinologia Clinică în Medicina Dentară, Carmen Georgescu, Ed Med Univ "Iuliu Haţieganu" Cluj-Napoca, 2009 (Biblioteca UMF)		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work conditions
- Permanent participation of the members of the discipline in scientific manifestations, in forms of continuous medical education, in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other education institutions, for coordinating the content taught with other similar programs within other education institutions.
- The studied notions are in accordance with the regulations in force and are compatible with the activities carried out at national level on the dentistry segment.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence) Ability to understand fundamental problems and customization.	Written test with multiple choice questions	**70**
10.5. Practical Activity	Evaluation of clinical skills	Case presentation	**20**
10.6. Activity during semester	Continuous evaluation of the interest and participation of the students to clinical stages.	Questions	**10**
10.7. Minimum performance standard			

The ability to use the specialty terminology as well as understanding the theoretical and practical notions of examination; Note 5

PNEUMOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	**Medicine**
1.3. Department	VI – Medical Sciences
1.4. Domain of study	medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Pneumology**					
2.2. Responsible for lecture			Prof Carmen Monica Pop Lecturer Ruxandra Rajnoveanu					
2.3. Responsible for practical activity			Lecturer: Ruxandra Rajnoveanu Assistant Professor : Bianca Domokos Assistant Professor: Chis Ana Assistant Professor: Lesan Andrei Assistant Professor: Motoc Nicoleta					
2.4. Year of study	5	2.5. Semester	I/II	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	 X

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**4**	3.2. Course	**2**	3.3. Practical Activity	2
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					3
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					3
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				560	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Anatomy, Physiology, Pathophysiology, Respiratory Semiology Pharmacology, Radiology, Methodology of Scientific Research,

4.2. Competences	Anamnesis, Communicating with the patient and family, Making the objective exam, Interpreting an x-ray, Writing the correct prescriptions,

5. Requisites (if applicable)

5.1. For lectures	• telephone conversations will not be tolerated during the course, nor students will leave the classroom for personal phone calls;; • Food and beverages are not allowed during the course /labs • It will not be tolerated the students' delay in the course and practical work as it proves disruptive to the educational process
5.2. For practical activities	Each student must complete his / her individual portfolio and the abilities booklet with the specific data

6. Acquired specific competences

Professional competences	• presentation and explanation of thoraco-pulmonary diseases approached at the Department of Pneumology: definition, epidemiology, etiopathogenesis, clinical presentation, diagnostic methods, positive and differential diagnosis, evolution and prognosis, prevention and treatment; • acquiring clinical (diagnostic and treatment) clinical algorithms, acquiring information on the principles of treatment, medicines used in clinical practice and how to administer them • developing practical skills, creating a medical logic to address the respiratory pathology, crystallizing a responsible attitude towards respiratory health by promoting a healthy lifestyle
Transversal competences	• Have the ability to communicate effectively with the patient • Demonstrate preoccupation for professional development by engaging critical thinking skills;; • Demonstrate involvement in research activities, such as the development of scientific articles • Demonstrate the ability to use digital media for medical information

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the course students will be able to develop a diagnostic and treatment algorithm
7.2. Specific objectives	At the end of the course, students will be able to perform a complete examination, perform an anamnesis of patients with respiratory diseases, interpret a toracopleuropulmonary radiography, request other necessary investigations, analyze results in clinical context, establish diagnosis of reperfusion diseases, establish positive diagnosis,know the differential diagnosis), to know the principles of treatment, to know how to develop a treatment plan, to release a medical prescription

8. Content

g. Lecture	Teaching methods	Observations
1. Pulmonary suppurations: pulmonary abscess, bronchiectasis,	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power	Oral exposures duplicated by PowerPoint

	Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	presentations, movies
2. Hydatic cyst	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
3. Diffuse interstitial lung disease and idiopathic pulmonary fibrosis	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
4. Sarcoidosis	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
5. Sleep apnea syndrome	-The material that is taught according to the analytical curriculum of the subject will be	Oral exposures duplicated by

	presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	PowerPoint presentations, movies
6. Mediastinal syndrome	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
7. Tabacology (tobacco addiction, smoking-induced pathology)	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
8. Tuberculosis	-The material that is taught according to the analytical curriculum of the subject will be presented using the video projector (Power Point presentations, educational films), structured systematically and accompanied by a rich and suggestive iconography (images, tables and algorithmic schemes). - The informative material is continuously adapted according to the latest information in the field of respiratory diseases. - It will also provide electronic presentation presentation support	Oral exposures duplicated by PowerPoint presentations, movies
Bibliography		

1. Apneea in somn si comorbiditatile sale" Note de curs , sub redactia Doina Todea**,** Editura Medicala Universitara „Iuliu Hatieganu" 2011,Cluj-Napoca,
2. Tuberculoza, Sub redactia C Pop, Ed Did si Pedagocica, Cluj Napoca, 2009
3. Pneumologie, sub red. Bogdan M; Ed. Universitară „Carol Davila", Bucureşti, 2008..
4. Planquette B., ECN Pneumologie, ed. Vernazobres-Grego
5. European Respiratory Monograph, 2009-2012,
6. Harrison – Principiile Medicinei Interne, vol. 1 şi 2, 14th ed., sub red. Fauci, Braunwald, Isselbacher, Wilson, Martin, Kasper, Hauser, Longo; ediţia a II-a în limba română, Ed. Teora, Bucureşti, 2003.
7. Murray and Nadel's Textbook of Respiratory Medicine, 5th ed., sub red. Mason RJ, Broaddus VC, Martin TR, King TE Jr., Schraufnagel DE, Murray JF, Nadel JA; Saunders Elsevier, Philadephia, 2010

Practical Activities	Teaching Methods	Activity to be done by students
1. Clinical examination (anamnesis and physical examination) of patients with respiratory diseases - observation sheet 2. Pulmonary imaging: Pulmonary X-ray and computer tomography 3 . Respiratory functional examinations: spirometry 4 . Other diagnostic procedures used in respiratory diseases (nonspecific sputum examination, specific microscopy, culture, bronchoscopy, thoracentesis 5 . Presentation of the clinical case of tuberculosis with its particularities 6. Presentation of clinical cases of pneumology: diagnostic and treatment algorithm, presentation modalities 7. Diagnosis of Obstructive Sleep Apnea Syndrome: Investigation and Treatment 8. Diagnosis of Obstructive Sleep Apnea Syndrome: Investigation and Treatment		

Bibliography:
1. Tuberculoza, Sub redactia C Pop, Ed Did si Pedagocica, Cluj Napoca, 2009
2. Pneumologie, sub red. Bogdan M; Ed. Universitară „Carol Davila", Bucureşti, 2008..
3. Planquette B., ECN Pneumologie, ed. Vernazobres-Grego
4. European Respiratory Monograph, 2009-2012,
5. Harrison – Principiile Medicinei Interne, vol. 1 şi 2, 14th ed., sub red. Fauci, Braunwald, Isselbacher, Wilson, Martin, Kasper, Hauser, Longo; ediţia a II-a în limba română, Ed. Teora, Bucureşti, 2003.
6. Murray and Nadel's Textbook of Respiratory Medicine, 5th ed., sub red. Mason RJ, Broaddus VC, Martin TR, King TE Jr., Schraufnagel DE, Murray JF, Nadel JA; Saunders Elsevier, Philadephia, 2010

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from

			the final grade
10.4. Lecture	Written exam	Questions grid	20%
10.5. Practical Activity	Assessment during the year	Interview	
10.6. Activity during semester	Assessment during the year		
10.7. Minimum performance standard			

NEUROLOGY-PSYCHIATRY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Neurosciences
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Neurology-Psychiatry (Neurology Module)**					
2.2. Responsible for lecture			Assoc. Prof. Stan Adina Dora					
2.3. Responsible for practical activity			Assoc. Prof. Stan Adina Dora					
2.4. Year of study	IV	2.5. Semester	II	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content / Mandatory	DS / DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**7**	**3.6. Practical activity**	**7**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					6
Individual study using on-line platforms, field research					4
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					4
Tutoring					2
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)					16
3.9. Total hours/semester					30
3.10. Number of credits					1

4. Prerequisites (if needed)

4.1. Curriculum	Anatomy, morphopathology, physiology and pathophysiology of the central and peripheral nervous system, notions of clinical semiology, notions of general pharmacology
4.2. Competences	Clinical examination

5. Requisites (if applicable)

5.1. For lectures	• Punctuality • Food consumption and use of the mobile phone are prohibited during the course
5.2. For practical activities	• Punctuality • Trainee notebook • Equipment (white gown) • Food consumption and use of the mobile phone are prohibited during the clinical practice • Each student must complete his or her individual portfolio and abilities with specific information

6. Acquired specific competences

Professional competences	• To critically analyze and be able to refer patients with neurological disorders to specialist • to be able to correctly interpret the results of a clinical trial • monitor the treatment prescribed in terms of effectiveness and adverse reactions • be able to use sources of information on drugs effectively
Transversal competences	• Have the ability to communicate with the patient • Preoccupation for professional development by engaging critical thinking skills • Involvement in research activities, such as the development of scientific articles • The ability to use digital media for medical information

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• acquiring practical skills to recognize the main neurological syndromes • understanding how neurological patients are treated
7.2. Specific objectives	• the recognition of semiological features in neurological patients • integration of clinical symptomatology in a syndrome • acquiring theoretical knowledge and direct clinical practice on 3 successive stages: - neurological semiology - neurological syndromology - neurological pathology

8. Content

Lecture	Teaching methods	Observations
1. Presentation of neurological symptomatology and its classification	Interactive exposition of the material, using power point	

	presentations, didactic movies.	
2. Ischemic and hemorrhagic stroke: etiology, clinical picture, acute phase treatment, immediate and delayed complications, primary and secondary prophylaxis principles, prognosis		
3. Parkinson's disease: etiology, clinical picture, motor and non-motor complications, therapeutic principles		
4. Multiple Sclerosis: Clinical forms, treatment and prognosis		
5. Epilepsy: etiology, classification, clinical picture, therapeutic principles		
6. Headache syndromes: migraine, Cluster headache, tension headache, primary and secondary trigeminal neuralgia (etiology, clinical picture, treatment)		
7. Coma: definition, etiology, evaluation (Glasgow Coma Scale)		

Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Participation in the activities of the department • Visit • Active participation in patient examination	Presentations of clinical cases, extensive explanations of the notions already presented in the course	Applying the theoretical knowledge in practice
2. Acquiring the interaction methodology with the neurological patient	1. Specific measures for the recognition and assessment of urgencies in: • Cerebral vascular pathology • Parkinson's disease • Multiple sclerosis • Epilepsy • Headache syndromes • Coma	

Bibliography:

1. Neurology Course (electronic form)
2. Geraint Fuller: Neurological Examination Made Easy, 5th edition. ISBN-13: 978-0702051777 ISBN-10: 0702051772; Ed. Elsevier. 2013
3. Allan Ropper, Martin Samuels , Joshua Klein (Tufts University School of Medicine, Boston, MA, Adams and Victors Principles of Neurology, ISBN: 9780071794794, McGraw Hill Professional, 2014

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• In order to carry out an appropriate program, an interdisciplinary collaboration was initiated between doctors in the specialties: neurology, dentistry, intensive care and ENT

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	In line with educational objectives	Written exam	**50 %**
10.5. Practical Activity	In line with educational objectives	Clinical case	**50%**
10.6. Activity during semester			
10.7. Minimum performance standard			
• Recognizing specific signs and symptoms of most frequent neurological disorders			

OPHTALMOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Medicine
1.3. Department	Ophthalmology
1.4. Domain of study	Ophthalmology
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Ophthalmology**					
2.2. Responsible for lecture			Dr. Macarie Sorin-Simion					
2.3. Responsible for practical activity			Șef Lucrări Dr.Sorin Macarie Asist. Univ. Dr. Cătălin Cărăuș Asist Univ. dr. Nemes Iulia Asist. Univ. Dr. Ovidiu Samoilă Asist Univ. dr. Ionana Incze Asist. Univ. Dr. Dan Călugăru Asist Univ. dr. Ana Banc					
2.4. Year of study =	4	2.5. Semester =	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**14**	3.3. Practical Activity	14
3.4. Total hours in the curriculum	**2**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours

Study using text books, lecture notes, references	2
Individual study using on-line platforms, field research	2
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	4
Tutoring	2
Examination/ semester	2
Other activities	2
3.8. Total hours of individual study (a+b+c+d)	56
3.9. Total hours/semester	59
3.10. Number of credits	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	
5.2. For practical activities	

6. Acquired specific competences

Professional competences	Acquiring the basic skills useful for general practice: examining the eye in daylight, instillations, ointment administration, eyelid exam, foreign body extraction, visual acuity measurement, ophthalmoscopic exam, ability to recognize the most frequent pathology (hordeolum, conjunctivitis, minor traumatisms).
Transversal competences	

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Learning the basic principles of ophthalmology, proving the importance of ophthalmic knowledge for general pathology.
7.2. Specific objectives	Acquiring the basic skills useful for general practice: examining the eye in daylight, instillations, ointment administration, eyelid exam, foreign body extraction, visual acuity measurement, ophthalmoscopic exam, ability to recognize the most frequent pathology (hordeolum, conjunctivitis, minor traumatisms).

8. Content

Lecture	Teaching methods	Observations
Eye Physiology Visual Function, Refraction, Binocular Vision.	Oral presentation, video presentation, Power Point	
Pathology of ocular annexes	Oral presentation, video	

Orbit, Eyelid, Tear system, Conjunctiva	presentation, Power Point	
Eye Pathology: Cornea, Uveea, Lens, Retina, Optic Nerve, Glaucoma Ocular Traumatisms	Oral presentation, video presentation, Power Point	
Bibliography 1. Mihai Călugăru, Dan Călugăru: *Ophthalmology*, Editura Todesco, Cluj-Napoca, ISBN 973-8198-70-4, 2003 2. *Oftalmologie* sub redacția Mihai Călugăru, Fundaţia Academia Civică Cluj, Cluj-Napoca 2002 3. J.Olver, L.Cassidy: *Ophthalmology at a Glance,* Blackwell Science Ltd, USA, ISBN-13: 978-0-632-06473-1, 2005		
Practical Activities	**Teaching Methods**	**Activity to be done by students**
Examination of: visual acuity, visual field, refraction, contrast and color sensitivity, eye movements, Diagnosis and treatment of adnexial and eye diseases, management of ocular trauma	Practical Demonstrations, Oral presentation, video presentation, Clinical cases,	
Bibliography: . Mihai Călugăru, Dan Călugăru: *Ophthalmology*, Editura Todesco, Cluj-Napoca, ISBN 973-8198-70-4, 2003 2. *Oftalmologie* sub redacția Mihai Călugăru, Fundaţia Academia Civică Cluj, Cluj-Napoca 2002 3. J.Olver, L.Cassidy: *Ophthalmology at a Glance,* Blackwell Science Ltd, USA, ISBN-13: 978-0-632-06473-1, 2005		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Invited speakers

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Theoretical knowlegdges	Theory exam – written, multiple choice questions	**80%**
10.5. Practical Activity	Practical abilities	Written – examinations during clinical stages	**10%**
10.6. Activity during semester	Medical thinking	Case presentations	**10%**
10.7. Minimum performance standard			
Grade 5			

INFECTIOUS DISEASE – EPIDEMIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine - Dentistry
1.3. Department	Community Medicine

1.4. Domain of study	Health
1.5. Level of course	License (undergraduate students)
1.6. Academic degree	Dental Medicine - Dentistry in English
1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Epidemiology and Primary Health Care**					
2.2. Responsible for lecture			Assoc. Prof. Amanda Rădulescu					
2.3. Responsible for practical activity			Lecturer Radu Tudor Coman					
2.4. Year of study	4	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum		**3.5. Course**		**3.6. Practical activity**	
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					10
Individual study using on-line platforms, field research					6
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					4
Tutoring					2
Examination/ semester					-
Other activities					-
3.8. Total hours of individual study (a+b+c+d)					22
3.9. Total hours/semester					50
3.10. Number of credits					2

4. Prerequisites (if needed)

4.1. Curriculum	-
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Students will not be allowed at the practical works with open phones and phone calls will not be acceptable during the courses or students leaving the classroom to retrieve personal telephone calls.
5.2. For practical activities	In delay presentation for the courses and practical works is not acceptable as it proves disruptive to the educational process.

6. Acquired specific competences

Professional competences	Students will: - integrate the role of epidemiology in understanding the impact and causes of health phenomena; - achieve the useful knowledge in planning epidemiological studies; - earn the ability to evaluate the evidence brought by clinical epidemiology with application in disease prevention and control; - interpret and apply the concepts of the infectious disease epidemiology with significance in dental medicine; - integrate the role of active immunoprophylaxis in disease prevention; - achieve the ability to apply the measures of prevention and control of healthcare associated infections and the dental practice characteristics.
Transversal competences	Built up the professional development by engaging critical thinking skills and understanding through the use of the epidemiological method. Integration of the epidemiological approach into the concept of preventive medicine.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the course the students will have the basic knowledge and skills to apply the concepts of epidemiology in promoting health and disease prevention within communities and in health care services.
7.2. Specific objectives	At the end of the course the students will be able: - to understand the interrelation between risk factors, environmental and host factors involved in infectious and chronic diseases occurrence; - to identify the infectious risk, the basic knowledge applicable in the epidemiology of infectious diseases and to integrate their particularities in dentistry; - to apply the principles of immunoprophylaxis in the healthcare of healthy people and in groups at risk for the acquisition or transmission of infectious diseases; - to consider the judicious use of chemoprophylaxis in exogenous and endogenous infections; - to integrate the post exposure prophylaxis in case of occupational exposure to infectious agents transmissible through blood and other biological fluids.

8. Content

Lecture	Teaching methods	Observations
Definition of health, health determinants, the professional basis and methods of public health in primordial, primary and tertiary prevention.	Lecture, interactive presentation.	Lecture with power point presentation.
The contribution of epidemiology to understanding the impact and causes of health phenomena. The steps of epidemiological reasoning with applicability in the study of health related events.	Lecture, interactive presentation.	Lecture with power point presentation.
Epidemiology objectives and the domains of application: epidemiological surveillance, investigation, analysis and evaluation.	Lecture, interactive presentation.	Lecture with power point presentation.
The aims and objectives of the epidemiological surveillance, the	Lecture,	Lecture with

fundamental component in building health policies.	interactive presentation.	power point presentation.
Epidemiological analysis - principles, design and planning epidemiological studies. Types of errors and their control in epidemiological research.	Lecture, interactive presentation.	Lecture with power point presentation.
Definition of commensal, pathogenic and opportunistic microorganisms with different approaches in the preventive and therapeutic interventions. The immune response to infection - the significance of nonspecific protective barriers, the innate and adaptive immunity.	Lecture, interactive presentation.	Lecture with power point presentation.
Infectious disease classification according to the type of transmission and in relation with the preventive and control approach.	Lecture, interactive presentation.	Lecture with power point presentation.
Causality criteria in the epidemiology of infectious and chronic diseases. The validity of epidemiological studies and the correlation between the quality of evidence and the strength of recommendations in medical practice.	Lecture, interactive presentation.	Lecture with power point presentation.
Clinical epidemiology - the normal / abnormal approach, diagnosis, prognosis, natural history and treatment.	Lecture, interactive presentation	Lecture with power point presentation
Optimal primary prevention by combining the population strategy with the high individual risk strategy. Secondary prevention and the justification of screening programs.	Lecture, interactive presentation.	Lecture with power point presentation.
Primary Health Care (PHC), a universal approach to health and well-being of communities. PHC components and principles in the 21st Century - Millennium Development Goals.	Lecture, interactive presentation.	Lecture with power point presentation.
Surveillance of healthcare-associated infections, the individual, population and economic significance.	Lecture, interactive presentation.	Lecture with power point presentation.
Types of healthcare associated infections, the risks and specific components in dentistry.	Lecture, interactive presentation.	Lecture with power point presentation.

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Defining the preventive and combative antiepidemic activities. Case studies.	Power point presentation, interactive teaching.	The preventive approach in the dental setting.
Passive and active immunization. Principles, objectives and recommendations.	Power point presentation, interactive teaching.	Identifying the individual and population needs.
Passive immunization – indications, administration and adverse events – case study.	Power point presentation and practical demonstration.	Understanding the responsibility of recommending and administering the preparations. Appropriate management of the risk

		regarding presented cases.
The recommended vaccines in the National Immunization Schedule.	Power point presentation and practical demonstration.	Vaccine schedules, administration and storage.
Vaccine contraindications and adverse events following immunizations.	Power point presentation and practical demonstration.	Learning how to administer the vaccines and the resuscitation protocol in the event of an anaphylactic shock.
Chemoprophylaxis - recommendations in exogenous infections and prevention of infective endocarditis in the dental office.	Power point presentation, interactive teaching.	Case studies, description of dental procedures in valvular heart disease patients.
Standard precautions – components, hand hygiene, the personal protective equipment (PPE).	Power point presentation, filmed demonstration.	Exercise of hand hygiene and donning/removing the PPE.
Transmission based precautions (additional) – airborne, droplets and contact precautions and protective environment isolation.	Power point presentation. Demonstrations based on medical literature.	Identifying the types of precautions in case studies.
The attitude in case of occupational exposure to blood and other potentially infectious body fluids - hepatitis B, C viruses and HIV.	Power point presentation. Exercise of risk assessment.	Identification of risks and risk management in case studies.
Definition and calculation of the most important epidemiological indicators - incidence, prevalence and relative risk. Specific indicators in dentistry - DMFT.	Power point presentation, interactive teaching.	Calculation of indicators.
The epidemiology of viral hepatitis – prevention and control.	Power point presentation, interactive teaching.	Identifying hepatitis B and C specific transmission issues in dentistry.
The epidemiology of HIV infection – the trends, prevention and control. Ending AIDS by 2030.	Power point presentation, interactive teaching.	Statistics and epidemiological features of HIV/AIDS in Romania.
The dental setting, biological risks and dental instrument classification. Disinfection, sterilization and cleaning in the dental setting. Basic knowledge upon hazardous waste management.	Power point presentation, interactive teaching.	Risk assessement and appropriate management in case studies.
Case studies - healthcare associated infections in dentistry.	Power point presentation.	Identify the risks in case studies.
Bibliography: Epidemiology and PHC - electronic support of the courses for the use of the students in Dentistry. 1. R. Bonita, R. Beaglehole, T. Kjellström Basic epidemiology. 2nd edition. World Health Organization, 2012. ISBN 92 4 154707 3 2. Mandel G.L, Bennett J.E, Dolin R. Principles and Practice of Infectious Disease 8th Edition, Churchill Livingstone, London, New York, 2015. ISBN-10: 1455748013		

3. Aschengrau A, Seage G. Essentials of Epidemiology in Public Health. 3rd Ed. Jones & Bartlett Learning. 2014. ISBN 9781284028911.
4. Merrill R. Introduction to Epidemiology 6th Ed. Ed. Jones & Bartlett Learning. 2013. ISBN 9781449665487.
5. Hebel JR, McCarter R. Study guide to Epidemiology and Biostatistics 7th Ed. Ed. Jones & Bartlett Learning. 2012. ISBN9781449604752.
6. Fletcher RH, Fletcher SW. Clinical Epidemiology – the Essentials 4th Ed., Lippincott Williams &Wilkins, 2012. 9781451144475.
7. Nelson KE, Williams C. Infectious Disease Epidemiology Theory and Practice 3rd Ed. Ed. Jones & Bartlett Learning. 2014. ISBN 9781449683795.
8. Rothman K.J., Greenland S, Lash TL. "Modern Epidemiology" 3rd ed. Lippincot Williams & Wilkins, Philadelphia 2012, ISBN-13: 978-1451190052.
9. Plotkin SA, Orenstein WA, Offit PA, Edwards KM. Plotkin's Vaccines. 7th ed., Elsevier 2018. ISBN: 978-0-323-35761-6.
10. European Centre for Disease Prevention and Control. ECDC Available at: https://www.ecdc.europa.eu/en/home.
11. Centrul National de Supraveghere si Control al Bolilor Transmisibile (*CNCSBT)* – Available at: https://cnscbt.ro/.
12. Centers for Disease Control and Prevention. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2016. https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

Productive dialogue with the representatives of the dentist community in order to assess the employers' needs and expectations in the conditions of extremely rapid technological development in the field, in order to adapt the training program to the needs of practical practice.
Participation of the discipline members at scientific manifestations and other forms of continuing medical education in order to optimize and update the theoretical and practical information upon the most important themes.
Current regulations in prophylactic medicine are one of the components that complement the theoretical and practical notions offered to students.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Compliant with the educational objectives. General evaluation criteria (coverage and correctness of accumulated knowledge). Ability to understand fundamental problems and customization.	Multiple choice test, 15 questions.	**60%**
10.5. Practical Activity	Compliant with the educational objectives of the practical works. Assessment of theoretical knowledge and practical skills.	Multiple choice test, 15 questions.	**40%**

10.6. Activity during semester	-		
10.7. Minimum performance standard			
Acquiring the basic epidemiological knowledge by: Conclusions - synthesis at the end of each course, practical works key messages.			

OCCLUSION

1. Information about the program

1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
2. Faculty	Dental Medicine
3. Department	4th
4. Domain of study	Healthcare
5. Level of course	License (undergraduate students)
6. Academic degree	Dental Medicine in Romania
7. Qualification	Doctor –Dental Medicine (Dentistry)
8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Occlusology**					
2.2. Responsible for lecture			Senior Lecturer Dr. Smaranda Buduru					
2.3. Responsible for practical activity			Lecturer dr. Oana Almășan Assist. dr. Ioana Duncea Asist. Dr. Manziuc Manuela Asist. Dr. Corina Tisler Asist. Dr. Bacali Cecilia					
2.4. Year of study	4	2.5. Semester	8	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	**70**	**3.5. Course**	**28**	**3.6. Practical activity**	**42**

3.7. Distribution of time needed/week	Hours
1. Study using text books, lecture notes, references	**28**
2. Supplemental study in the library, using on-line medical platforms, field research	**10**
3. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	**13**
4. Tutoring	**2**
Examination/ semester	2
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	55
3.9. Total hours/semester	125
3.10. Number of credits	5

4. Prerequisites

4.1. Curriculum	Morphology and function of the dento-maxillary apparatus (DMA)
4.2. Competences	-

5. Requisites

5.1. For lectures	Amphitheatre/Lecture room with projection system
5.2. For practical activities	Dental offices with dental chairs and semi-adjustable articulators

Specific acquired competences, Professional competences	• Capacity to adequately and contextually utilize speciality terminology. • *Knowledge of anatomy and function of the DMA.* • *Capacity to synthetize in an interdisciplinary fashion all notions of anatomy, physiology, histology, with the purpose of knowing and understanding the main functions of the DMA: mastication, deglutition, phonation, physiognomy.* • *Knowledge of mandibular cinematics and their application in practical dentistry.* • *Acquiring concepts of functional dental occlusion.* • *Acquiring detailed information regarding the mandibulo-maxillary reference positions (centric relation - CR, mandibular rest position - MRP, maximum intercuspation - MI) and of mandibular eccentric positions, lateral and anterior guidance.* • *Gaining clinical experience in appreciating the patients' occlusal characteristics.* • *Gaining practical experience necessary for proper usage of speciality-specific instruments for occlusal analysis (using the face bow and the semi-adjustable*

		articulators with all corresponding accessories).
	Transversal competences	• Using acquired knowledge in new contexts. • Applying theoretical notions in a multidisciplinary practical activity. • Establishing interdisciplinary correlations in the studied domains.

4. Course objectives (derived from the acquired specific competences)

1. General Objectives	• *Knowledge of dental occlusion concepts and correlation of occlusion with the function of the DMA and integrating the information into all fields of dentistry.*
2. Specific objectives	• *Acquiring notions of morphology of the masticatory muscles, the TMJ, the dental arches.* • *Acquiring concepts of functional dental occlusion.* • *Study of the fundamental mandibular positions: MI, CR, propulsion, laterotrusion, MRP.* • *Detecting occlusal characteristics, both physiological and pathological.* • *Methods of recording and transferring occlusal relationships.* • *Instrumental and occlusal analysis; conceiving the occlusal treatment plan.* • *Exercising capacities of synthesis and bibliographical research/documentation.*

5. Content

1. Lecture	**Teaching methods**	**Observations**
1. Anatomy of the DMA. Jaw bones – the maxilla and the mandible. Masticatory muscles (elevator and depressor muscles), cervical muscles, muscles of the neck, muscles of the mimic and of the tongue.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos

2. Anatomy of the DMA. The temporo-mandibular joint (TMJ) – components (temporal bony surface, mandibular condyles, articular disk, the capsule, the ligaments), vascularisation, innervation.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
3. Notions of dental morphology. Lateral teeth – cusps (supporting and guiding), fossae, marginal ridges (embrasures); frontal teeth – incisal edges, palatal surfaces. Analysis of dental arches – curves of occlusion: role, normal and pathological situations. Occlusal stops. Functional and non-functional dental contacts in the frontal and lateral area.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
4. Mandibular cinematics. Classification of mandibular movements. Closing and opening movements. MI position: characteristics, contact point description in all 3 planes.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
5. MRP. Vertical dimension of rest and of occlusion (VDO and VDR). Factors that influence the VD. Examining the VDO. Consequences of modifying the VDO. Therapeutic modifications of the VDO.	*Lecture, systematic and interactive display of information, problematisation, conversation*	*Oral displays, PowerPoint presentations, videos*
6. CR. Definition, rapport between CR and MI, manipulations of the mandible in CR, recording the CR position.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
7. Eccentric movements. Occlusal theories. Retropulsion, diduction movement. Theories of functional occlusion: the theory of the bilateral balanced occlusion, the gnathological theory, the functionalistic theory, the myo-centric theory, the Romanian School theory.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
8. Analysis of functional occlusion criteria. Multiple, stable stops in MI, CR (primary and secondary occlusal trauma). Anterior guidance harmonised with functional movements of the mandible and the TMJ. Disocclusion of posterior teeth during propulsion (active and passive interferences and premature contacts during propulsion, the Thielemann phenomenon, the 6-year molar syndrome.	Lecture, systematic and interactive display of information, problematisation, conversation	*Oral displays, PowerPoint presentations, videos*

9. Analysis of the functional occlusion. Disocclusion of lateral teeth during laterotrusion on the non-working (NW) side – functional guidances during laterotrusion (canine, lateral, antero-lateral), passive interferences and premature contacts during diduction. Absence of interferences of the working (W) side (active interferences and premature contacts during laterotrusion).	Lecture, systematic and interactive display of information, problematisation, conversation	*Oral displays, PowerPoint presentations, videos*
10. Patient examination. Anamnesis: localised and referred muscular pain, articular pain and noises, dento-periodontal pain. Objective exo-oral clinical examination (examination technique of the masticatory muscles, of the TMJ, of the mandibular limit movements). Arch analysis and static and dynamic occlusal analysis, detecting occlusal pathological factors, detecting consequences of occlusal anomalies.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
11. Articulators. Classification (non-adjustable, semi-adjustable, non-adjustable), description, associated necessary procedures, advantages and disadvantages, selecting an articulator. Describing components and accessories. Describing the face bow.	*Lecture, systematic and interactive display of information, problematisation, conversation*	*Oral displays, PowerPoint presentations, videos*
12. Mounting casts in the semi-adjustable articulator and its programming. Usage protocol of a semi-adjustable articulator. Programming the condylar slope and the Bennett angles. Programming the incisal guide table.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
13. Particularising notions of functional occlusion in different clinical situations. Functional occlusion applied on dental- and implant-based fixed dentures. Functional occlusion applied on dental- and implant-based removable dentures.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
14. Occlusion in the digital era. Intraoral and cast scanning. CAD/CAM systems and virtual articulators. Facial scanners. Computerised axiography. The T-Scan computerised occlusal analysis system.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos

2. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Clinical patient examination.	*Interactive discussions regarding the practical subject. Practical demonstration on a*	*Clinical patient examination. Data entry in the practical notebook. Impressions of both*

	live patient. Verifying patient examinations.	*arches.*
2. Oro-facial muscle examinations (masticatory and cervical muscles).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
3. TMJ examination.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
4. The semi-adjustable articulator (SAA).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	Articulator usage; face bow and accessories familiarisation Data entry in the practical notebook.
5. Static occlusion analysis. The curves of occlusion.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
6. MI position examination.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
7. Cast mounting in the SAA (MI position).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	Using the face bow and the transferring device. Mounting the casts in MI. Data entry on the casts and in the practical notebook.
8. Analysing anterior guidance (the propulsion movement).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*

9. Programming the condylar slope.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	Acquiring eccentric occlusal impressions and programming the articulator. Data entry on the casts and in the practical notebook.
10. Analysing guidances in laterotrusion (diduction).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
11. Programming the Bennett angle.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	Acquiring eccentric occlusal impressions and programming the articulator. Data entry on the casts and in the practical notebook.
12. Analysing the VDO.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
13. Examining the CR.	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	*Clinical patient examination. Data entry in the practical notebook.*
14. Mounting casts in the SAA (CR position).	*Interactive discussions regarding the practical subject. Practical demonstration on a live patient. Verifying patient examinations.*	Acquiring multiple centric occlusal impressions and programming the articulator. Data entry on the casts and in the practical notebook.

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2. *BUDURU SMARANDA, ALMASAN OANA – Notiuni practice de ocluzologie, Ed. Napocastar, Cluj-Napoca, 2010.*
3. *POPA SMARANDA – Examinarea clinica a pacientului cu disfunctia ADM, Ed. Dacia, Cluj-Napoca, 2003.*
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5. *IONITA SERGIU, PETRE ALEXANDRU – Ocluzia Dentara, Ed. Didactica si Pedagogica, Bucauresti, 1997.*

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7. *BRATU DORIN et. al. – Aparatul dento-maxilar, Ed. Helicon, Timisoara, 1999.*
8. *JEANMONOD ALBERT – Occlusodontologie. Applications cliniques, Editions CdP, Paris, 1988.*
9. *ASH, RAMFJORD – Occlusion, 4th edition, WB Saunders, 1995.*
10. *OKESON JEFFREY P. – Temporomandibular didorders and Occlusion, Mosby, 1998.*
11. *LeGALL M.G., LAURET J-F. – Occlusion et fonction. Une approche clinique rationnelle, Ed. CdP, Paris, 2002.*
12. *ORTHLIEB J.D., BROCARD D., SCHITTLY J., MANIERE-EZVAN A. – Occlusodontie pratique, Ed. CdP, Paris, 2000.*

1. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- *Permanent and constructive dialogue with the representatives of the dentists' community – in order to identify the needs and expectations of dental field employers and to adapt the analytical syllabus to the necessities of current dental practice.*
- *Permanent participation of the members of the Department in scientific manifestations, Continuing Medical Education events and exhibitions of dental devices and materials dedicated to activity in dental medicine – in order to keep the theoretical and practical information that is being introduced in the lecture up-to-date.*
- *Keeping in contact with other teachers in the same field, that are employed in the higher education system, in order to calibrate taught content with other similar curricula in other institutions of higher education.*
- The studied notions are concordant with current legislation and are compatible with ongoing activities at a national level in the field of dental medicine.

2. Evaluation

Activity type	**1. Evaluation criteria**	**10.2. Evaluation methods**	**Percent from the final grade**
10.4. Lecture	*General evaluation criteria (covered field and correctness of acquired knowledge, logic coherence and fluency of expression).* *Capacity to comprehend and particularise fundamental issues.*	*Written multiple-choice and essay-type examination*	*45%*
10.5. Practical activities	*Evaluating theoretical knowledge and practical abilities.*	*Practical examination*	*45%*
10.6. Activity during the semester	*Continuity of the learning process throughout the semester.*	*Tests for verification*	*10%*
10.6. Minimum performance standard			

Acquiring main notions of Dental Occlusology and normal DMA function

- Masticatory muscles, the TMJ, dental arches: anatomy and physiology
- Mandibular cinematics
- Functional occlusion
- Occlusal pathology
- Using the SAA in occlusal examinations

ORAL RADIOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Maxilo-facial Surgery and Radiology
1.4. Domain of study	Radiology 4th year
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**General Radiology**					
2.2. Responsible for lecture			Prof. dr. Mihaela Hedeşiu					
2.3. Responsible for practical activity			Asist. univ. dr. Raluca Roman					
2.4. Year of study	4	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content / Mandatory	DS / DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**4**	3.2. Course	**2**	3.3. Practical Activity	2
3.4. Total hours in the curriculum	**56**	**3.5. Course**	**28**	**3.6. Practical activity**	**28**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					4
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
Tutoring					4
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				44 sem I	
3.9. Total hours/semester				100	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	- Knowledge of the radiological anatomy of dental- periodontal and maxillofacial structures.

	• Notions of radiological image and radiation physics, radioprotection, radiobiology; notions of radiation protection applied in the dental radiology office; • Knowledge of the principles and use of the radiological equipment in the diagnosis of dento-periodontal and maxillofacial lesions, of the use of the Roentgen analog and digital equipments and of the orthopantomography equipment; • Knowledge of the principles and performing the periapical dental radiography, and also bitewing, occlusal, orthopantomography techniques; • Detection, knowledge and correction of the possible errors in dento-maxillo-facial radiology; • Understanding the principles and technique in computer tomography, magnetic resonance imaging and CBCT
4.2. Competences	• passing the Dental Radiology exam - general notions from III rd year

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projector
5.2. For practical activities	Laboratories with specific equipment for practical activities in the field of radiology

6. Acquired specific competences

Professional competences	The ability to use specialized terminology, properly and contextually • Acquire the knowledge of the concepts of radiological dental-alveolar and maxillofacial anatomy • Gain experience in recognizing radiological and imaging exams in the dental and maxillofacial regions Gain experience in recognizing different pathological entities in dento-maxilo-facial radiology, conventional and special imaginig
Transversal competences	Using assimilated notions in new contexts • The application of theoretical notions in practical activity • personal professional development • Establishing interdisciplinary correlations in the fields studied

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Recognition the dento-alveolar pathology on radiological examinations, learning the diagnostic algorithm using radiological and imaging examinations in dental and maxillofacial pathology, special imaging techniques in implantology and pathology of the maxillofacial area
7.2. Specific objectives	• Refreshing and consolidating the knowledge regarding the dental-maxillofacial radiological anatomy, • Recognizing dental pathology on radiological examinations • Knowledge of the diagnostic algorithm using radiological and imaging methods in dento- maxillofacial pathology • Special imaging techniques in dento-maxillofacial pathology (CBCT, CT, MRI, Ultrasound of the head and neck) • Radiographic imaging in maxillofacial pathology

	• Use of imaging techniques in implantology • Use of imaging techniques in salivary gland pathology • The use of imaging techniques in the pathology of the temporo-mandibular joint

8. Content

Lecture	Teaching methods	Observations
1. Radiological diagnosis of carious lesions	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
2. Radiological diagnosis pulp pathology and periapical periodontities	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
3. Radiological diagnosis of chronic periodontal disease – pathology and examination protocols	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
4. Radiological diagnosis of dental anomalies	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
5. Radiological diagnosis in orthodontics – digital and conventional cephalometric radiography	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
6. Radiological diagnosis in oral implantology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
7. European guide of recommendations regarding radiological examination in oral and maxillofacial pathology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
8. Special imaging techniques in dento-maxillofacial pathology: CT, MRI, Ultrasound of the head and neck, advantages and disadvantages	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
9. Radiological diagnosis in maxillofacial trauma	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
10. Radiological diagnosis in maxillofacial tumors, solid and cystic.	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
11. Use of imaging techniques in implantology, use of CBCT viewer in planning	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
12. Radiological diagnosis in salivary gland pathology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
13. Radiological diagnosis in para-nasal sinuses pathology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point
14. Radiological diagnosis in tempro-mandibular joint pathology	Lecture, systematic, interactive presentation	Expuneri orale, prezentari Power-Point

Bibliography

1.Whaites E. Essentials of Dental Radiography Churchill Livingstone, 2003
2. White CS, Pharoah MJ. Oral radiology. Principles and interpretation. Fourth edition, Mosby 2000
4. Goaz PW, Whaite CS. Oral Radiology: principles and interpretation. 1999
5. Fildan F,Hedesiu M., Radiologie stomatologica, notiuni de fizica si tehnica radiologica, Editura

Medicala Universitara Iuliu Hatieganu Cluj-Napoca,2003
6. www.radiologieorală.ro

Practical Activities	Teaching Methods	Activity to be done by students
1. Radiological diagnosis of carious lesions	Systematic presentation, conversation, problematization	radiographic images interpretation
2. Radiological diagnosis pulp pathology and periapical periodontities	Systematic presentation, real-time demonstrations	radiographic images interpretation
3. Radiological diagnosis of chronic periodontal disease – pathology and examination protocols	Systematic presentation, real-time demonstrations	radiographic images interpretation
4. Radiological diagnosis of dental anomalies	Systematic presentation, conversation, problematization	radiographic images interpretation
5. Radiological diagnosis in orthodontics – digital and conventional cephalometric radiography	Systematic presentation, real-time demonstrations	radiographic images interpretation
6. Radiological diagnosis in oral implantology	Systematic presentation, real-time demonstrations	radiographic images interpretation
7. European guide of recommendations regarding radiological examination in oral and maxillofacial pathology.	Systematic presentation, real-time demonstrations	Practical implementation
8. Special imaging techniques in dento-maxillofacial pathology: CT, MRI, Ultrasound of the head and neck, advantages and disadvantages	Systematic presentation, real-time demonstrations	Practical images interpretation
9. Radiological diagnosis in maxillofacial trauma	Systematic presentation, real-time demonstrations	radiographic images interpretation
10. Radiological diagnosis in maxillofacial tumors, solid and cystic	Systematic presentation, conversation, problematization	radiographic images interpretation
11. Use of imaging techniques in implantology, use of CBCT viewer in planning	Systematic presentation, real-time demonstrations	Practical implementation
12. Radiological diagnosis in salivary gland pathology	Systematic presentation, conversation, problematization	radiographic images interpretation
13. Radiological diagnosis in para-nasal sinuses pathology	Systematic presentation, conversation, problematization	radiographic images interpretation
14. Radiological diagnosis in tempro-mandibular joint pathology	Systematic presentation, conversation, problematization	radiographic images interpretation

Bibliography:
1.Whaites E. Essentials of Dental Radiography Churchill Livingstone, 2003
2. White CS, Pharoah MJ. Oral radiology. Principles and interpretation. Fourth edition, Mosby 2000
4. Goaz PW, Whaite CS. Oral Radiology: principles and interpretation. 1999
5. Fildan F,Hedesiu M., Radiologie stomatologica, notiuni de fizica si tehnica radiologica, Editura Medicala Universitara Iuliu Hatieganu Cluj-Napoca,2003
6. www.radiologieorală.ro

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dental practitioners community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical activity
- Permanent participation of the discipline members in scientific manifestations, continuous medical education and technical exhibitions for equipment and materials dedicated to the practical activity of dental medicine and radiology - in order to maintain the theoretical and practical level of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, graduates in other higher education institutions, for coordinating the content presented with other similar programs within other higher education institutions in the world.
- The concepts studied are in accordance with the regulations and are compatible with the activities carried out at national level in the segment of dental radiology.

10.Evaluation

Activity type	**10,1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (degree of coverage, correctness of knowledge, logical coherence, fluency of expression, ability to make argumentation) Discipline-specific criteria Ability to understand fundamental problems and to customize	written	**50%**
10.5. Practical Activity	Practical skills in coordination with theoretical knowledge	practical	**50%**
10.6. Activity during semester	Seminars during the practical activities	practical	**10%**
10.7. Minimum performance standard			
The ability to properly understand and use specialized terminology in context • theoretical and practical notions specific to radiology • knowledge of the presentation of different pathologies in dento-maxilo-facial radiology			

CAD/CAD SYSTEM

1. **Information about the program**

1.1.	Institution for graduate and	University of Medicine and Pharmacy "Iuliu

postgraduate studies	Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	IV
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**CAD_CAM Digital Dentistry**					
2.2. Responsible for lecture			Sef. Lucr. Dr. Bogdan Culic					
2.3. Responsible for practical activity			Sef lucr dr. Bogdan Culic Asist dr. Varvara Adrian Mihai Asist dr. Alexandra Botos Asist dr. Cristina Gasparik Asist dr Alexandru Grecu Asist dr Burde Alexandru					
2.4. Year of study	4	2.5. Semester	1	2.6. Form of evaluation	Written examination + Practical examination	2.7. Course type	Content	DS
							Compulsory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	**3.2. Course**	**1**	**3.3. Practical Activity**	**1**
3.4. Total hours in the curriculum	**14**	**3.5 Course**	**14**	**3.6. Practical Activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					9
Individual study using on-line platforms, field research					7
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					4
Tutoring					2
Examination/ semester					3
Other activities					
3.8. Total hours of individual study (a+b+c+d)				22	
3.9. Total hours/semester				28	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Notions of Prosthodontics- indirect restorations manufactured by digital technology
4.2. Competences	Innovative notions of dental medicine Computerized notions for the manufacturing of indirect restoration

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with multi-media system for projection
5.2. For practical activities	Simulation offices and laboratories with specific equipment for practical activities Optical impression of the prosthetic field Design techniques - individual achievement Milling of restorations

6. Acquired specific competence

Professional competences	• The ability to use the specialized terminology properly and contextually • Knowledge of the particularities of CAD_ CAM systems in dental medicine • Knowledge of the technological possibilities of CAD_CaM systems indications, limits
Transversal competences	• Using assimilated notions in new contexts • Application of theoretical notions in practical activity • Establishing interdisciplinary correlations within the studied fields

7. Course objectives (derived from the acquired specific competences)

1.9. General Objectives	• Knowledge of CAD_CAM technology - office and laboratory
1.10. Specific objectives	• Knowledge of general principles • Know the limits of use • Knowledge of types of prosthetic restorations, types of preparations • Learning of optical impression methods • Acquiring design methods for different types of prosthetic restorations

8. Content

Course	Teaching methods	Observations
1. CAD / CAM systems in Dental Medicine. Definition. Historic. Generalities. Types of CAD / CAM systems. In office systems. Presentation of the equipment, technological variants Intraoral scanning. Types of CAD / CAM systems. Laboratory systems.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
2. Types of preparations for prosthetic restorations inlay, onlay, crown	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
3 . Optical impression. Definition, Characteristics, Performance. Image capture. = part I (intraoral) Optical impression. Definition, Characteristics, Performance. Image capture. = part II (model)	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
4. CAM / CAD Materials – Feldspar ceramic. Lithium Disilicate ceramic. CAM / CAD Materials - Hybrid Ceramics. Zirconium oxide	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
5. Software for design. Design of restorations for Inlay / Onlay / Crowns / Bridges. Indications, Choosing the type of restoration according to the clinical indication	Lecture, systematic, interactive	Oral presentations, Power-Point

Choosing ceramic materials for CAD / CAM technique The thickness of the ceramic. Milling work Sintering / Crystallization, types of ovens ... etc. Glazing	presentation	presentations
6. Cementation of all ceramic works Zr cementation, Feldspar ceramic cementation, Emax, etc. Adhesion - tooth (types of adhesives, etc.) Preparation of ceramics Types of cement	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
7. CAD_CAM systems for the laboratory. Applications of 3D printing in dental medicine. Milling systems - in the laboratory. Surgical guides using CAD / CAM technology. Intervention planning.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations

b. Practical Activities	**Teaching Methods**	**Activity to be done by students**
General features of CAD_Cam systems - Presentation of systems at the discipline leve	Practical demonstrations, interactive exercises	Exercises for using the systems
Optical impression - intraoral system of offices	Demonstrations regarding the use of instrumental systems for the analysis of dental color	Impression of maxillary prosthetic field + mandibul + occlusion - mounting in the virtual articulator
Optical impression - laboratory scanner	Practical demonstrations, interactive exercises	Impression of maxillary prosthetic field + mandibul + occlusion - mounting in the virtual articulator
Design generation - inlay/onlay _ CAD component	Practical demonstrations, interactive exercises	Use of the design software
Design generation - crown/ brige _ CAD component	Practical demonstrations	Use of the design software
Milling techniques for prosthetic restorations - CAM component	Practical demonstrations	Milling of restorations from different CAD-CAM materials
Pigmentation and glazing of prosthetic restorations	Practical demonstrations	Glazing the milled restorations

Bibliography

1. Fradeani M. Esthetic Analysis. A systematic Approach to Prosthetic Treatment Quintessence, 2004
2. Chu S, Devigus A, Mieleszko A. Fundamentals of Color, Shade matching and Communications in Esthetic Dentistry. Quintessence Publishing Co, Inc, 2004.
3. Shillingburg HTJr. Fundamentals of fixed prosthodontics, 4rd ed., Quintessence Publishing Co Inc., 2012.

9. *Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field*

- Permanent and constructive dialogue with representatives of the community of dentists - in order to identify the needs and expectations of employers in the field and to adapt the analytical program to the needs of the current practical activity

- Permanent participation of the members of the chair in scientific manifestations, forms of continuous medical education and exhibitions of equipment and CAD_CAM materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, in other institutions of higher education, for coordinating the content taught with other similar programs within other institutions of higher education.
- The concepts studied are in accordance with the current regulations and are compatible with the activities carried out at national level in the medicine segment.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage area and accuracy of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and to customize	Multiple choise exam and open questions	**50%**
10.5. Practical Activity	The ability to select and render relevant information within a theme from the displayed topic	Essay	**30%**
10.6. Activity during semester	Preparation activity during the semester	Periodic tests	**20%**
10.6. Minimum performance standard • Knowledge of the technological variants of CAD_CAM systems • To know the stages of performing a CAD_CAM prosthetic work			

INTEGRITY IN RESEARCH SCIENCE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Reabilitation
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title	**Integrity in Research**
2.2. Responsible for lecture	Maria Aluaș
2.3. Responsible for practical activity	-

2.4. Year of study	4	2.5. Semester	8	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DC
							Mandatory	DO

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	-
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**-**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					8
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				38	
3.9. Total hours/semester				52	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	
4.2. Competences	Adequate level of understanding, conversation, speaking, and writing in English

5. Requisites (if applicable)

5.1. For lectures	Students will keep them off GSM. During the course, phone calls are not allowed. Students cannot leave the amphitheater to the reason of personal phone calls; It is not allowed to eat during class sessions consumption of food and drinks is prohibited; Students must respect timetables; the late arrival to activities is prohibited, as this will disturb the working sessions.
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	•Being able to use correctly, in the appropriate context, the specific terminology •Being able to frame ethical and integrity issues in the medical and health context •Identify the negative consequences that can raise from the misconduct and misbehavior practices • Being able to use efficient sources of information and distinguish official information other information found on the internet
Transversal competences	•Having the ability to use the concepts learned in new contexts; •To optimize creatively their potential in the scientific and research activities in which they are involved; • To have the ability to identify the consequences of the presented topics in personal and professional life; • To show concern for identifying solutions and arguments in favor of proposed

	solutions; • To justify the decisions they would make in such situations; • Demonstrate the ability to use digital media and reference documents for information purposes in order to solve ethical and academic integrity issues.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the semester, students will acquire skills that make them able to identify and contextualize an ethical and integrity issue and, to be aware about consequences of such practices for the profession of dentist and researcher.
7.2. Specific objectives	At the end of the semester, students will be able to: - Distinguish between describe and evaluate a concrete situation and delineate the ethical and integrity issues from other types of frauds. - To problematize and analyze the presented cases and situations. - Identify solutions or possibilities to avoid such situations.

8. Content

h. Lecture	**Teaching methods**	**Observations**
1. Introductory course. Conceptual definitions and boundaries: What does ethics and academic integrity mean?	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
2. The causes and cases that led to the emergence of this new discipline: Jon Studbo, Eric Poehlman, Andrew Wikelfied.	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
3. Forms of facts that can be classified as misconduct in the academic environment: data falsification, fabrication, plagiarism, other frauds	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
4. Data fabrication: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
5. Data falsification: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
6. Plagiarism: causes and consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled

	illustration by clinical cases; use of multimedia;	images / movies)
7. Conflict of interests: definition, causes, consequences	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of 5multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
8. Data protection. The concept of privacy and confidentiality	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
9. Intellectual property rights: copyright and patents	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
10. Legal regulations regarding Misconduct practices	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
11. European Code of Research Integrity	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
12. Sanctions applied to acts of misconduct: academic, disciplinary, legal sanctions	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
13. Solutions: education, methodological skills, change of policies	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
14. Science and professional responsibility	Exhibition of knowledge according to the proposed themes, stimulating interactivity; illustration by clinical cases; use of multimedia;	Oral presentation (lecture), with multimedia support (Powerpoint, doubled images / movies)
Bibliography All European Academies, The European Code of Conduct for Research Integrity. Revised Edition, Berlin 2017 PRINTEGER (2016). Documents and Results. https://printeger.eu/documents-results/. Accessed 20-06-		

2019
A.Shamoo, D. Resnik, Responsible Conduct of Research, 3rd ed. Oxford University Press, 2015

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

To structuring the content, the choice of teaching / learning methods, the responsible of this discipline has :
Held working meetings with doctors, lawyers, historians, and other professionals in the medical universities. These meetings had the objective to identify problems and to contemplate appropriate solutions as well as coordination with other similar programs of faculties.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	In accordance with the educational objectives (theoretical examination)	Written exam: ethical scenario and role play (70%) Argumentation of the decision and proposed solution (30%)	**100%**
10.5. Practical Activity			
10.6. Activity during semester			
10.7. Minimum performance standard			

INNOVATIVE METHODS FOR TISSUE REGENERATION IN DENTISTRY

1. Program information data

1.1. High education institution	”Iuliu Haţieganu” Univesity of Dentistry, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Rehabilitation 3
1.4. Field of study	Medicine
1.5. Study cycle	License
1.6. Study program	Dental Medicine in English
1.7. Qualification	Doctor- Dentist
1.8. Form of education	Frequence required

2. Discipline information

2.1. Name of the discipline				Innovative tissue regeneration technology in denstistry				
2.2. Head of lecture				Assoc. Prof. Dr. Ilea Aranka				
2.4. Year of study	4	2.5. Semester	2	2.6. Type of evaluation	Theoretical exam	2.7. Discipline status	Content	DS
							Optional	DO

3. Estimated full time (teaching activities hours / semester)

3.1. Number of hours per week	**1**	3.2. Out of which: course	**1**	3.3. Practical work	0
3.4. Total hours of the curriculum	**14**	**3.5. Out of which: course**	**14**	**3.6. Practical work**	**0**

3.4. Distribution of time / week	Hrs.
Student study, course support, bibliography and notes	14
Supplementary documentation in the library, on the specialized electronic platforms and in area of expertise	10
Tutoring	2
Examinations / semester	2
3.7. Total hours of individual study (a+b+c+d)	28
3.8. Total hours per semester	42
3.9. Number of credits	2

4. Requirements (where appliable)

4.1. The curriculum	Cervical area anatomy and physiology, oral cavity histopathology
4.2. Competency	Skills in research domain (critical and analytical)

5. Condititions (where applicable)

5.1. For lectures	Amphitheater with projection system

6. Specific Accumulated competences

Professional skills	• Designing and applying predictable and innovative dental treatment plans useful in clinical situations that involve the loss of hard or soft parts of the oral cavity. • Ability to decide the opportunity for autologous tissue regeneration in daily dental work. • A new approach in clinical cases by future dental practitioners, by developing a thinking that integrates the knowledge accumulated during lectures within the optional course. • The development of skills that will favor the improvement of individual performances, in accordance to their professional aspirations, as well as the embracing and application of new technologies in the field of regenerative dental medicine. • Initiation in regenerative dentistry research domains.
Cross skills	• Integration of the notions assimilated during the lectures of regenerative dentistry in Odontology, Endodontics, Prosthetics, Parodontology, Maxillofacial Surgery, Implantology, Orthodontics. • Applying theoretical notions in practical work. • Establishment of interdisciplinary correlations within the studied domains.

7. Objectives of the discipline (based on the specific skills matrix)

7.1. The general	• The knowledge of the basic notions regarding the sources, the morphophysiology, the classification, the benefits brought by the

objective of the discipline	application of the knowledge accumulated in the current dental practice of the stem cells
7.2. Specific objectives	• Harvesting and storage of stem cells, their characterization, highlighting and exemplifying the protocols of isolation and storage, desires and perspectives in tissue engineering at the level of the cervical extremity.

8. Contents

Lecture's subjects	Teaching methodology	Comments
1. Stem cells- morphophysiology concepts.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
2. Oral cavity stem cells harvesting protocol.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
3. Stem cells characterization.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
4. Stem cells passage.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
5. Stem cells storage. Stem cells banks.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
6. Stem cells cultures and growth factor's implications.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
7. Tissue engineering and matrix applications.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
8. Oromaxillofacial structure's regeneration.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
9. Neural regeneration in oro-maxillo-facial area.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
10. Oro-maxillo-facial soft and striatum muscular tissue regeneration.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
11. Oro-maxillo-facial vessel's regeneration.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
12. Dental and periodontal structure's regeneration.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
13. Oral cavity bone structure's regeneration.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
14. Tissue engineering, matrix and biomaterials.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations

9. Evaluation

Activity type	9.1. Evaluation criterias	9.2. Evaluation methods	Weight of the final grade
9.3. Course	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand regenerative dentistry problems and customization to clinical situations	Powerpoint presentation	**100%**

	Powerpoint presentation – subject chosen from the lectures during the semester, futurist dentistry – seen through th eyes of the VIth year student		

BIOCOMPATIBILITY OF DENTAL MATERIALS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Biocompatibility of Dental Materials**					
2.2. Responsible for lecture			Prof dr. Gottfried Schmalz/Associate Prof of UMF Prof dr. Diana Dudea					
2.3. Responsible for practical activity								
2.4. Year of study	4	2.5. Semester	2	2.6. Form of evaluation	Written exam	2.7. Course type	Content Optional	DS

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	0
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**28**	**3.6. Practical activity**	**0**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					10
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
Tutoring					4
Examination/ semester					2
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Notion of Dental Materials
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Attendance 100%

	Amphitheater with projection system
5.2. For practical activities	

6. Acquired specific competences

Professional competences	-Knowledge of the therapeutic and adverse effects of the materials used in the prophylaxis and treatment of oral and dental disorders. Assimilation of the fundamental notions aimed at defining and explaining terms widely used in biomaterial science: biocompatibility, systemic toxicity and local adverse reactions, allergic or toxic phenomena, risk of administration. Knowledge of the fundamental methodology for testing the biocompatibility of dental materials, as well as certain tests applied in specific circumstances - such as tests for evaluating the allergic potential. Knowledge of the biocompatibility aspects of the different classes of dental materials
Transversal competences	Using assimilated notions in new contexts; • Applying the theoretical notions in the practical activity; • Establishing interdisciplinary correlations within the studied domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of the aspects of biocompatibility and the therapeutic and adverse effects of the materials used in the prophylaxis and treatment of oral and dental disorders.
7.2. Specific objectives	Assimilation of the fundamental notions aimed at defining and explaining terms widely used in biomaterial science: biocompatibility, systemic toxicity and local adverse reactions, allergic or toxic phenomena, risk of administration. Knowledge of the fundamental methodology for testing the biocompatibility of dental materials, as well as certain tests applied in specific circumstances - such as tests for evaluating the allergic potential. Knowledge of the biocompatibility aspects of various classes of dental materials

8. Content

8.1. Lecture	**Teaching methods**	**Observations**
1. The fundamental notions aimed at defining and explaining terms widely used in biomaterials science.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
2. Biocompatibility, systemic toxicity and local adverse reactions, allergic or toxic phenomena, risk of administration.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
3. The fundamental methodology of testing the biocompatibility of dental materials,	Lecture, interactive exposure	Oral exposures, Power-Point presentations
4.Biocompatibility of amalgams and composite resins,	Lecture, interactive exposure	Oral exposures, Power-Point presentations
5. Biocompatibility of dental ceramics and alloys used in dental medicine	Lecture, interactive exposure	Oral exposures, Power-Point presentations
6.Biocompatibility of root obturation materials	Lecture, interactive	Oral exposures, Power-

and polymethacrylic resins	exposure	Point presentations
7. General toxicity, tissue compatibility and cytotoxicity, antimicrobial properties, as well as results of preclinical laboratory and clinical tests regarding: diffusion through dentin, reaction of pulp and oral mucosa, sensitivity associated with application, allergic and carcinogenic potential, marginal microinfiltration.	Lecture, interactive exposure	Oral exposures, Power-Point presentations
8.2 Practical activity		
References Schmalz G, Bindslev A- Biocompatibility of Dental Materials, 2010, Springer Schmalz G. Strategies to Improve Biocompatibility of Dental materials. Curr Oral Health Rep 2014. 1:222-231 Dias Ribeiro A et al. Cytotoxic effect of a 35% hydrogen peroxide bleaching gel on odontoblast-like MDPC-23 cells ; (Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2009;108:458-464) Gottfried Schmalz Kerstin M. GallerBiocompatibility of biomaterials – Lessons learned and considerations for the design of novel materials. Dental materials 3 3 (2 0 1 7) 382–393 Galler K, DDS, PhD, Andreas Eidt, and Gottfried Schmalz, DDS, PhD Cell-free Approaches for Dental Pulp Tissue Engineering JOE — Volume 40, Number 4S, April 2014 *Gottfried Schmalz, Reinhard Hickel, Kirsten L. van Landuyt, Franz-Xaver Reichl*, Nanoparticles in dentistry Dental materials 3 3 (2 0 1 7) 1298–1314 Gottfried Schmalz, Anthony J. Smith- Pulp Development, Repair, and Regeneration: Challenges of the Transition from Traditional Dentistry to Biologically Based Therapies (J Endod 2014;40:S2–S5)		

***9.* Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field**

Constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work;

• Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to keep the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.

• Maintaining contacts with other teachers in the field, titled in other universities, to coordinate the content taught with other similar programs within other universities.

• The studied concepts are in line with the actual regulations and are compatible with the activities carried out at national level in the preclinical dentistry segment.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization	Exam with multiple choice questions	**75%**
10.6. Activity	Continuity of preparation during semester	Review	**25%**

during semester			
10.7. Minimum performance standard			
Oriented information in the field of therapeutic and adverse effects of materials used in the prophylaxis and treatment of oral and dental disorders. Definition and explanation of widely used terms in biomaterial science: biocompatibility, systemic toxicity and local adverse reactions, allergic or toxic phenomena, risk of administration. Motions for biocompatibility of the materials used in the dental practice of preservation and restoration of dental structures: composites and resins, ceramic masses, dental cements (zinc phosphate, glass ionomers, calcium hydroxide, etc.), root filling materials, dental alloys, polymethacrylic resins.			

22.THE CURRICULA OF THE 5TH YEAR

PERIODONTOLOGY 1

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	3 - Oral Rehabilitation
1.4. Domain of study	Health
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Periodontology I**					
2.2. Responsible for lecture			Lecturer Dr. Stefan Adrian Petrutiu, DMD, PhD					
2.3. Responsible for practical activity			Lecturer Dr. Stefan Adrian Petrutiu, DMD, PhD, Assit Prof Dr Daniela Condor, Assit Prof Fr Cosmin Cioban, Assit Prof Drd Cristina Micu, Assist Prof. Drd Andreea Ciurea,					
2.4. Year of study	5	2.5. Semester	1	2.6. Form of evaluation	**Written and oral exam**	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	**4**
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					11
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					16
Tutoring					2
Examination/ semester					1

Other activities	1
3.8. Total hours of individual study (a+b+c+d)	43
3.9. Total hours/semester	127
3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	Histology, immunology, physio-pathology, microbiology, internal medicine, scientific research methodology
4.2. Competences	Clinical studies analysis

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Preclinical laboratory with preclinical study models and audio/video system Dental units Application of the internal rules and regulations

6. Acquired specific competences

Professional competences	• Ability to use correctly the periodontal terminology • Ability to perform a full periodontal examination • Ability to make a correct diagnose and prognostic • Ability to conceive a treatment plan and monitor its results • Ability to perform supra and sub-gingival scaling manual or mechanical • Knowledge of the periodontitis general risk factors, their etiological and prophylactic role in periodontitis, the importance of collaboration with the general physician • Knowledge of periodontal surgery techniques and the capability to explain their necessity • Ability to collaborate with the periodontist for managing complex interdisciplinary treatments • Ability to analyze the results of periodontal therapy and to manage the supportive periodontal therapy • Ability to synthesize in an interdisciplinary manner the clinical data in correlation with the complementary investigations (histological, immunological, biochemical, physio-pathological, microbiological) to assure a correct treatment plan • Ability to use specific periodontal instruments according to standard international protocols
Transversal competences	• Ability to communicate with the periodontal patient regarding the periodontal disease • Ability to motivate and educate the periodontal patient regarding the self-performed plaque control • Ability to communicate with other professionals for the management of the periodontal systemic factors and conditions • Application of the theoretical knowledge in the practical activity • Ability to use the digital tools for patient awareness

	• Developing the skills and motivation for continuous professional development

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• At the end of the activity the student will be able to properly evaluate the periodontal status of the patient and to differentiate the healthy and affected periodontium. The student will be familiar the principles of the evidence-based treatment.
7.2. Specific objectives	• Provide the theoretical knowledge about periodontal entities semiology and risk factors. Provide theoretical knowledge regarding the base principles of periodontal treatments and also the therapeutically protocols for different forms of disease. • Provide examination protocols and specific periodontal treatment plans based on the theoretical knowledge • Provide the necessary knowledge for clinical application of the above notions • Developing the practical abilities for using the examination and specific treatment protocols by exercising on periodontal models and afterwards in the clinical office. • Developing the ability of synthetizing and communicating with other specialties in order to manage the periodontal affected cases in proper conditions • Exercising the ability of scientific documentation

8. Content

i. Lecture	Teaching methods	Observations
1. Vulnerable anatomical elements of the periodontium	Interactive lecture	Lectures, Power point presentations
2. Muco-gingival environment. The development of the biofilm on the dental surface	Interactive lecture	Lectures, Power point presentations
3. The bacterial specificity in different forms of periodontal disease. Bacterial interactions in the sub gingival biofilm.	Interactive lecture	Lectures, Power point presentations
4. Pathogenic mechanisms of gingivitis	Interactive lecture	Lectures, Power point presentations
5. Pathogenic mechanisms of periodontitis. Requirements for attachment loss initiation	Interactive lecture	Lectures, Power point presentations
6. Classification of gingival disease. Plaque induce gingivitis	Interactive lecture	Lectures, Power point presentations
7. Classification of periodontal disease. Periodontitis associated with systemic factors	Interactive lecture	Lectures, Power point presentations
8. Periodontal clinical examination. The examination of the gingival mucosa and of the local risk factors	Interactive lecture	Lectures, Power point presentations
9. Periodontal clinical examination. Gingival inflammation, quantification of the clinically	Interactive lecture	Lectures, Power point presentations

detected parameters		
10. Periodontal clinical examination. Clinical signs of periodontal attachment loss. Periodontal pocket – definition, classification, clinical examination.	Interactive lecture	Lectures, Power point presentations
11. Periodontal clinical examination. Clinical signs of periodontal attachment loss: furcation lesion, mobility, gingival recession – definition, classification, clinical examination	Interactive lecture	Lectures, Power point presentations
12. Radiological examination in periodontology	Interactive lecture	Lectures, Power point presentations
13.Systemic risk factors associated with periodontal disease – classification, genetic risk factors	Interactive lecture	Lectures, Power point presentations
14. Systemic risk factors associated with periodontal disease – smoking and stress	Interactive lecture	Lectures, Power point presentations
15. Systemic risk factors associated with periodontal disease – diabetes. The management of the diabetic patient suffering of periodontitis	Interactive lecture	Lectures, Power point presentations
16. Systemic risk factors associated with periodontal disease – Cardiovascular disease. The prophylactic and therapeutic management of these 2 related complex diseases.	Interactive lecture	Lectures, Power point presentations
17. Notions of periodontal epidemiology	Interactive lecture	Lectures, Power point presentations
18. Microbial and genetic tests for diagnosing and monitoring periodontitis	Interactive lecture	Lectures, Power point presentations
19. Chronic periodontitis	Interactive lecture	Lectures, Power point presentations
20. Aggressive periodontitis	Interactive lecture	Lectures, Power point presentations
21. The effects of occlussal trauma on the periodontium	Interactive lecture	Lectures, Power point presentations
22. Periodontal emergencies: necrotizing periodontal entities	Interactive lecture	Lectures, Power point presentations
23. Periodontal emergencies: periodontal abscess, herpetic gingival-stomatitis	Interactive lecture	Lectures, Power point presentations
24. Furcation lesions: clinical examination and treatment	Interactive lecture	Lectures, Power point presentations
25. Classification of periodontal treatment stages Staging of periodontal therapy by the type and the gravity of the destruction	Interactive lecture	Lectures, Power point presentations
26. Initial therapy in periodontitis. The role that personal plaque control has in the treatment of the periodontal affected patients. Possibilities and limitations. (2 h)	Interactive lecture	Lectures, Power point presentations
Bibliography 1. Roman A., Soancă A. Clinical manual of periodontology, Ed Med Univ Iuliu Hatieganu 2011 (ISBN		

978-973-693-471-1).
2. Soancă A, Roman A, Petruțiu SA. Concepts in Periodontal Therapy. Ed Med Univ Iuliu Hatieganu, 2013 (ISBN 978-973-693-540-4).
3. Lindhe J, Lang NP, Karring T (eds). Clinical Periodontology and implant dentistry, 5th ed, Blackwell, Muncsgaard, 2008.

j. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Evaluation of: probing pocket depth, attachment level, gingival recession, furcation on periodontal models (1st preclinical encounter)	Interactive presentation based on clinical cases	Practical exercises of evaluation the mention parameters on periodontal learning models
2. Radiographic evaluation of the alveolar bone. Utility of the holder for the retro alveolar investigation. Database management (1 encounter)	Interactive presentation based on clinical cases Short demonstration movies	Practical exercises of evaluation the alveolar bone loss on radiographies from our database
3. Interpretation of diagnostic based upon evaluated clinical and nonclinical parameters: case study (1 encounter)	Interactive power point presentation based on clinical cases from our database	Diagnostic determination for cases from our database – photography and radiographies
4. Clinical evaluation of dental hygiene and gingival inflammation. Recording the data in the observation chart (2 encounters)	Interactive power point presentation Providing written protocols	Determination of the parameters on patients
5. Clinical evaluation of: pocket probing depth, attachment loss, gingival recession, furcation, data recording in the observation chart (2 clinical encounters)	Power point explanations, providing written protocols	Evaluation of the parameters on clinical cases
6. Chronic periodontitis: identification of the etiological and local/general risk factors. Establishing the diagnostic and treatment plan (1 clinical encounter)	Power point explanations, Providing case definitions	Evaluation of clinical cases
7. Aggressive periodontitis: identification of the etiological and local/general risk factors. Establishing the diagnostic and treatment plan (1 preclinical encounter)	Power point explanations, Providing case definitions	Evaluation of clinical cases from our database Knowledge testing
8. Risk factors identification; Risk factors modulation in the initial therapy stage. (1 clinical encounter)	Recapitulating the theoretical knowledge on the risk factors Providing tables with biological identified parameters	Anamnestic and intervention exercising on clinical cases
9. Gingival recession: etiologic risk factors determination; diagnostic and treatment plan determination (2 clinical encounters)	Power point presentations, Interactive teaching	Clinical exercises for evaluation the gingival recessions. Trying to

		determine a treatment plan. Developing the non-surgical treatment on particular cases
10.Supragingival calculus diagnostic. Supragingival scaling (1 clinical encounter)	Instruments presentation	Exercising the developed skills on patients
11.Sub gingival calculus diagnostic. Sub gingival scaling with ultrasonic instruments. (1 clinical encounter)	Instruments presentation	Exercising the developed skills on patients

Bibliography :

4. Roman A., Soancă A. Clinical manual of periodontology , Ed Med Univ Iuliu Hatieganu 2011 (ISBN 978-973-693-471-1).
5. Soancă A, Roman A. Concepts in Periodontal Therapy. Ed Med Univ Iuliu Hatieganu, 2019 (ISBN 978-973-693-897-9).
6. Lindhe J, Lang NP, Karring T (eds). Clinical Periodontology and implant dentistry, 5th ed, Blackwell, Muncsgaard, 2008.
7. Roman A., Popovici Andrada, Pastrav Ovidiu, Condor Daniela- Odontologie restaurativa, ghid teoretic si clinic. Ed. Medicala Universitara Iuliu Hatieganu, Cluj-Napoca, 2006, ISBN (10)973- 693-186-2.
8. Graux F, Dupas PH. La prothèse fixée transitoire. Editions CdP, Groupe Liaisons SA, 2000.
9. Borghetti A, Monnet Corti V. (edts). Chirurgie plastique parodontale. Edition Cdp 2000.

9.Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives from the dental medicine community – in view of the identification of the needs and expectations of employers from the field and the adaptation of the analytical curriculum to the necessities of current practical activities.
- Permanent participation of the department members in scientific manifestations, various forms of continual medical education, equipment and medical material exhibitions dedicated to dental medicine activities – in view of maintaining the theoretical and practical information constantly being introduced in the course structure at a high level of quality.
- Maintaining contact with other department chairs from the field, in order to coordinate the teaching material with other similar programs from within other similar institutions of superior education.
- The studied notions are in accordance to the current regulations and are compatible with activities taking place on a national level in the segment of pre-clinical dental medicine.

10.Evaluation

Activity type	Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Evaluation criteria (the width and corectness of acquired knowledge, logical coherence) Ability to undderstand fundamental problems and to customize them.	Written exam	**50 %**
10.5. Practical	Evaluation of the assimilated theoretical	Oral exam	**50 % (40 % practical**

Activity	knowledge		**exam and 10 % individual portfolio)**
10.6. Activity during semester		Test	**10 % - part of 10.5**
10.7. Minimum performance standard			
The acquirement of the basic knowledge in periodontology • Signs and symptoms of periodontal diseases • The importance of the clinical exam in the diagnostic of periodontal disease • Primary and secondary prophylaxis algorithms in periodontal diseases considering the systemic risk factors			

PERIODONTOLOGY 2

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	3 - Oral Rehabilitation
1.4. Domain of study	Health
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Periodontology II**					
2.2. Responsible for lecture			Associate Professor Dr. Soanca Andrada, DMD, PhD					
2.3. Responsible for practical activity			Assist Professor Dr. Cioban Cosmin Vasile, Asist Dr.Daniela Condor, Assist Professor Drd Cristina Iulia Micu, Assist Professor Drd Andreea Ciurea					
2.4. Year of study	5	2.5. Semester	2	2.6. Form of evaluation	**Written and oral exam**	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

4.1. Curriculum	Histology, immunology, physio-pathology, microbiology, internal medicine, scientific research methodology
4.2. Competences	Clinical studies analysis

4. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Preclinical laboratory with preclinical study models and audio/video system. Dental units. Application of the internal rules and regulations

5. Acquired specific competences

Professional competences	• Ability to use correctly the periodontal terminology • Ability to perform a full periodontal examination

	• Ability to make a correct diagnose and prognostic • Ability to conceive a treatment plan and monitor its results • Ability to perform supra and sub-gingival scaling manual or mechanical • Knowledge of the periodontitis general risk factors, their etiological and prophylactic role in periodontitis, the importance of collaboration with the general physician • Knowledge of periodontal surgery techniques and the capability to explain their necessity • Ability to collaborate with the periodontist for managing complex interdisciplinary treatments • Ability to analyze the results of periodontal therapy and to manage the supportive periodontal therapy • Ability to synthesize in an interdisciplinary manner the clinical data in correlation with the complementary investigations (histological, immunological, biochemical, physio-pathological, microbiological) to assure a correct treatment plan • Ability to use specific periodontal instruments according to standard international protocols
Transversal competences	• Ability to communicate with the periodontal patient regarding the periodontal disease • Ability to motivate and educate the periodontal patient regarding the self-performed plaque control • Ability to communicate with other professionals for the management of the periodontal systemic factors and conditions • Application of the theoretical knowledge in the practical activity • Ability to use the digital tools for patient awareness • Developing the skills and motivation for continuous professional development

6. Course objectives (derived from the acquired specific competences)

6.1. General Objectives	• At the end of the activity the student will be able to properly evaluate the periodontal status of the patient and to differentiate the healthy and affected periodontium. The student will be familiar the principles of the evidence-based treatment.
6.2. Specific objectives	• Provide the theoretical knowledge about periodontal entities semiology and risk factors. Provide theoretical knowledge regarding the base principles of periodontal treatments and also the therapeutically protocols for different forms of disease. • Provide examination protocols and specific periodontal treatment plans based on the theoretical knowledge • Provide the necessary knowledge for clinical application of the above notions • Developing the practical abilities for using the examination and specific treatment protocols by exercising on periodontal models and afterwards in the clinical office. • Developing the ability of synthetizing and communicating with other specialties in order to manage the periodontal affected cases in proper conditions • Exercising the ability of scientific documentation

7. Content

k. Lecture	Teaching methods	Observations
1. Subgingival scaling and root planing	Interactive lecture	Lectures, Power point presentations
2. Ultrasonic subgingival scaling	Interactive lecture	Lectures, Power point presentations
3. Manual subgingival scaling	Interactive lecture	Lectures, Power point presentations
4. Re-evaluation phase. Prognosis evaluation	Interactive lecture	Lectures, Power point presentations
5. Possibilities of residual pockets reduction (2h)	Interactive lecture	Lectures, Power point presentations
6. Basic principles of periodontal healing	Interactive lecture	Lectures, Power point presentations
7. Periodontal regeneration	Interactive lecture	Lectures, Power point presentations
8. Instruments used in periodontal surgery. Postoperative care	Interactive lecture	Lectures, Power point presentations
9. Bone substitutes used in periodontal regeneration	Interactive lecture	Lectures, Power point presentations
10. Treatment options for infra-bony defects	Interactive lecture	Lectures, Power point presentations
11. Systemic antibiotic therapy in periodontitis	Interactive lecture	Lectures, Power point presentations
12. Local antibiotic therapy in periodontitis	Interactive lecture	Lectures, Power point presentations
13.Antiseptic used in periodontal therapy	Interactive lecture	Lectures, Power point presentations
14. Chlorhexidine	Interactive lecture	Lectures, Power point presentations
15. Periodontal host modulation therapy	Interactive lecture	Lectures, Power point presentations
16. Supportive periodontal treatment, Management of recurrences	Interactive lecture	Lectures, Power point presentations
17. Etiology of gingival recession (2h)	Interactive lecture	Lectures, Power point presentations
18. Prophylaxis and treatment of gingival recessions	Interactive lecture	Lectures, Power point presentations
19. Ortho-perio inter-relationship. Treatment options	Interactive lecture	Lectures, Power point presentations
20. Prosthetic-perio inter-relationship. Treatment options	Interactive lecture	Lectures, Power point presentations
21. The effects of occlusal trauma on the periodontium	Interactive lecture	Lectures, Power point presentations
22. Provisionals in periodontal treatment	Interactive lecture	Lectures, Power point presentations

23. Splinting - role in the periodontal treatment plan	Interactive lecture	Lectures, Power point presentations
24. Treatment protocols and sequencing for different periodontitis forms	Interactive lecture	Lectures, Power point presentations

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1. Roman A, Soancă A, Petruțiu SA, Condor D, Cioban C. Parodontologie 2. Ghid de tratament Ed Med Univ Iuliu Hatieganu 2018 (ISBN 978-973-693-766-8)
2. Roman A., Parodontologie 1. Notiuni de baza. Ed Med Univ Iuliu Hatieganu 2017 (ISBN 978-073-693-767-5).
3. Soancă A, Roman A. Concepts in Periodontal Therapy. Ed Med Univ Iuliu Hatieganu, 2019 (ISBN 978-973-693-897-9).
4. Soancă A, Roman A, Petruțiu SA. Concepts in Periodontal Therapy. Ed Med Univ Iuliu Hatieganu, 2013 (ISBN 978-973-693-540-4).
5. Roman A., Popovici A, Cara R, Vitiuc I. Ghid teoretic şi clinic de parodontologie. Ed. MedicalăUniversitară "Iuliu Hatieganu", 2008, Cluj-Napoca, ISBN 978-973-693-264-9.
6. Roman A., Popovici Andrada, Pastrav Ovidiu, Condor Daniela- Odontologie restaurativa, ghid teoretic si clinic. Ed. Medicala Universitara Iuliu Hatieganu, Cluj-Napoca, 2006, ISBN (10)973- 693-186-2.
7. Lindhe J, Lang NP, Karring T (eds). Clinical Periodontology and implant dentistry, 5th ed, Blackwell, Muncsgaard, 2008.

I. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Manual sub-gingival scaling with Gracey curettes	Instruments description Power point presentation with scaling protocol	Practical exercises of scaling on periodontal learning models
2. Manual and mechanical sharpening of Gracey curettes	Sharpening devices description Short demonstration movies	Sharpening of Gracey curettes
3. Subgingival scaling and root planing (2 clinical encounters)	Clinical protocol	Clinical realization of the technique
4. Class II restorations protocol (2 clinical encounters)	Clinical protocol	Clinical realization of the technique
5. Treatment of gingival recessions (1 pre-clinical encounter)	Power point explanations, providing written protocols	Practical exercises on periodontal learning models
6. Identification of sites with biological width invasion (1 clinical encounter)	Examination protocols	Clinical realization of the technique
7. Periodontal regenerative therapy (1 clinical encounter)	Presentation of instruments used and techniques	Assisting the clinical realization of the technique
8. Gingival recession treatment (1 clinical encounter)	Presentation of instruments used and techniques	Assisting the clinical realization of the technique
9. Biological width reestablishment procedures (2 clinical encounters)	Presentation of instruments used and techniques	Assisting the clinical realization of the

		technique
10.Teeth splinting (1 pre-clinical encounter)	Power point presentation Instruments presentation	Practical exercises on periodontal learning models
11.Teeth splinting (1 clinical encounter)	Power point presentation Instruments presentation	Clinical realization of the technique
12.Antisepsis and disinfection of periodontal instruments (1 clinical encounter)	Instruments presentation	Exercising the developed skills on patients

Bibliography :

1. Roman A, Soancă A, Petruțiu SA, Condor D, Cioban C. Parodontologie 2. Ghid de tratament Ed Med Univ Iuliu Hatieganu 2018 (ISBN 978-973-693-766-8)
2. Roman A., Parodontologie 1. Notiuni de baza. Ed Med Univ Iuliu Hatieganu 2017 (ISBN 978-073-693-767-5).
3. Roman A., Soancă A. Clinical manual of periodontology, Ed Med Univ Iuliu Hatieganu 2011 (ISBN 978-973-693-471-1).
4. Soancă A, Roman A, Petruțiu SA. Concepts in Periodontal Therapy. Ed Med Univ Iuliu Hatieganu, 2013 (ISBN 978-973-693-540-4).
5. Roman A., Popovici A, Cara R, Vitiuc I. Ghid teoretic şi clinic de parodontologie. Ed. Medicală Universitară "Iuliu Hatieganu", 2008, Cluj-Napoca, ISBN 978-973-693-264-9 .
6. Roman A., Popovici Andrada, Pastrav Ovidiu, Condor Daniela- Odontologie restaurativa, ghid teoretic si clinic. Ed. Medicala UNiversitara Iuliu Hatieganu, Cluj-Napoca, 2006, ISBN (10)973- 693-186-2.
7. Graux F, Dupas PH. La prothèse fixée transitoire. Editions CdP, Groupe Liaisons SA, 2000.
8. Borghetti A, Monnet Corti V. (edts). Chirurgie plastique parodontale. Edition Cdp 2000.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives from the dental medicine community – in view to identify the needs and expectations of employers from the field and to adapt continuously the analytical curriculum to the necessities of current practical activities.
- Permanent participation of the department members in scientific manifestations, various forms of continual medical education, equipment and medical material exhibitions dedicated to dental medicine activities – in view of maintaining the theoretical and practical information constantly being introduced in the course structure at a high level of quality.
- Maintaining contact with other department chairs from the field, in order to coordinate the teaching material with other similar programs from within other similar institutions of superior education.
- The studied information is in accordance to the current regulations and is compatible with activities taking place on a national level in the segment of pre-clinical dental medicine.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Evaluation criteria (the width and	Written	**50 %**

	correctness of acquired knowledge, logical coherence) Ability to understand fundamental problems and to customize them.	exam	
10.5. Practical Activity	Evaluation of the assimilated theoretical knowledge	Oral exam	**50 % (40 % practical exam and 10 % individual portfolio)**
10.6. Activity during the semester		Test	**10 % - part of 10.5**
10.7. Minimum performance standard			
The acquirement of the basic knowledge in periodontology • Signs and symptoms of periodontal diseases • The importance of the clinical exam in the diagnostic of periodontal disease • Primary and secondary prophylaxis algorithms in periodontal diseases considering the systemic risk factors			

PROSTHETIC DENTISTRY – COMPLETE DENTURES

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 4, Department of proshodontics and Dental Materials
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Complete edentation, clinical trial and prosthetic treatment**					
2.2. Responsible for lecture			Vacancy					
			Asist dr. Bacali Cecilia Asist dr. Ispas Ana Asist. Dr. Negucioiu Marius Asist. Dr. Duncea Ioana					
2.4. Year of study	5	2.5. Semester	10	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					26

Individual study using on-line platforms, field research	20
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	14
Tutoring	6
Examination/ semester	3
Other activities	
3.8. Total hours of individual study (a+b+c+d)	66
3.9. Total hours/semester	**150**
3.10. Number of credits	6

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of the subjects studied in previous years: Head and neck anatomy, Morphology and function of the dento-maxillary system Complete Denture technology, occlusology
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projection system
5.2. For practical activities	Practices with dental units and appropriate equipment

6. Acquired specific competences

Professional competences	• Gaining of specialized terminology and the ability to use it appropriately and in context • Ability to perform the objective clinical examination of the complete edentulous patient, starting from knowing the head and neck anatomy, the skeletal bone of the visceral cranium, the mandibular mobilizing muscles, the periprosthetic muscles. • Deepening the knowledge of the morphology of dento-alveolar arches (shape, occlusion curves, occlusal contacts), morphology of permanent teeth groups (cusps, fossils, marginal ridges, incisal edges, palatal faces), prerequisites for prosthetic restoration of total edentation • Acquiring the capacity to translate the concepts of centric relationship and maximum intercuspation position, as well as the relationship between them in the case of the total edentation, respectively the prosthetic restoration. • Acquiring notions on the mandibular rest position, vertical dimension of rest position and vertical dimension of occlusion, having as practical applicability the restoration of the optimal mandibular-jaw reports, an essential step in the treatment of total edentation. • Understanding the medical reasoning of the treatment of total edentation, the logic behind the execution of the complete dentures and the acquisition of the theoretical knowledge and of the practical skills related to it. • Developing the ability to synthesize, in an interdisciplinary way, the notions of anatomy, physiology, occlusology, in order to know and understand the way of restoring the morphology and the main functions of the dento-maxillary system withremovable dentures.

	• Improving the capacity to transfer the acquired theoretical knowledge into the total edentation and its prosthetic treatment in the clinical activity. • Acquiring the necessary practical experience for the use of specific instruments, used in clinical work, using the specific materials to each stage of work.
Transversal competences	• Establishing correlations between the theoretical notions in the studied field. • Integration of assimilated notions into an interdisciplinary context and the ability to use them in complex situations. Applying the theoretical knowledge gained in clinical activity.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Acquiring the basic notions regarding the clinical study of total edentation and the basic principles of its prosthodontic treatment in order to restore normal morphology and functionality of the dento-maxillary apparatus.
7.2. Specific objectives	• Advanced clinical study of total edentation, highlighting the morpho-functional particularities of the complete edentulous prosthetic field • Knowing the etiological factors of total edentation and the extent to which they contribute to the worsening of the clinical picture of the total edentation, including the augmentation of the prosthodontic treatment difficulty • Understanding the evolution and dysfunctional manifestations of the total edentation, respectively the importance of dentures in preventing the occurrence of major complications, affecting the general condition of the patient • Acquisition of the theoretical and practical notions related to the prosthodontic therapy of total edentation, a pathological condition of dento-maxillary system • Assimilation of clinical notions of the prosthodontic treatment of the total edentation by direct exercise of the patient in the patient by observing the medical records performed during clinical stages and by thematic debates with the participation of the teaching staff and colleagues • Developing the capacity to apply the acquired theoretical notions in the practical activity • Developing the capacity to synthesize assimilated theoretical notions • Acquiring the methodology and skills of bibliographic documentation

8. Content

m. Lecture	**Teaching methods**	**Observations**
1. The concept of total edentation: definition, generalities. Clinical study of total edentation: etiology, symptomatology, evolution, complications.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
2. Morphological and functional alterations of the dento-maxillary apparatus to total edentation, bone, mucosa, muscles and temporomandibular joint.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
3. Morphophysiology of the total edentrial and mandibular edentrial prosthetic area: support area	Lecture, systematic, interactive exposure	Oral displays, Power-Point

(bone substrate and mucosal substrate) and suction area.		presentations
4.Periprosthetic musculature and its role in the functioning of dento-maxillary apparatus and complete dentures. Physical, morphological and functional factors involved in the maintenance and stability of total prostheses.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
5. Functional areas of the complete edentulous maxillary prosthetic field.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
6. Functional areas of the mandibular totally edentulous prosthetic field.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
7. Clinical examination of the total edentulous patient: anamnesis, objective examination, diagnosis, therapeutic indications, objectives. Clinical forms of the complete edentulous prosthetic field.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
8. Impression materials used in total edentation therapy. Impression of the totally edented prosthetic field: definition, principles and general objectives. Classification of impression techniques, description, advantages, disadvantages.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
9.Preliminary impression: generalities, objectives, milestones. Final impression: Goals, Stages. Verify the custom trays.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
10. Classification of impression techniques, description, advantages, disadvantages. Author techniques: Herbst, Schreinemakers, Devin.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
11. Determination and recording of jaw relation: theoretical considerations, succession of clinical times, common methods and techniques. Considerations about articulators and mounting of master casts in the articulator.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
12. Principles of choice of artificial teeth selection and placemant. General rules for teeth placement and occlusion.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
13. Trial dentures intra and extra oral control.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
14. Applying and adapting dentures in the oral cavity: physionomical and phonetic control, control of occlusal relations. Indications for complete denture care. Introduction to special prosthodontic treatment techniques.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
Bibliography **Constantiniuc Mariana** – Terapia protetică a edentației totale. Editura Medicala Universitară „Iuliu		

Haţieganu" Cluj-Napoca 2015
Constantiniuc Mariana – Edentaţia totală, noţiuni clinice. Editura Medicală Universitară „Iuliu Haţieganu" Cluj-Napoca 2015
Constantiniuc Mariana – Edentaţia totală. Clinică si terapie. Note de curs pentru studenţii anului V, Facultatea de Medicină Dentară. Editura Argonaut, Cluj –Napoca, 2008
Hutu E. si colab. – Edentaţia totală. Ed National, 2000
Negucioiu M. – Edentaţia totală. Clinica si tratament. Ed. Medicală Universitară "Iuliu Haţieganu" Cluj –Napoca, 2004
Bratu D., Ieremia L., Uram-Ţuculescu S. – Bazele clinice si tehnice ale protezării edentaţiei totale. Ed. Imprimeriei de Vest Oradea, 2003
Rignon-Bret C., Rignon-Bret J-M. – Prothèse complete, supraradiculaire, supraimplantire, Edition CdP, 2002
Okeson JP. Management of Temporomandibular Disorders and Occlusion 7th Ed. Mosby, St. Louis, 2012
Ash M.M., Ramfjord S., Occlusion, 4th Ed, W.B. Sanders Comp, Philadelphia, 1995
Lejoyeux J. – Traitement de l'edentation totale. Maloine S.A. Ed. I, Paris, 1975
Lejoyeux J., Devin R. - Proteza totala: materiale si tehnici de amprentare. Ed. Medicala, Buc., 1977
Journals:
The Journal of Prosthetic Dentistry
Les Cahiers de Prothese
Medecine and Pharmacy Reports

Practical Activities	**Teaching Methods**	**Activity to be done by students**
The practical works of Vth year are addressed not only to complete edentulous patients, but also include a rich and varied casuistry, during which the accent will be emphasized in this semester on total edentation prosthodontic therapy, the proportion of activities of this type being correlated to addressability. Students will acquire the examination protocol and therapeutic treatments specific to total edentation, in a concrete and direct way by treating real clinical cases. Practical works will progressively track all clinical and laboratory phases in total prosthesis. The working protocol will be discussed before it is implemented, resuming the theoretical aspects presented in the course. A complete case study, study model, photographs, radiographs will be carried out so that each student can create their own database, which will serve as a presentation for the practical examination. The clinical activity of dental care does not allow for a rigorous separation of practical activities in clinical practice and hours, since the addressability of patients with a certain pathology cannot be anticipated and the planning of treatment sessions is more flexible than practical work and the patient that are addressing for treatment at that time. In the absence of the possibility of simultaneous development of the same clinical phases in all patients (who do not start	- Case presentations; - Presentation of subjects directly related to clinical cases under treatment; - Preliminary discussion of the clinical trials to be performed at that session; - Interactive teaching; - Testing of knowledge; - Presentation of papers from the subject taught during the course, from the literature; - Individual study for the execution	

treatment all the time), the activity in the clinical stages will be varied, but it necessarily requires the following practices and procedures:	of clinical stages in advance of their presentation during the course.	
Preliminary examination of the complete edentulous patient, conducting the case history and drawing up the examination file. Guidance to specialized services for paraclinical examinations.	Case presentation. Interactive presentation.	Procedures and labour related to clinical stage referred to.
Developing the treatment plan and filling in the patient file.	Case presentation. Interactive presentation.	Procedures and labour related to clinical stage referred to.
Performing pre-prosthetic treatments	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Preliminary impression of the prosthetic field. Designing the functional limits of the bearig area.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Analysis of the preliminary impression and the border moulding.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Trial and adaptation of the individual impression portrait to ensure maintenance on the bearing area.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Finishing border seal in key areas.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Secondary impression using various impression techniques. Analysis of the master casts. Perform engraving on the functional model	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Exo and endo-buccal control of occlusal rims.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Determination and recording of jaw relation. Determination of the vertical resting dimension and the vertical occlusion dimension.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.

Exercise of mandible guiding techniques in centric relationship.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Extraoral and intraoral test of a trial dentures. Verify the finishing of the master casts before turning it into a final denture.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Applying complete dentures inside oral cavity. Provide instructions and tips for complete denture care.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.
Subsequent dentures correction sessions.	All or some of the mentioned methods, as appropriate.	Procedures and labour related to clinical stage referred to.

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Journals:

The Journal of Prosthetic Dentistry

Les Cahiers de Prothese

Medecine and Pharmacy Reports

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Establishing contacts with tutors in other higher education institutions for consultations to coordinate the Practical work and contents of the lectures.
- Harmonization of the curricula of the discipline with the contents of analytical programs developed by other faculties of dental medicine in the country.

• Keeping teachers in the discipline up-to-date with the latest data and discoveries in the field, by consulting the specialized literature, discussing the topics of interest in the departmental team, participating in scientific manifestations, continuous medical education and equipment exhibitions and materials dedicated to the practice of dental medicine. • Maintaining a permanent and constructive dialogue with representatives of the dentist community in order to identify the needs and expectations of employers in the field and to adapt the analytical program to the needs of the current practical work. The concepts studied are consistent with the regulations in force and are compatible with the national activities in the field of dental medicine.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (extent and accuracy of accumulated knowledge, logical coherence, fluency of speech). Ability to understand fundamental problems and particularities	Grid type exam and editorial questions	**50%**
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills.	Practical exam	**40%**
10.6. Activity during semester	Evaluation of training during the semester	Evaluation tests	**10%**
10.7. Minimum performance standard			
Acquiring fundamental knowledge of clinical activity and therapy of total edentation: • Clinical study of total edentation • Morpho-functional elements of the dento-maxillary system in complete edentulous patients and patient examination • Imprinting the complete edentulous field and the impression materials used in the therapy of total edentation. • Determination of jaw relations in complete edentulous patients. • Artificial teeth selection and placement. Trial dentures testing. • Applying and adapting dentures in the oral cavity.			

DENTO-FACIAL AESTHETICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 4
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Notions in Esthetic Dentistry**					
2.2. Responsible for lecture			Conf. Dr. Alexandra Aghiorghiesei					
2.3. Responsible for practical activity			Conf. Dr. Anca Mesaroș Sef. Lucr. Dr. Cristina Gasparik Asist. Univ. Dr. Mihai Varvară Asist. Univ. Dr. Ioana Vlas					
2.4. Year of study	5	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
a. Study using text books, lecture notes, references					16
b. Individual study using on-line platforms, field research					7
c. Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					7
d. Tutoring					2
Examination/ semester					5
Other activities					
3.8. Total hours of individual study (a+b+c+d)				32	
3.9. Total hours/semester				60	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Dental Morphology Odontotherapy notions – direct restorations Prosthetics notions – indirect restorations
4.2. Competences	Examination in dental medicine Preparations for direct and indirect restorations

5. Requisites (if applicable)

5.1. For lectures	Lecture hall with projection system
5.2. For practical activities	Dental offices and simulation laboratories Esthetic examination of patients following the presented protocol and filling in the provided esthetic examination chart Preparations on simulators Filling in color assessment charts by visual and instrumental techniques

6. Acquired specific competences

Professional competences	• The ability to use correctly the professional language in the domain • Knowledge of the particularities of esthetic perception and the communication methods between dentist – patient – dental technician in esthetic dentistry. • Knowledge of the examination techniques used in esthetic dentistry. • The ability to recognize the esthetic norms which define the normal aspect of

	dento-facial components – notions of facial esthetic, dento-facial esthetics, dental and gingival esthetics. • Knowledge of current methods for reestablishing the esthetic aspect of the dental arches, by means of direct and indirect restoration of dental structures.
Transversal competences	• Ability to use the acquired information in a new context • Ability to apply the theoretical knowledge on a practical basis. • Ability to establish connections between the studied subjects.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Knowledge of certain notions of facial, dento-facial, dental and gingival esthetics, necessary for the complex rehabilitation of the dental arches.
7.2. Specific objectives	• Knowledge of the general principles of dentist-patient-dental technician communication in the field of aesthetic perception • Knowledge of the ideal norms of facial aesthetics • Knowledge of dento-facial aesthetics – relations of dental arches with the face and lips • Knowledge of dental esthetics norms • Learning methods for esthetic restoration of the dental arches • Information regarding the characteristics and optical properties of dental materials used in esthetic dentistry • Knowledge of the optical properties of the dental structures.

8. Content

Lecture	Teaching methods	Observations
Lecture 1- Introduction. Definitions- Esthetic Dentistry, Relation with the other branches of Dentistry. Esthetic perception. Factors that influence the Esthetic perception	PP presentations	Interactive presentations
Lecture 2 - Communication methods between the doctor-patient-dental technician regarding esthetic perception	PP presentations	Interactive presentations
Lecture 3 - Notions of dento-facial esthetics. Dento-facial relations in clinical rest (postural) postion and in smile.	PP presentations	Interactive presentations
Lecture 4 - Esthetics of the dental arches. Shape of the dental arch. Frontal arch. Symmetry of the dental arches. Position of the interincisal line/ maxillary vs mandibular. Angulation of the dental longitudinal axis. Interdental Contact areas, dental embrasures.	PP presentations	Interactive presentations
Lecture 5 - Dental Esthetics. Dental shape. Anatomic and apparent dental dimensions. Convexity of the labial surfaces. Texture of the labial surfaces. Gingival esthetics	PP presentations	Interactive presentations
Lecture 6. Optical properties of the dentition. Visual and instrumental dental color assessment.	PP presentations	Interactive presentations
Lecture 7. Dental dischromic conditions. Diagnosis. Treatment methods. Treatment of dischromic conditions by bleaching methods.	PP presentations	Interactive presentations

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4. Chu S, Paravina R, Devigus A, Mieleszko A. Fundamentals of Color, Shade matching and Communications in Esthetic Dentistry. 2nd ed Quintessence Publishing Co, Inc, 2010.
5. Shillinburg HTJr. Fundamentals of fixed prosthodontics, 4th ed., Quintessence Publishing Co Inc., 2012.
6. Lazarescu F. (sub redactia) Incursiuni in Estetica dentara. SSER- 2013.
7. Lazarescu F (sub redactia) Comprehensive Esthetic Dentistry. Quintessence Publ, Berlin 2015

Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Examination in esthetic dentistry	Practical demonstrations, interactive exercises	Filling in of the esthetic examination form
2. Photography in dentistry	Practical demonstrations	Extraoral and intraoral photography exercises
3. Visual dental color matching	Demonstration of color matching techniques with different shade guides	Color matching exercises using different shade guides
4. Instrumental color matching	Demonstration of color assessment with various instrumental methods	Color matching exercises using the Vita EasyShade spectrophotometer
5. Digital Smile Design	Demonstration of the DSD protocol	Creating a DSD in PowerPoint
6. Preparations for veneers	Preparation demonstration	Preparations on phantom teeth in the simulation lab
7. Presentation of a review		

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2. Goldstein RE. Esthetics in Dentistry. Vol I si II, BC Decker Inc, 2002
3. Fradeani M. Esthetic Analysis. A systematic Approach to Prosthetic Treatment Quintessence books, 2004
4. Chu S, Paravina R, Devigus A, Mieleszko A. Fundamentals of Color, Shade matching and Communications in Esthetic Dentistry. 2nd ed Quintessence Publishing Co, Inc, 2010.
5. Shillinburg HTJr. Fundamentals of fixed prosthodontics, 4th ed., Quintessence Publishing Co Inc., 2012.
6. Lazarescu F. (sub redactia) Incursiuni in Estetica dentara. SSER- 2013.
7. Lazarescu F (sub redactia) Comprehensive Esthetic Dentistry. Quintessence Publ, Berlin 2015

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Dialog with the representatives of the dental community, in order to identify the requirements for the future dentist; the results are the basis for the continuous update and improvement of the dental curricula
- Participation of the staff to scientific events, continuous education lectures, exhibitions in the domain of dentistry, in order to keep a high level of knowledge.

• Maintaining of the permanent contact with Faculties of Dentistry in our country and abroad, in order to permanently update the curricula according to corresponding programs in other universities.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria – to cover the entire range of information, to be able to do connections between subjects, to have a logic approach	Written exam- multiple-choice questions and essays	**50%**
10.5. Practical Activity	The ability to select and present relevant information regarding a topic from those presented	Review paper and presentation	**30%**
10.6. Activity during semester	Evaluation of the continuity in preparation of theoretical and practical activties.	Periodic tests	**20%**
10.7. Minimum performance standard			
• Knowledge of certain ideal facial esthetics norms • Knowledge of certain dento-facial esthetics norms • Knowledge of dental esthetics norms			

FORENSIC MEDICINE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Community Medicine
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Forensic Medicine**					
2.2. Responsible for lecture			Conf. Dr. Dan Perju Dumbravă					
2.3. Responsible for practical activity			Asist. Univ. Ureche Daniel					
2.4. Year of study	5	2.5. Semester	I	2.6. Form of evaluation	FE (Final Exam) Theoretical Exam + Practical exam)	2.7. Course type	Contents Mandatory	Specialty Discipline Mandatory Discipline

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					1
Individual study using on-line platforms, field research					0.30
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					0.30
Tutoring					-
Examination/ semester					-
Other activities					-
3.8. Total hours of individual study (a+b+c+d)					2
3.9. Total hours/semester					30
3.10. Number of credits					1

4. Prerequisites (if needed)

4.1. Curriculum	Anatomy, Pathology, Semiology, Orthopedics, Neurosurgery, Radiology, Psychiatry.
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	The students will not be allowed in lectures/ practical activity with theirs mobile phones ringing, or making noise. Also will not be tolerated phone calls during classes, neither leaving the class to take personal calls. It is forbidden to eat or drink during lectures or practical activity. It is not tolerated coming late for classes, because it will suspend the activity of the educational process.
5.2. For practical activities	

6. Acquired specific competences

Professional competences	To know the importance and purpose of forensic medicine in modern society and the interface between medicine and Justice -They will need to be familiar with the types of forensic activities : coroner, forensic clinical toxicology, forensic laboratory and forensic assimilation of knowledge required, regardless of the specialty they will follow in the future -To be able at any moment to recognize a possible forensic situation and act accordingly, in accordance with the law. -To know the main types of forensic documents - certificate , report finding expert report / new expertise
Transversal competences	- They need to demonstrate concern for professional development through training the critical thinking skills ; - Demonstrate involvement in research, such as the development of scientific articles. - Demonstrate the ability to use digital methods for medical information

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	At the end of the course students will know the types of forensic activities: forensic morgue , forensic clinical forensic laboratory and assimilation of knowledge forensic necessary , will be able to recognize a situation forensic and act accordingly , in accordance with the law
7.2. Specific objectives	At the end of the course students will be able to: -to know the underpinning forensic procedures autopsy and the cases where it is necessary forensic necropsy - to be able to determine the death type, by distinguishing between violent death and non-violent death - to acquire notions of the mechanisms and thanatology syndromes both violent deaths and non-violent - knowledge about early and late cadaveric changes (rigor, mortis), methods of conservation , artificial preservation methods, - to be able to do a externally physical exam of the body and recognize the manner of death and possible causes of death and potential recognition of a forensic case - to know the role of clinical forensic medicine and the situations that require forensic examination on alive persons - to know about the forensic examination types - to make physical examination with the identification of medico-legal issues : finding traumatic injuries - by specifying their characteristics -to assess the injuries in accordance with CP - art. 194, 193, 196, and to understand the concept of care by number of days - to know the types of forensic examinations complementary forensic toxicology, forensic serology, histopathology - to know the basic concepts about toxicity, forensic toxicology in relation with clinical toxicology

8. Content

Lecture	Teaching methods	Observations
1. Overview in forensic medicine, Juridical bases, Legislation	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
2. Thanatology. Forensic Entomology.	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
3. Injuries and death caused by its own means of attack - human defense	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
4. Injuries caused by weapons. Falling and precipitation injuries	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
5. Forensic road accidents. Forensic Firearms	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies

6. Mechanical asphyxiation	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
7. Physical agents. Chemical agents	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
8. Forensic examination of the body, autopsy and exhumation of corpses	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
9. The forensic examination of life persons. The forensic examination in obstetrics and gynecology	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
10. Expertise in civil and family law	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
11. Forensic sexology aspects	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
12. Psychiatric expertise	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
13. Methodology of forensic examination in delaying and interruption of prison sentence. Expertise forensic work capacity	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
14. Malpractice. Expertise of DNA and other kind of forensic identification	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies

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Belis V.,-- GHID DE URGENTE MEDICO-JURIDICE, Bucuresti, 1998.
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www.legmed.ro
www.imlcluj.ro

a. **Practical Activities**	**Teaching Methods**	**Activity to be done by students**
1. Thanatology 2h	Systematic exposure,	Oral exposures, PowerPoint

	conversation, demonstration, case report	presentations, movies
2. Primary traumatic injuries 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
3. Mechanical asphyxiation 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
4. Physical agents. 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
5. Chemical agents 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
6. Road accidents 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies
7. Forensic expertise methodology. Malpractice 2h	Systematic exposure, conversation, demonstration, case report	Oral exposures, PowerPoint presentations, movies

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Dermengiu Dan, MEDICINA LEGALA, C.H.Beck, Bucuresti, 2009
Dermengiu Dan—Patologie Medico-Legala, ed.Viata Medicala Romaneasca, 2002
Perju-Dumbravă Dan, Margineanu V, TEORIE ŞI PRACTICĂ MEDICO-LEGALĂ ,Ed.Argonaut, 1996 ,
Perju-Dumbrava Dan,--EXPERTIZA MEDICO-LEGALĂ ÎN PRACTICA JURIDICĂ, Ed. Argonaut, 1999
Perju-Dumbravă Dan--RESPONSABILITATE MEDICALĂ---, Ed.Hipparion, 2000,
Perju-Dumbrava Dan, Zaharie Toader--MEDICINĂ LEGALĂ -TEXT, IMAGINE; FILM, Ed.Argonaut, 2001 -- 248 pagini text, 519 imagini , 53 filme, Editată şi pe Compact-Disc.
PerjuDumbravaDan--MEDICINA LEGALA, Ed. Argonaut, 2006, .
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9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

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10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	Consistent with the educational goals	Single choice written exam	**66%**
10.5. Practical Activity	Consistent with the educational goals regarding practical activity	Forensic interpretation of injuries regarding some cases	**33%**
10.7. Minimum performance standard			
Some key messages from the end of each course.			

ORAL REHABILITATION

1. Program information data

1.1. High education institution	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dentistry
1.3. Department	Dental Medicine 3
1.4. Field of study	Medicine
1.5. Study cycle	License
1.6. Study program	Dentistry – English line
1.7. Qualification	Doctor- Dentist
1.8. Form of education	Frequence required

2. Discipline information

2.1. Name of the discipline				Oral Rehabilitation				
2.2. Course teacher				Assoc. Prof. Dr. Ilea Aranka				
2.3. The teachers for practical activity				Assoc. Prof. dr. Ilea Aranka Assist. Univ. dr. Pop Andreea Assist. Univ. dr. Băbțan Anida-Maria Assist. Univ. dr. Lazar Adela				
2.4. Year of study	5	2.5. Semester	1	2.6. Type of evaluation	Theoretical exam + Practical exam	2.7. Discipline status	Content	DS
							Mandatory	DI

3. Estimated full time (teaching activities hours / semester)

3.1. Number of hours per week	**6**	3.2. Out of which: course	**2**	3.3. Practical activities	4
3.4. Total hours of the curriculum	**84**	**3.5. Out of which: course**	**28**	**3.6. Practical activities**	**56**

3.4. **Distribution of time / week**	Hrs.
Student study, course support, bibliography and notes	28
Supplementary documentation in the library, on the specialized electronic platforms and in area of expertise	18
Training seminars / laboratories, themes, papers, portfolios and essays	14
Tutoring	2
Examinations / semester	2
Other activities	2
3.7. Total hours of individual study (a+b+c+d)	66
3.8. Total hours per semester	150
3.9. Number of credits	6

4. Preconditions (where applicable)

4.1. The curriculum	Odontology, Endodontics, Prosthetics, Periodontology, Maxillofacial Surgery, Implantology, Orthodontics, Internal Medicine, Pharmacology, Pathophysiology
4.2. Competency	-

5. Condititions (where applicable)

5.1. For teaching the course	Amphitheater with projection system
5.2. For practical activities	Laboratories with facilities specific to practical activities

6. Specific Accumulated competences

Professional competences	• Learning of knowledge in complex oral rehabilitation of the pathologies approached. Holistic approach of the patient in the dental office. • Ability to decide the opportunity for dental work in the context of the presence of a general disorder. • The ability to evaluate the particularities of dental treatment performed in patients with comorbidities. • Ability to evaluate the bi-directional interrelationship between general disorders and oral cavity pathology. • The therapeutic decision in the dental office influenced by the metabolic and functional imbalances. • The way in which the therapeutic decision in the dental office is influenced by complex chronic treatments of patients. • Prevent transmission of infectious diseases in the dental office.
Cross competencies	• Integration of the notions assimilated in Odontology, Endodontics, Prosthetics, Periodontology, Maxillofacial Surgery, Implantology, Orthodontics, Internal Medicine, Pharmacology, Pathophysiology in the context of complex oral rehabilitation. • Applying theoretical notions in practical activities. • Establishment of interdisciplinary correlations within the studied domains.

7. Objectives of the discipline (based on the specific skills matrix)

7.1. The general objective of the discipline	• Acquiring knowledge about complex oral rehabilitation of the patients. • Particularities of dental treatment in patients with comorbidities.
7.2. Specific objectives	• Specific preparation of the patient with comorbidities in order to rehabilitate the oral cavity. • Establishing the opportunity of dental treatments for the patient with general disorders. • Specific patient preparation with associated conditions, optimal response time and post-interventional follow-up. • Complex rehabilitation of affected dento-maxillary system functions on stabilized dento-periodontal structures.

8. Contents

8.1. Course	Teaching methods	Remarks
1.The concept of oral rehabilitation. Holistic approach of the patient in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
2. The complex and interdisciplinary approach of the adult patient with special care needs.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
3. Medical prescription in the dental office	Lecture, systematic,	Oral displays, Power-

indicated in oral pathology in correlation with the general conditions.	interactive exposure	Point presentations
4. Particularities of dental treatment in patients with diabetes mellitus.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
5. Risks of the patient with metabolic unbalanced of diabetes mellitus in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
6. Particularities of dental treatment in the patient with metabolic syndrome.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
7. The interrelation between obesity and periodontal disease. Risks of the patient with metabolic syndrome in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
8. The specifics of dental treatment in the patient with neurological disorders.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
9. Particularities of dental treatment in the patient with a history of stroke. The risks of the patient with stroke in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
10. The specificities of dental treatment in the patient with multiple sclerosis. The risks of the patient with multiple sclerosis in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
11. Particularities of dental treatment in patients with epilepsy. The risks of the patient with epilepsy in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
12. Particularities of dental treatment in patients with hepatic disorders.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
13. Risks of the patient with metabolic and functional unbalanced liver diseases in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations
14. Infectious risk of the patient with viral hepatic diseases, blood post-exposure accidents and infection control in the dental office.	Lecture, systematic, interactive exposure	Oral displays, Power-Point presentations

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2. Ghid de abordare a pacientului cu paralizie facială în cabinetul stomatologic - Ilea Aranka. Editura Școala Ardeleană; București, Editura Eikon; Cluj-Napoca, 2015, ISBN 978-606-8770-13-0; ISBN 978-606-711-323-5

3. Reabilitare Orală – G. Băciuț, M. Băciuț, R.S. Câmpian, C. Balog, D. Pop – Ed Medicală Universitară ”Iuliu Haţieganu”, Cluj Napoca, 2002, ISBN 973-8019-90-7

4. Implicațiile multidisciplinare în durerea orală și cranio-facială - A. Rotaru, C. Sarbu, R.S. Câmpian, I. Munteanu, H. Rotaru – ED. Clusium, Cluj Napoca, 2001, ISBN 973-555-299-X

8.2. Practical activities	**Teaching methods**	**Practical activities**
1. Examination of patients with general disorders and dental conditions. Anamnesis, local and general objective exam.	Power-point interactive teaching presentations. Practical demonstration.	Exooral, endooral and general clinical examination
2. Preparation of the observation sheet. Establishing the diagnosis of oro-dental affections and diagnosis of general condition.	Interactive discussions, power-point presentations. Practical demonstration.	Filling in the observation sheet by the students. Elaborating the diagnosis
3. Conducting the treatment plan in the context of the general illness. The medical prescription in the dental office.	Interactive discussions. Model demonstrations and clinical cases. The concept and mode of prescribing oral medication.	Staging of dental treatment in the context of general condition
4. Circuit of medical documents in the dental office.	Interactive discussions and practical demonstrations	Clinical and paraclinical evaluation of odonto-periodontal status in the patient with comorbidities
5. Restoration of the oral cavity structures and functions in adult patients addressed to a dental clinic.	Interactive discussions and practical demonstrations	Clinical and paraclinical evaluation of odonto-periodontal status in children with or without comorbidities
6. Performing dental treatments, scaling, extractions in patients with diabetes mellitus.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
7. Performing dental treatments, extractions, suppuration incisions in patients with obesity and metabolic syndrome.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
8. Dental treatment, extractions, suppurations incision in patients with neurological disorders – strokes.	Interactive discussions and practical demonstrations	Carrying out the learned techniques

9. Perform dental treatments, scaling, extractions, suppuration incisions in patients with neurological disorders - multiple sclerosis, essential and secondary trigeminal neuralgia.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
10. Performing dental treatments, extractions, suppurations incision in patients with neurological - epilepsy disorders.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
11. Performing dental treatments, extractions, suppuration incision in patients with hepatic disorders.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
12. Performing dental treatments, scaling, extraction, suppuration incisions in patients with cirrhosis.	Interactive discussions and practical demonstrations	Carrying out the learned techniques
13. The follow-up of oral cavity pathology in patients with comorbidities in the dental office.	Interactive discussions and practical demonstrations	Performing prophylactic consultations
14. Practical Exam - case presentation	Testing knowledge through discussions about the case presented	Meeting the workbench during the internship

Bibliography:

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2. Ghid de abordare a pacientului cu paralizie facială în cabinetul stomatologic - Ilea Aranka. Editura Școala Ardeleană; București, Editura Eikon; Cluj-Napoca, 2015, ISBN 978-606-8770-13-0; ISBN 978-606-711-323-5
3. Reabilitare Orală – G. Băciuț, M. Băciuț, R.S. Câmpian, C. Balog, D. Pop – Ed Medicală Universitară "Iuliu Haţieganu", Cluj Napoca, 2002, ISBN 973-8019-90-7
4. Implicațiile multidisciplinare în durerea orală și cranio-facială - A. Rotaru, C. Sarbu, R.S. Câmpian, I. Munteanu, H. Rotaru – ED. Clusium, Cluj Napoca, 2001, ISBN 973-555-299-X

9.Corroborating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field of the program

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work.
- Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activities of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education

institutions, for coordinating the content taught with other similar programs within other higher education institutions.

- The studied concepts are in line with the regulations in force and are compatible with the activities carried out at national level in the segment of clinical dental medicine.

10. Evaluation

Activity type	a. Evaluation criterias	10.2. Evaluation methods	Weight of the final grade
10.4. Course	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization	Written exam	**40%**
10.5. Practical work	Evaluation of practical knowledge	Practical exam	**40%**
10.6. Activity during the semester	Assessment of practical knowleadge and presentation of a case report and oral rehabilitation treatments plan.	Practical exam	**20%**
10.6. Minimum performance standard			
The ability to conceive and develop a complex oral rehabilitation plan in the context of general diseases. • Establishing the correct local and general diagnosis. • Establish the opportunity of a medical prescription as adjuvant treatment of oral pathology. • Evaluation of the metabolic and functional balance in the patient with comorbidities. • Elaboration of dental treatment stages. • Specific patient preparation with comorbidities in the dental office. • The opportunity of dental treatment in the context of general disorders. • Assessing the risks of the patient with general disorders in the dental office. • The follow-up of the patient with comorbidities in the dental office.			

MANAGEMENT OF THE DENTAL OFFICE

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Rehabilitation 3
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Dental Office management**					
2.2. Responsible for lecture			Associate Professor Ondine Lucaciu					
2.3. Responsible for practical activity			Lecturer Alexandru Meşter Assisting Professor Ioana Codruța Mirică Assisting Professor Adina Sârbu					
2.4. Year of study	5	2.5. Semester	9	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. **Total hours/week**	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	3.5. Course	28	3.6. Practical activity	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					12
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					4
Tutoring					-
Examination/ semester					
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				44	
3.9. Total hours/semester				100	
3.10. Number of credits				4	

4. Prerequisites (if needed)

4.1. Curriculum	General concepts of management
4.2. Competences	

5. Requisites (if applicable)

5.1. For lectures	Lecture hall with a projection system
5.2. For practical activities	Laboratories with specific equipment for practical teamwork

6. Acquired specific competences

Professional competences	• Knowledge of requirements for setting up a dental office • Knowledge of the organization of a dental office • Knowledge of health care systems and of the Romanian health care system in particular • Basic concepts regarding dental office management • Basic concepts regarding the marketing techniques used in a dental office • Management of resources necessary for the functioning of a dental office
Transversal competences	• Application of theoretical concepts to practical work • Establishment of interdisciplinary correlations in the studied fields

7. Course objectives (derived from the acquired specific competences)

7.1 General Objectives	Knowledge of basic concepts of dental office management
7.2 Specific Objectives	Acquisition of concepts related to the health care system Acquisition of concepts related to the science of management in medical units Acquisition of knowledge related to human resource management in the dental office Acquisition of knowledge related to the management of financial resources in the dental office Acquisition of knowledge related to the management of communication in the dental office Acquisition of knowledge related to dental office marketing Acquisition of knowledge related to health economics principles and financing of health care services Practicing synthesis and bibliographic documentation skills

8. Content

n. Lecture	Teaching methods	Observations
1. Introduction to general management	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
2. The dental office brand	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
3. Health care management – the science of management in medical units – the role of the manager	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
4. Health care management – the science of management in medical units – the role of leadership	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
5. Health care management – the science of management in medical units – entrepreneur	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
6. Human resource management in the dental office (curriculum vitae, letter of intention for employment, job interview)	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
7.Human resource management in the dental office (curriculum vitae, letter of intention for employment, job interview)	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
8. Human resource management in the dental office (curriculum vitae, letter of intention for employment, job interview)	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
9. Management of communication in the dental office	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
10. Management of communication in the dental office. The treatment plan.	Lecture, systematic interactive	Oral presentations, PowerPoint presentations

	presentation	
11. Management of financial resources in the dental office	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
12. Principles of marketing in the dental office	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
13. Health economics principles. Financing of health care services	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations
14. Presentation of the basic health care models and the model used in Romania	Lecture, systematic interactive presentation	Oral presentations, PowerPoint presentations

Bibliography

1. Amariei Corneliu - Introducere in managementul stomatologic, Viata Medicala Romaneasca, Bucuresti, 1998
2. Armean Petru - Management sanitar: notiuni fundamentale de sanatate publica**,** Editura Coresi, Bucuresti, 2004
3. Lucaciu Ondine - Managementul si Marketingul Cabinetului de Medicina Dentara. Editura Medicală Universitară "Iuliu Haţieganu", Cluj-Napoca, 2014
4. Opincaru, C., Gălăţescu, E.M., Imbri, E. I. - Managementul calităţii serviciilor în unităţile sanitare, Editura Coresi, Bucureşti, 2004
5. Ursoiu Sorin - Management Sanitar, Editura de Vest, Timişoara, 2000
6. Vlădescu Cristian, Sanatate publica si managementul sanitar, Editura Cartea Universitară, 2004

Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Communication in the dental office	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
2. Designing a correspondence system in the dental office	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
3. Designing a system of correspondence with external collaborators	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
4. Communication on online platforms.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
5. The most common mistakes in the management of a dental office	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
6. How to do the advertising of the dental office.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
7. How to build the dental office brand	PowerPoint presentations, interactive	Presenting an essay on the topic mentioned in the first

	teaching	column.
8. Attract funds for a start-up dental office.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
9. Cash flow in the dental office.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
10. Algorithms for calculating tariffs in the dental office.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
11. The management of the difficult patient.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
12. Fidelity of existing patients.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
13. Designing a treatment plan.	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
14. Advertising channels	PowerPoint presentations, interactive teaching	Presenting an essay on the topic mentioned in the first column.
Bibliography: 1. Armean Petru - Management sanitar: notiuni fundamentale de sanatate publica**,** Editura Coresi, Bucuresti, 2004 2. Ispas Florin - www.dentistuldesucces.ro 3. Lucaciu Ondine - Managementul si Marketingul Cabinetului de Medicina Dentara. Editura Medicală Universitară “Iuliu Haţieganu”, Cluj-Napoca, 2014 4. Manuc Daniela - Cabinetul Medico Dentar, Editura Viata Medicala Romanească, 2006		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- A permanent constructive dialogue with the representatives of the dentist community – in order to identify the needs and expectations of employers in the field and to adapt the curriculum to the requirements of current practice.
- The permanent participation of the department members in scientific meetings, continuing medical education forms and exhibitions of equipment and materials used in the practice of dental medicine – in order to keep up to date the theoretical and practical information related to the discipline.
- The maintenance of relationships with teaching staff from other higher education institutions in the field, in order to coordinate the content taught with other similar study programs from other higher education institutions.
- The studied content is in accordance with the regulations in force and is compatible with the activities carried out at national level in the field of preclinical dental medicine.

10.Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (extent and correctness of the acquired knowledge, logical coherence, expressional fluency) The ability to understand fundamental problems and to particularize	Written examination	**70%**
10.5. Practical Activity	Evaluation of theoretical knowledge and practical skills	Essay	**20%**
10.6. Activity during semester	Participation during training and theoretical activities		**10%**
10.7. Minimum performance standard			
Acquisition of the main concepts of dental office management and marketing			

MAXILLO-FACIAL SURGERY

1. Information about the program

1.1. Higher education institution	University of Medicine and Pharmacy ”Iuliu Haţieganu”, Cluj-Napoca
1.2. Faculty	Dental medicine
1.3. Department	I– Maxillofacial Surgery and Radiology
1.4. Field of study	Dental Medicine
1.5. Study cycle	License
1.6. Study program	Dental medicine
1.7. Qualification	Doctor - dentist
1.8. Form of study	Full time - with frequency

2. Data about the discipline

2.1. Name of discipline			**MAXILLOFACIAL SURGERY YEAR V**					
2.2. Coordinator of course activities			Prof. Dr. Băciuţ Mihaela (vacancy position)					
2.3. Coordinator of practical work			Lecturer Armencea Gabriel Assit. Prof. Manea Avram					
2.4. Year of study	V	2.5. Semester	1	2.6. Type of evaluation	ES - Theoretical Exam + Practical Exam	2.7. Discipline regime	Content	DS
							Mandatory	DO

3. Total estimated time (hours per semester of didactic activities)

3.1.Number of hours per week	**7**	3.2. Of which: courses	**3**	3.3. Practical work	4
3.4. Total hours from the education curricula	**98**	**3.5. Of which: courses**	**42**	**3.6. Practical work**	**56**
3.4. **Distribution of the time fund / week**					Hours

Studying using the manual, course materials, bibliography and lecture notes	42
Supplementary documentation in the library, on designated electronic platforms and on the field	3
m. Preparation for seminars / laboratories, homework, assignments, portfolios and essays	3
Tutoring	2
Examinations/ semester	2
Other activities	-
3.7. Total hours of individual study (a+b+c+d)	52
3.8. Total hours per semester	150
3.9. Number of credits	6

4. **Preconditions** (where applicable)

4.1. Curriculum	The anatomy of the dento-maxillary apparatus. The physiology of the dento-maxillary apparatus. Pathophysiology. The anesthesia in dental medicine. Oral and maxillofacial surgery. Oral pathology
4.2. Competences	The ability to analyze anatomo-clinical parameters in a clinical study case. The ability to establish a clinical diagnosis in the oro-maxillofacial sphere. Critical analysis and interpretation of laboratory analyses and paraclinical explorations

5. **Conditions** (where applicable)

5.1. Of the course	- place where the course takes place - amphitheater with a projection system - the students will not attend classes with open mobile phones. Also, telephone conversations will not be tolerated, nor shall the students leave the classroom to take personal phone calls - eating and drinking is not allowed during the course - student delays to the course will not be tolerated, as this is disruptive to the educational process
5.2. To conduct practical activities	- laboratories with equipment specific to the practical work - cabinets with dental units, salons, treatment rooms, operating rooms - the students will not attend practical work with open mobile phones. Also, telephone conversations will not be tolerated, nor shall the students leave the practical work room to take personal phone calls - eating and drinking is not allowed during practical work - student delays to practical work will not be tolerated, as this is disruptive to the educational process - ethic behavior towards the patient, the cleaning staff and the teaching staff

6. **Specific competences acquired**

Professional competences	Acquirement of theoretical and practical notions for examinations, specific to the specialty Acquirement of knowledge regarding the surgical diseases of the dento-maxillary apparatus, with emphasis on the traumatic, infectious and tumor pathology
Transversal competences	The use of assimilated notions in new contexts The application of theoretical notions in the practical activity The establishment of interdisciplinary correlations within the studied domains

	The acquirement of the ability to communicate efficiently with the patient The thorough thought for professional development through the training of the analytic and synthetic thinking abilities The demonstration of the involvement in research activities, such as participation in scientific research

7. Objectives of the Discipline (resulting from the table regarding specific competences acquired)

7.1. General objective of the discipline	The course offers to the students of year V of Dental Medicine of the Dental Medicine Faculty theoretical notions regarding the surgical diseases of the dento-maxillary apparatus, with emphasis on the traumatic, premalignant, tumor and cystic pathology. The thorough study of the trauma of maxillofacial soft tissues, maxillofacial skeleton and dento-periodontal traumas correlated with the clinical practice standards. The thorough study of maxillary bone cysts. The practical work have as objective the acquirement of practical notions regarding the traumatic, tumor and cystic pathology. The thorough study of the trauma of maxillofacial soft tissues, maxillofacial skeleton and dento-periodontal traumas correlated with the clinical practice standards. The thorough study of maxillary bone cysts. The study of oral and facial premalignant lesions. The study of malignant tumors of the oral cavity and of the maxillofacial regions.
7.2. Specific objectives	The acquirement of knowledge regarding surgical diseases of the dento-maxillary apparatus with emphasis on the traumatic, infectious and tumor pathology. The thorough study of the trauma of maxillofacial soft tissues, maxillofacial skeleton and dento-periodontal traumas correlated with the clinical practice standards. Infections of the deep veins of the oro-maxillofacial regions. Premalignant oral and facial lesions. Malignant tumors of the oral cavity and maxillofacial regions. Benign tumors of the soft parts and bone parts in the oro-maxillofacial sphere.

8. Content

8.1. Course	**Teaching methods**	**Observations**
1. The wounds of the soft parts of the face and oral cavity.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
2. Trauma of the face and maxillofacial skeleton.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
3. Mandible fractures.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
4. Fractures of the middle third of the face.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
5. Fractures of the zygomatic-orbital	Lecture, interactive and	Oral presentations and

complex and trauma of the nasal pyramid.	systematic exposure, presentation of patients from relevant cases.	Power-Point presentations
6. Infections of the deep veins of the oro-maxillofacial regions. Oral floor diffuse infection. Hemifacial diffuse infection. Lymphadenitis. Specific infections. Osteitis and osteomyelitis. Perimaxillary fistulas.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
7. Benign tumors of the soft parts and bone parts.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
8. Premalignant lesions of the oral cavity and maxillofacial territory. Debut forms of oro-maxillofacial malignant tumors.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
9. Methods of early diagnosis of malignant tumors and their metastases in the oro-maxillofacial domain.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
10. Cancer of the oral floor. Cancer of the buccal region, cancer of the intermaxillary commissure.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
11. Gingival cancer and cancer of the rough and soft palate. Cancer of the tongue.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
12. Skin cancer of the face. Malignant oro-facial melanoma.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
13. Cancer of the jaw and mandible. Maxillary sarcomas.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
14. Surgical, radiotherapy and chemotherapy treatment of the malignant oro-maxillofacial tumors.	Lecture, interactive and systematic exposure, presentation of patients from relevant cases.	Oral presentations and Power-Point presentations
Bibliography - Corneliu Burlibasa, CHIRURGIE ORALA SI MAXILOFACIALA, Editura Medicala, Bucuresti, 1999. - Alexandru Rotaru, Grigore Băciuţ, Horaţiu Rotaru, CHIRURGIE MAXILO-FACIALA, Vol. I si Vol. II, Editura Medicală Universitară “Iuliu Haţieganu” Cluj- Napoca, 2003. - Raymond Fonseca, sub red., ORAL AND MAXILLOFACIAL TRAUMA, Edit. Elsevier Saunders, St.		

Louis, 2005.
- Bucur A. et al, COMPENDIU DE CHIRURGIE ORO-MAXILO-FACIALA vol. I si II Q Med Publishing, 2009.

Bucur A., Baciut G., Surpateanu M. MANAGEMENTUL AFECTIUNILOR CHIRURGICALE ORO-MAXILO-FACIALE, Ed. Didactica Si Pedagogica, Bucuresti, 2012

8.2. Practical work	**Teaching methods**	**Practical activity performed by the students**
1. Consultation of patients - wounds of the soft parts of the face and oral cavity. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
2. Consultation of patients - trauma of the face and maxillofacial skeleton. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
3. Consultation of patients - mandible fractures. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
4. Consultation of patients - fractures of the middle third of the face. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
5. Consultation of patients - fractures of the zygomatic-orbital complex and trauma of the nasal pyramid. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
6. Consultation of patients - infection of the superficial veins of the head and neck. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
7. Consultation of patients - specific infections, osteitis, osteomyelitis, premaxilla fistula. Assistance with	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases,

treatment.		model study, radiography study, patient consultation, assistance during surgical interventions.
8. Consultation of patients - premalignant lesions of the oral cavity and maxillofacial territory. Debut forms of malignant oro-maxillofacial tumors. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
9. Methods of early diagnosis of malignant tumors and their metastases in the oro-maxillofacial domain. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
10. Consultation of patients - cancer of the oral floor. Cancer of the jugal region, cancer of the intermaxillary commissure. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
11. Consultation of patients - gingival cancer and cancer of the rough and soft palate. Cancer of the tongue. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
12. Consultation of patients - skin cancer of the face and malignant oro-facial melanoma. Assistance with treatment	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
13. Consultation of patients - cancer or the jaw and mandible. Maxillary sarcomas. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.
14. Surgical, radiotherapy and chemotherapy treatment of the malignant oro-maxillofacial tumors. Assistance with treatment.	Power-point presentation, interactive teaching.	Interactive programmed learning. Clinical stages with the presentation of the patients in relevant cases, model study, radiography study, patient consultation, assistance during surgical interventions.

Bibliography
- Corneliu Burlibasa, CHIRURGIE ORALA SI MAXILOFACIALA, Editura Medicala, Bucuresti, 1999.
- Alexandru Rotaru, Grigore Băciuţ, Horaţiu Rotaru, CHIRURGIE MAXILO-FACIALA, Vol. I si Vol. II, Editura Medicală Universitară "Iuliu Haţieganu" Cluj- Napoca, 2003.
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- Bucur A., Baciut G., Surpateanu M. MANAGEMENTUL AFECTIUNILOR CHIRURGICALE ORO-MAXILO-FACIALE, Ed. Didactica Si Pedagogica, Bucuresti, 2012

9. Corroboration of the discipline contents with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field afferent to the program

- Permanent and constructive dialogue with the representatives of the community of dentists - in order to identify the needs and expectations of the employers in the field and in order to adapt the analytical program to the needs of the current practical activity
- Permanent participation of the members of the discipline to scientific manifestations, forms of continuous medical education, exhibitions of equipment and materials dedicated to the practical activity in dental medicine - in order to maintain the theoretical and practical information introduced in the discipline structure at the most up-to-date level.
- Maintaining contact with other teachers in the field, coordinators in other higher education institutions, in order to coordinate the content taught with other similar programs within other institutions of higher education.
- The studied notions are in concordance with the regulations in force and are compatible with the activities carried out at national level on the segment of clinical dental medicine.

10. Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation methods	Share of the final grade
10.4. Course	General criteria of evaluation (coverage area and correctness of the accumulated knowledge, logical coherence) The capacity to understand fundamental and particular problems	Written examination with multiple choice questions	**50%**
10.5. Practical work	Evaluation of the theoretical knowledge	Oral presentation in the form of case presentation from the subject presented during the courses and practical training	**50%**
10.6. Activity during the semester			
10.6. Minimum performance standard			

The capacity to use the specialty terminology adequately and in context The acquirement of the theoretical and practical notions for examination typical to the specialization; Knowledge of the clinical and therapeutic aspects of trauma of the maxillofacial soft parts, of the maxillofacial skeleton and of dento-periodontal trauma correlated with the standards of the clinical practice. Knowledge of the clinical and therapeutic aspects of the infections of the deep veins of the oro-maxillofacial regions Knowledge of the clinical and therapeutic aspects of the premalignant oral and facial lesions, of the malignant tumors of the oral cavity and of the maxillofacial regions. Knowledge of the clinical and therapeutic aspects of the benign tumors of the soft and bone parts in the oro-maxillofacial sphere.

ORTHODONTICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Conservative odontology
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Diagnosis in Orthodontics**					
2.2. Responsible for lecture			Conf.Dr. Dana Festila					
2.3. Responsible for practical activity			Conf.Dr. Dana Festila S.L.Dr. Mircea Ghergie Asist.Dr. Olimpia Bunta Asist.Dr. Mihaela Pastrav Asist.Dr. Ioana Colceriu-Simon					
2.4. Year of study	V	2.5. Semester	2	2.6. Form of evaluation	Theoretical exam + practical exam	2.7. Course type	Content	DS
							Obligatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					6
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					2
Tutoring					2

Examination/ semester	2
Other activities	1
3.8. Total hours of individual study (a+b+c+d)	41
3.9. Total hours/semester	125
3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	Notions of pedodontics and dental radiology
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	amphitheater with a projection system
5.2. For practical activities	Laboratory with specific practical activities: Cabinet equipped with dental units

6. Acquired specific competences

Professional competences	• Capacity to present cases from theoretical knowledge • Acquiring practical experience through the use of specialist instruments for executing the necessary stages in establishing an orthodontic diagnosis • Acquiring necessary practical experience in utilising specialist instruments in the view of manipulating orthodontic appliances
Transversal competences	• Utilisation of notions from new context • Application of theoretic notions in the practical activity • Establishing a interdisciplinary correlation

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of dento-maxillary anomalies and possibilities of treatment
7.2. Specific objectives	• Appropriation of knowledge about growth and development of the dento-maxillary apparatus • Clinic and complementary examinations • Remembering the clinical table for dento-maxillary anomalies and etiological factors implicated in its production • Establishing a diagnostic and therapeutic plan • Knowledge of objectives of treatments • Knowledge of mobile orthodontic devices (classification, components, mode of action) • Appropriation of practical knowledge for realizing the mobile orthodontic devices • Prophylaxis and interception of the dento-maxillary anomalies • Practicing capacity for synthesizing documents bibliographic

8. Content

Lecture	Teaching methods	Observations
1. Growth and development of the dento-maxillary apparatus	Lecture, systematic	Oral exposure power-

	interactive exposure	point presentation
2. Evolution relation/order of normal occlusion	Lecture, systematic interactive exposure	Oral exposure power-point presentation
3. Clinical examination in orthodontics	Lecture, systematic interactive exposure	Oral exposure power-point presentation
4. Complementary exams: Study model, examine photostatic, anthropologic	Lecture, systematic interactive exposure	Oral exposure power-point presentation
5. Radiologic examinations: methods of analysis of profile teleradiographs	Lecture, systematic interactive exposure	Oral exposure power-point presentation
6. Orthodontic terminology classification and diagnostic of dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
7. Etiological and Pathogenesis of dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
8. Dento-maxillary anomalies in the transversal plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
9. Dento-maxillary anomalies in the sagittal plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
10. Dento-maxillary anomalies in the vertical plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
11. Dental anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
12. Anomalies consisting of consecutive premature loss of temporary and permanent teeth	Lecture, systematic interactive exposure	Oral exposure power-point presentation
13. Prophylaxis for dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
14. Indications for treatment in dento-maxillary anomalies. Principals of orthodontic treatments, types of mobile biomechanics devices	Lecture, systematic interactive exposure	Oral exposure power-point presentation

Bibliography

1. Cocarla E – Ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca, 1995.
2. Cocarla E – Stomatologie pediatrica , Ed. UMF „Iuliu Hatieganu”, Cluj-Napoca, 2000.
3. Mesaros M – Notiuni practice de ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca,2003
4. Tarmure V, Serbanesu A – Elemente de diagnostic si tratament in ortodontie, Ed. Charmides, Bistrita, 2010.
5. Houston WJB, Tulley WJ – A textbook of orthodontics , Wright, 1986.
6. McDonald F, Ireland AJ – Diagnosis of the orthodontic patient , Oxford University Press, 1998.
7. Isaacson KG, Muir JD, Reed RT – Removable orthodontic appliances, Wright, 2002.

8. Proffit WR, Fields J,Sarver D - Contemporary orhodontics , Mosby, Elsevier,2007.
9. Graber VV, Vanarsdall, Vig- Orthodontics.Current principles and techniqueS, Fifth edition, Mosby, Elsevier, 2012.

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Clinical and functional examination of children with dento-maxillary anomalies	Interactive exercises on real supports	Examination and patient files
Impression, turning models	exercises on real supports	Taking patients impressions
Model analysis, measurement	Exercises on virtual supports (study models)	Remembering exercises of the teeth and occlusal relations, measurement on the model
Examine photostatic interpretations	Exercises on virtual supports (photomontage)	Interpretation exercises of photomontages
OPT analysis Data analysis cefalometric Profile teleradiograph interpretation	Exercises on virtual supports (radiographic, CBCT) computerised techniques	Interpretation of radiological measurements
Establishing a diagnostic and a therapeutic plan	Exercises on support virtual (study models, photomontage and radiological examinations) teaching interactive	Reproducing data found from the clinical exam and complimentary exam
Completion of laboratory files with indications for the technician	teaching interactive	Exercises of drawing mobile orthodontic devices
Application of mobile orthodontic devices and indications for patients	Exercises on support real	Exercises of applying mobile orthodontic devices
Orthodontic periodic controls: activation of mobile orthodontic devices	Exercises on support real	Exercises of activating mobile orthodontic devices
Miogymnastic exercises	Exercises on support real	Explanation and demonstration of miogymnastic exercises
Application of small measures of orthodontic prophylaxis, interception and curative: exercises with a spatula, selective shaving of temporary teeth. Temporary teeth extraction in an orthodontic scope	Exercises on support real	Treatment orthodontic prophylactic
Presentation of clinical cases	Exercises on support real and virtual	Reproducing knowledge accumulated and testing them

Bibliography:

1. Cocarla E – Ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca, 1995.

2. Cocarla E – Stomatologie pediatrica , Ed. UMF „Iuliu Hatieganu", Cluj-Napoca, 2000.
3. Mesaros M – Notiuni practice de ortodontie , Ed. Medicala Univ. "Iuliu Hatieganu" , Cluj-Napoca,2003
4. Mesaros M, Muntean A – Medicina dentara pediatrica, Ed.Med.Univ. " Iuliu Hatieganu", Cluj-Napoca, 2012.
5. Isaacson KG, Muir JD, Reed RT – Removable orthodontic appliances, Wright, 2002
6. Rakosi T,Janas I, Graber M – Orthodontics-diagnosis, Thieme, 1993.
7. Proffit WR, Fields J,Sarver D - Contemporary orhodontics , Mosby, Elsevier,2007.
8. Graber VV, Vanarsdall, Vig- Orthodontics.Current principles and techniqueS, Fifth edition, Mosby, Elsevier, 2012.
9. McDonald F, Ireland AJ – Diagnosis of the orthodontic patient , Oxford University Press, 1998.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- . Permanent and constructive dialog with representative dentists from the community in the view of identification of the need and demands of employers in the domain
- Permanent participation from disciplinary members of scientific forms of medical education continues and exposure to apparatus and materials dedicated to the practical activities in dental medicine and orthodontics
- Maintaining contact with the other cathedras in the domain, teaching in other institutions of superior studies for the coordination and continual teaching with other similar programs of superior studies

  Studied notions that are in concordance with the vigorous regulations and are compatible with the activities at a national level in the dental medicine and orthodontic segment

10.Evaluation

Activity type	**10.Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General criteria for evaluation (covered area of studies and accumulated knowledge, logical coherence and fluent expression of the material) Capacity of understanding the problems Understanding the fundamental of the particulars	Examen scris tip intrebari redactionale	**50%**
10.5. Practical Activity	Evaluation of theoretical knowledge and practical ability	Practical exam	**50%**
10.6. Activity during semester			
10.7. Minimum performance standard			
- Recognition and diagnostic of dento-maxillary anomalies - Establishing therapeutic objectives - Prophylactic treatment and interception of dento-maxillary anomalies - Recognition and description of mobile orthodontic appliances			

ODONTOLOGY

1. Information about the program

1 Institution for graduate and postgraduate studies	**Universitatea de Medicina și Farmacie ”Iuliu Hațieganu”, Cluj-Napoca**
2. Faculty	**Dental Medicine**
3. Department	**Dental Medicine 2**
4. Domain of study	**Health**
5. Level of course	**Licence**
6. Academic degree	**Dental Medicine**
7. Qualification	**Dentist**
8. Form of education	Full-time program

2.Information about *the* discipline

2.1. Name			**Odontology**				
2.2. Course holder			ASIST Dr. Bud Marius				
2.3. Holder of practical works			Sef lucr. dr. Radu Chisnoiu Asist dr.Ionescu Corina Asist dr Marius Bud				
2.4. Year of study	**5**	**2.5. Semester**	**2**	**2.6. Evaluation type**	**Theoretical exam + Practical Exam**	**2.7. The discipline regime**	**mandatory**

3. Total estimated time (hours/semester for teaching activity)

3.1.Houres per week	**4**	3.2. Out of which: course	**1**	3.3. Practical work	**3**
3.4. Total hours of the curriculum	**56**	**3.5. Out of which: course**	**14**	**3.6. Practical work**	**42**
3.7. **Time / week distribution**					Ore
a. Study after manual, course support, bibliography and notes					30
b. Additional documentation in the library, on the specialized electronic platforms and on the field					20
c. Preparing seminars / laboratories, themes, papers, portfolios and essays					16
d. Tutoring					1

Exams/ semester	2
Other activities	-
3.7. Total houres of individual study(a+b+c+d)	69
3.8. Total houres per semester	125
3.9. Credits number	5

4. Prerequisites (if needed)

4.1. Curriculum	Diagnosis of simple dental caries, methods of odontal treatment and knowledge of stages of endodontic treatment
4.2. Competences	-

5. *Requisites(where applicable)*

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Dental cabinets provided with units specific to the practical activities on the patient

6. Acquired specific competences

Profesionals skills	• The ability to use the theoretical and practical notions of cariology and endodontics adequately and in context • Knowing the tools for examining and preparing the various types of cavities • Knowing and choosing the methods of odontal treatment by direct methods according to the given clinical situation • Biological orientation, selection of odontonal restoration materials, through appropriate techniques for each individual patient • Developing the capacity of synthesis of the notion of aesthetic and functional restoration, in order to understand and restore the main functions of the dento-maxillary apparatus: mastication, swallowing, phonation, physionomic function • Improving the ability to replicate the theoretical knowledge of cavity preparation and obturation • Clinical, paraclinical diagnosis and appropriate treatment of outbreak disease • Achieving the practical experience necessary for the complex restorations
Transverse skills	• Use of assimilated notions in particular contexts, specific to each case • Applying theoretical notions in practical work • Complex treatment of the patient, establishment of interdisciplinary correlations

7. Course objectives (derived from the acquired specific competences)

1. The general objective of the discipline	• Improving the knowledge about the positive, differential diagnosis of simple and complicated odontal lesions and about the possibilities of odontal and endodontic treatment for complex case solving.
2. Specific objectives	Medical reasoning in conservative odontal therapy. • Comprehensive examination of the patient, establishing a complete and correct diagnosis and treatment plan. • Assimilation of differential diagnosis notions and the conditions in which it is realized. • Biological orientation, selection of odontonal restoration materials, by appropriate individualized techniques for each patient. • Clinical, paraclinical diagnosis and appropriate treatment of outbreak disease • Accidents, complaints, iatrogenes of odontal treatments. • Performing aesthetic treatments. • Developing the ability to replicate the theoretical knowledge by preparing the cavities and filling adapted to each clinical situation • Exercise of synthesis and bibliographic documentation

8. *Contents*

1. Course	**Teaching methods**	**Mentions**
1. Medical reasoning in conservative odontal therapy.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
2. Principles of minimally invasive dentistry.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
3.Conservative preparation of cavities for composite direct restoration. The role of ultrasounds in minimally invasive preparation.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
4.Replacement versus repairing of odontal restorations. Patient monitorisation	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
5. Biological vision in odontal therapy. Choosing the right techniques, instruments and restorative materials.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
6. Aesthetic direct restorations of frontal teeth using modern composites. Vanini Technique, restoration with Hri composite.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides

7. Restoration of enodontically treated teeth	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
8. The limits of conservative restorative dentistry. Direct versus indirect restoration	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
9. Modern equipments and techniques used in odontal restorative therapy. Semi-direct method of making the composite inlay.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
10. Laser use in dentistry: indications, advantages, disadvantages, working technique.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
11. The use of Dental Operating Microscope in restorative dentistry.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
12. Accidents and complications of odontal therapy.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
13.External whitening, indications, contraindications, materials, work technique.	Lecture, systematic, interactive presentation	Oral presentations,Power-Point slides
14. Internal whitening, indications, contraindications, materials, work technique.	Systematic, interactive presentation	Interactive discussions

Bibliography:

Summitt J.; Robbins W.; Schwartz R. : Fundamentals of operative Dentistry ; Ed. Quintessence 2013
Harald O.Heyman;Edward J.Swift;Andre V. Ritter:Sturdevant's Art and Science of Operative Dentistry,Sixth Edition;Ed.Elsevier 2011
Adrian Lussi;Markus Schaffner : Advances in RestorativeDentistry; Ed. Quintessence 2012
Alexandra Roman ;Andrada Popovici;O.Pastrav;Daniela Condor: Odontologie restaurativa:ghid teoretic si clinic; Ed.UMF Cluj-Napoca; 2006
Mount G.; Hume W.R.: Preservation and restoration of the tooth structure; Ed. Mosby 1998Jean JacquesLasfargues :Concepts cliniques en Odontologie conservatrice ;Ed.SNPMD 2001
Goldstein RE.:Esthetics in Dentistry,Second Edition 1998

2. Practical works	**Teaching Methods**	**Students practical work**
Dental examination and treatment plan, making the patient's record, recording all data on cabinet patients book	Interactive discussions and demonstrations	Dental examination and recording the information in file of the patient
Odonto-periodontal prophylaxis	Interactive	Doing the professional dental cleanning of

(scalling, professional dental cleanning).	discussions and demonstrations	the patient
Morphofunctional restoration of dental structures.	Interactive discussions and demonstrations	Making customized treatments on the patient
Intraoperative injuries of endodontic treatment.	Interactive discussions	Doing the endodontic and restoratives treatments on patients
Endodontic retreatment	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
Limits of conservative endodontic treatment	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
Restoration of endodontically treated teeth	Interactive discussions and demonstrations	Dental treatments on patientst
Aesthetic restorations	Interactive discussions and demonstrations	Dental treatments on patientst
The use of new modern technologies for diagnosis and treatments.	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
. Direct composite restoration of posterior teeth using "Stamp technique".	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
Knowledge of the rational use of medication and materials in conservative dental medicine	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
Diagnosis of odonto-periodontal	Interactive	Dental treatments on patientst

infection and interpretation of paraclinical examinations	discussions and synthesis of theoretical knowledge	
Evaluating patients at risk in dental treatment.	Interactive discussions and synthesis of theoretical knowledge	Dental treatments on patientst
Practical examination + interview	Knowledge evaluation: interview	Dental examination, establishing the diagnosis and the treatment plan on the patient

Bibliography

Summitt J.; Robbins W.; Schwartz R. : Fundamentals of operative Dentistry ; Ed. Quintessence 2000
Iliescu A.; Gafar M. : Caria dentara; Ed. Medicala Bucuresti 2002
Harald O.Heyman;Edward J.Swift;Andre V. Ritter:Sturdevant's Art and Science of Operative Dentistry,Sixth Edition;Ed.Elsevier 2011
Alexandra Roman ;Andrada Popovici;O.Pastrav;Daniela Condor: Odontologie restaurativa:ghid teoretic si clinic; Ed.UMF Cluj-Napoca; 2006
Ada Gabriela Delean, Refacerea aspectului estetic în zona frontală cu ajutorul materialelor compozite, Ed. Alma Mater, Cluj-Napoca; 2007

Goldstein RE.:Esthetics in Dentistry,Second Edition 1998

Mount G.; Hume W.R.: Preservation and restoration of the tooth structure; Ed. Mosby 1998

Adrian Lussi;Markus Schaffner : Advances in RestorativeDentistry; Ed. Quintessence 2012

9. ***Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field***

- Permanent and constructive dialogue with representatives of the dental community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current clinical work
- Permanent participation of the members of the department at scientific events, continuous medical education programs and exhibitions of equipments and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education institutions, to coordinate the content taught with other similar programs within other higher education institutions.
- The concepts studied are in line with current regulations and are consistent with national activities in the preclinical dentistry segment.

10. *Evaluation*

Activity type	**10.1Evaluation Criteria**	**10.2. Evaluation Methods**	**Weight of the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of student knowledge, logical coherence, fluency of expression) Ability to understand fundamental problems and customization for each case	Oral exam	**70%**
10.5. Practical work	Assessment of theoretical knowledge and practical skills	practical exam	**15%**
10.6. Clinical work during the semester	Continuity of training during the semester	Evaluation of clinical work during the practical trainings	**15%**
10.6. Minimum performance standard			
Acquiring the main concepts of cavity preparation and cavity filling in simple dental caries: • Examining the patient, establishing the correct and complete diagnosis and the therapeutic plan • Individualization of odontal and endodontic therapy for each case and integration into the general context of the patient • Preparation of minimally invasive cavities for composite obturation • Treatment of dental plaque • Performing endodontic treatments • Apply matrix systems and make complex odon restorations • Compleating the minimum number of required clinical cases by the end of semester			

GENERAL ANESTHESIOLOGY AND EMERGENCIES IN DENTISTRY

1. Program Information

1.1. **Educational Institution**	”Iuliu Hatieganu” University of Medicine and Pharmacy, Cluj-Napoca
1.2. University	Dental Medicine
1.3. Department	I – Maxillofacial Surgery and Radiology
1.4. Field of study	Dental Medicine
1.5. Study Cycle	License
1.6. Learning Program	Romanian Language Dental Medicine
1.7. Qualifications	Doctor-Dentist
1.8. Form of learning	Day – full time

2. Course Information

2.1. Course Name			**DENTAL MEDICINE EMERGENCIES AND GENERAL ANESTHESIOLOGY Year V**					
2.2. Course Coordinator			Lecturer Mitre Ileana					
2.3. Practical Activities Coordinator			(vacancy position)					
2.4. Year of study	5	2.5. Semester	2	2.6. Evaluation type	Theoretical examination + Practical examination	2.7. Course regime	Content	DS
							Mandatory	DO

3. Total estimated time (hours per semester for didactic activities)

3.1.Number of hours per week	**6**	3.2. Of which: lecture	**2**	3.3. Practical activities	**4**
3.4. Total hours out of the teaching program	**84**	**3.5. Of which lecture**	**28**	**3.6. Practical activities**	**56**

3.4. **Time distribution/weekly**	Hours
Study according to manual, course support, bibliography and class notes	28
Supplementary study in the library, on specialized electronic platforms and on field	8
Preparing seminars/practical skills laboratories/projects, themes, reports, portfolios and essays	3
Tutoring	2
Examinations/semester	-
Other activities	-
3.7. Total hours of individual study (a+b+c+d)	41
3.8. Total hours per semester	125
3.9. Number of credits	5

4. *Prerequisites (where applied)*

4.1. Of curriculum	General and special anatomy – head and neck. Physiology. Physiopathology. General and dento-maxillary apparatus semiology. Internal medicine. Pediatrics. Pharmacology. Dental medicine anesthesia. Oral surgery.
4.2. Of	The ability to analyze anatomical and clinical parameters in a clinical case.

competency	Critical analysis and laboratory test results interpretation. Critical analysis of paraclinical explorations. The correct filling of therapeutic prescriptions.

5. *Conditions* *(where applied)*

5.1. For the lectures	- lectures will be held in a projection system – equipped amphitheater - students will shut down their mobile phones prior to the beginning of the lecture. Phone calls during lectures will not be tolerated, nor will leaving the lecture hall in order to take phone calls. - The consumption of food or beverages during lectures will not be allowed - tardiness will also not be tolerated as it is disruptive for the educational process.
5.2. For the practical activities	Laboratories with specific equipment for specific practical activities - Offices equipped with dental units, patient wards, treatment rooms, operating rooms. - students are required to shut down their mobile phone prior to the beginning of the seminar. Phone calls during lectures will not be tolerated, nor will leaving the lecture hall in order to take phone calls - The consumption of food or beverages during lectures will not be allowed - tardiness will also not be tolerated as it is disruptive for the educational process - ethical behavior towards the teaching staff

6. Specific Acquired Competencies

Professional Competencies	Acquiring theoretical and practical specialty-specific patient examination notions Establishing an emergency diagnosis Knowledge of the first measures of treatment in medical and surgical emergencies Knowledge of the techniques and maneuvers necessary for the treatment of medical emergencies The ability to identify and apply emergency treatment for accidents and complications which may appear in the dental medicine practice. Knowledge of the means of prevention for local accidents and complications of the general dentistry act. Acquiring drug administering knowledge. Acquiring theoretical and practical knowledge of patient monitoring means.
Transversal Competencies	Using the acquired notions in new contexts Applying theoretical notions in practical activity Establishing interdisciplinary correlations within the studied fields Developing efficient patient communication skills. Demonstrating a willingness for professional improvement by training analytic and synthetic thought processes Proving involvement in research activities, such as elaborating scientific articles.

7. Course Objectives (according to the Specific acquired competencies chart)

7.1. General Course Objective	This Course offers Vth year students of Dental Medicine in the University of Dental Medicine theoretical knowledge about symptoms and making an emergency diagnosis of the complications which can arise in the dental office;

	the first measures of treatment in medical and surgical emergencies; knowledge of medicines, their effects and the risks of administering them, theoretical knowledge of anesthetic medicines; knowledge of technique's for administering medicine; listing general anesthesia techniques; patient monitoring; knowledge of risks and complications which can arise when administering intravenous sedatives. The objective of practical seminars is acquiring airway disobstruction techniques knowledge; learning how to prepare medicine to be administered in emergencies and how to administer it; acquiring knowledge of the devices and materials used in the treatment of medical emergencies; learning how to perform disobstruction maneuvers, artificial ventilation, external cardiac massage on a mannequin and gaining knowledge of anesthetic drugs; medicine administering techniques; general anesthesia techniques; patient monitoring; knowing the risks and complications which can arise when administering intravenous sedatives.
7.2. Specific objectives	Knowledge of symptoms and emergency diagnosis for complications which can arise in the dental office. The first measures of treatment in medical and surgical emergencies. Knowledge of the techniques and necessary maneuvers for the treatment of medical emergencies. Knowledge of drugs, their effects and the risks of administering them. Acquiring airway disobstruction techniques. Preparing the administering of drugs in emergency situations. Knowing the devices and materials used for the treatment of medical emergencies. Performing disobstruction, artificial ventilation and external cardiac massage maneuvers on mannequin. Listing the general anesthesia techniques. Patient monitoring. Knowledge of the risks and complications which may appear when administering intravenous sedatives.

8. Content

8.1. Lecture	**Teaching Method**	**Observations**
1. Cardiorespiratory and cerebral resuscitation: stages of resuscitation, used medicine.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. The etiology of cardio-respiratory arrest. Clinical manifestations and diagnosis in cardiorespiratory arrest. Stages of cardiorespiratory resuscitation. Drugs used for the treatment of cardiorespiratory arrest – types, indications, dosage.
2. Cardiorespiratory and cerebral resuscitation: resuscitation technique, resuscitation in special situations.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Cardiac massage, airway disobstruction techniques. Resuscitation algorithm for cardiac arrest through ventricular fibrillation, asystole, electromechanical dissociation in and outside the hospital. Resuscitation in children, pregnant women, electrocution, drowning.

3. The state of emergency. Organizing the immediate medical emergency. General accidents in the dental office.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Recognizing an emergency situation. The appropriate way to organize a dental office to facilitate the treatment of emergencies. Diagnosing and treating lipothymia, syncope, hypocalcaemia, epileptic seizures.
4. Respiratory emergencies: acute respiratory insufficiency, pulmonary embolism, bronchial asthma, acute angioedema, airway obstruction	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Etiology, physiopathology, clinical manifestations, emergency treatment in case of acute respiratory insufficiency, bronchial asthma, pulmonary embolism, acute airway obstruction
5. Cardio-circulatory emergencies: pectoral angina, acute myocardial infarction, arrhythmias.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. The differential diagnosis of thoracic pain. The diagnosis of unstable pectoral angina and myocardial infarction. The treatment of patients with coronary pathology. The etiology, diagnosis and treatment of cardiac arrhythmias. Treatment algorithm for bradycardia. Treatment algorithm for narrow complex tachycardia. Treatment algorithm for wide complex tachycardia.
6. Cardio-circulatory emergencies: hypertensive crisis, hypertension, global cardiac insufficiency.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Hypertensive crisis definition. Diagnosis and emergency therapeutic measures in case of hypertensive crisis. Clinical manifestations of arterial hypotension. Diagnosis and specific and non-specific emergency treatment of arterial hypotension. Therapeutic measures in acute cardiac insufficiency. The approach for patients with global cardiac insufficiency in the dental office
7. Comas: etiological and differential diagnosis. Comas: general coma treatment principles; emergency treatment of certain metabolic comas.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. The definition of coma and other types of altered consciousness. The classification of metabolic and structural comas. Differential diagnosis of the main types of metabolic comas which can be encountered in the dental medicine practice. Emergency therapeutic measures in the hypoglycemic, hyperglycemic, vascular, traumatic coma. General measures in coma treatment
8. Shock. Etiopathogenesis,	Lecture, systematic	Lectures, Power-Point presentations. Definition. Classification of shocks, general

classification, treatment principles.	interactive presentation.	clinical picture. Specific clinical picture. The diagnosis of hypovolemic, septic, cardiogenic and anaphylactic shock. Therapeutic measures in the hypovolemic, septic, cardiogenic, anaphylactic shock.
9. Emergency approach of polytrauma, cranio-maxillofacial trauma.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Classification of cranio-maxillofacial trauma. Clinical picture and emergency measure in cranio-maxillofacial trauma. Glasgow classification in traumatic comas. Emergency therapeutic measures in maxillofacial trauma. Antitetanic prophylaxis. Principles of wound treatment.
10. The approach for a patient with oro-maxillofacial territory hemorrhage.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Normal and pathological hemostasis. Laboratory tests which explore hemostasis. Classification of afflictions which modify normal hemostasis. The diagnosis of hemostasis deficiencies. Therapeutic measures for hemophilic, thrombocytopenic patients and those suffering from acquired hemostasis deficiencies.
11. Respiratory monitoring. Cardiovascular monitoring.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Clinical and para-clinical respiratory monitoring. Clinical and para-clinical cardiovascular monitoring. Importance, indications, limits.
12. Intravenous sedation: techniques and substances	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Principles of intravenous sedation. Substances used for intravenous sedation – benzodiazepines, barbiturates, phenothiazine, butyrophenone, imidazolates, opioids, propofole.
13. Inhalation sedation: techniques, incidents, complications.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Indications of inhalation sedation. Substances used for inhalation sedation. The technique of nitrous oxide sedation, incidents, accidents.
14. General anesthesia, principles. Drugs used in general anesthesia.	Lecture, systematic interactive presentation.	Lectures, Power-Point presentations. Definition, used substances. Induction, maintaining and awakening from general anesthesia.
Bibliography: - Ileana Mitre, Grigore Băciuţ, Mihaela Felicia Băciuţ,Radu Septimiu Campian,Lucia Hurubeanu, Horatiu Alexandru Rotaru, Simion Bran, Liana Crişan, Bogdan Crişan, Iuliu George Moldovan, Cristiana Balog, Mădălina Anca Lazăr, Ioan Barbur, Cristian Mihail Dinu, Sergiu Vacaras. *Urgente medico-*		

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- Paul F. White, PhD, MD, FANZCA, and Dajun Song, MD, PhD. New Criteria for Fast-Tracking After outpatient Anesthesia: A Comparison with the Modified Aldrete's Scoring System

8.2. Practical Activities	**Teaching methods**	**Student practical activities**
1. The emergency apparatus inside the dental office. The emergency kit: materials and drugs.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
2. Special surgical maneuvers in severe emergencies cricothyrotomy, tracheostomy.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
3. Knowing the useful devices for airway disobstruction. Knowing the disobstruction maneuvers.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
4. Mechanical airway disobstruction: using the oropharyngeal airway, Robertazzi airway, laryngeal mask.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
5. Performing airway disobstruction on mannequin. Acquiring knowledge of the cardiac massage techniques. Performing cardiac massage on mannequin.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
6. Peripheral venous line placement. Drug administering	Power-Point presentations, interactive	Scheduled interactive learning. Practical activities with the

notions. Intravenous kit. Applying an intravenous kit. Intramuscular, intravenous, intradermic injection techniques.	teaching.	showcasing and practising of first aid techniques and maneuvers on teaching models
7. Antitetanic prophylaxis. Emergency hemostasis.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
8. Emergency wound treatment. Emergency blood vessel ligatures in oro-maxillofacial hemorrhage.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
9. General emergencies in the dental office: lipothymy, syncope, convulsive accidents, allergic accidents.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
10. Differential diagnosis: clinical death, cerebral death. The differential diagnosis of shocks.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
11. Differential diagnosis of metabolic comas.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
12. Respiratory monitoring. Cardiovascular monitoring. The anesthesia machine.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
13. Knowing the diagnostic and therapeutic approach in patients with hemorrhagic or anaphylactic shock. Knowing the diagnostic and therapeutic approach in patients with hypoglycemic shock.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on teaching models
14. Laryngoscopy. Tracheal intubation tubes. Performing tracheal intubation. General anesthesia technique.	Power-Point presentations, interactive teaching.	Scheduled interactive learning. Practical activities with the showcasing and practising of first aid techniques and maneuvers on

Knowledge of intravenous anesthetic substances. Knowledge of inhalation anesthetic substances.		teaching models

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9. The coroboration of course contents with the expectations of the representatives of the epistemic communities, professional associations and representative employers from fields associated with the program

- Permanent and constructive dialogue with representatives from the dental medicine community – in view of the identification of the needs and expectations of employers from the field and the adaptation of the analytical curriculum to the necessities of current practical activities.
- Permanent participation of the department members in scientific manifestations, various forms of continual medical education, equipment and medical material exhibitions dedicated to dental medicine activities – in view of maintaining the theoretical and practical information constantly being introduced in the course structure at a high level of quality.
- Maintaining contact with other department chairs from the field, in order to coordinate the teaching material with other similar programs from within other similar institutions of superior education.
- The studied notions are in accordance to the current regulations and are compatible with activities taking place on a national level in the segment of pre-clinical dental medicine.

10. Evaluation

Type of Activity	10.1. Evaluation Criteria	10.2. Evaluation	Percentage from

		Methods	the final grade
10.4. Lecture	General evaluation criteria (the covered area and the correctness of acquired knowledge, logical coherence) The ability to understand fundamental issues and to particularize.	Multiple answer-type questions	**50%**
10.5. Practical Activities	Evaluation of theoretical knowledge	Oral presentation and practical examination on simulators according to the curricula taught throughout the lectures and practical activities.	**50%**
10.6. Activity throughout the semester			
10.6. Minimal performance standard			
The ability to utilize the specialized terminology appropriately and in context Acquiring specialty-specific theoretical and practical patient examination notions; Knowledge of the symptoms and emergency diagnosis of complications which may appear in the dental practice. First measures of treatment in medical and surgical emergencies. Knowledge of the anatomy and physiology of the dento-maxillary apparatus. Knowledge of the techniques and maneuvers necessary for the treatment of a medical emergency. Knowledge of the drugs, their effects and the risks associated with their administering. Acquiring upper airway disobstruction techniques. Preparing drugs for emergency administering. Knowledge of the materials and devices used to treat medical emergencies. Knowledge of anesthetic drugs. Knowledge of drug administering techniques. Listing the general anesthesia techniques. Patient monitoring. Knowing the risks and complications which may arise when administering intravenous sedatives.			

TECHNOLOGY OF IMPLANT-SUPPORTED DENTURES

1. Information about the program

1.1. University	”Iuliu Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I– Maxillofacial Surgery and Radiology
1.4. Field study	Health sciences
1.5. Cycle of academic studies	Graduate degree
1.6. Study Program	Dental Medicine English Section
1.7. Qualification	Dentist

1.8. Mode of study	Full-time learning

2. Information about the subject

2.1. Subject name			**Technology of Implant-supported Dentures – Fifth year**					
2.2. Course coordinator			Assoc. Prof. Bran Simion					
2.3. Practical courses coordinators			Lecturer Armencea Gabriel					
2.4. Year of study	V	2.5. Semester	1	2.6. Evaluation type	Theoretical exam + Practical exam	2.7. The discipline regime	Content	DS
							Compulsoriness	DO

3. Estimated total time (hours/semester for educational activities)

3.1.Total hours/week	**3**	3.2. Theoretical	**1**	3.3. Practical	2
3.4. Total number of hours in the educational plan	**42**	**3.5. Theoretical**	**14**	**3.6. Practical**	**28**
3.4. **Time distribution / week**					Hours
- Textbook, course support, bibliography and notes study					20
- Additional documentation from the library, online and in the field					20
- Seminaries/practical courses, homework, reports, portfolios and essays					15
- Tutoring					3
Exams/semester					-
Other studies					-
3.7. Total number of hours for individual study (a+b+c+d)			58		
3.8. Total number of hours/semester			100		
3.9. Total credits			4		

4. Preconditions (where applicable)

4.1. Curriculum	Knowledge of prosthetic restorations (clinical and in the dental laboratory). Morphology and function of the oral system. Dental prosthetics. Dental materials.
4.2. Abilities	The ability to analyze the anatomical, clinical and radiological parameters during a case study. The ability to make various dental impressions.

5. Conditions (where applicable)

5.1. For courses	- location for course unfolding – amphitheater with projection systems - students will keep their phones shut off while the courses are unfolding. No phone calls are allowed during the courses. Students are not permitted to leave the amphitheater in order to take phone calls. - food and beverage consumption is not allowed during the courses. - students are not allowed to be late for courses since their tardiness can be disruptive for the educational activity.
5.2. For practical courses	- laboratories that offer proper conditions for the practical courses to unfold - offices with dental chairs - students will keep their phones shut off while the practical courses are unfolding.

	No phone calls are allowed during the practical courses. Students are not permitted to leave the laboratory in order to take phone calls. - food and beverage consumption is not allowed during the practical courses. - students are not allowed to be late for the practical courses since their tardiness can be disruptive for the educational activity. - proper attitude towards the patient, doctors and teachers.

6. Specific abilities acquired

6.1 Professional abilities	Acquiring the theoretical and practical notions that concern the technology of implant-supported dentures
6.2 Transversal abilities	The use of the acquired knowledge in new contexts The implementation of theoretical notions in practical situations Establishing inter-disciplinary correlations between the studied subjects Gaining the ability to communicate efficiently with the patients Underlining the interest for constant professional improvement by training the analytical and synthetical thinking Taking part in research

7. Aims of the subject (arising from the acquired specific abilities list)

7.1 General aims	The course offers the ifth year students of the Dental Medicine Faculty basic notions concerning implant-supported dentures. Acquiring knowledge of diagnosis in implant-supported dentures. Studying the implant's components. Manufacturing implant-supported dentures and studying their maintenance. The practical courses have the same objectives, from a practical point of view.
7.2 Specific aims	Studying basic notions concerning implant-supported dentures. Acquiring knowledge of diagnosis in implant-supported dentures. Studying the implant's parts. Manufacturing implant-supported dentures and studying their maintenance.

8 Content

8.1 Course	**Teaching method**	**Observations**
1. Introduction in Implantology. The steps of implant treatment. Terminology	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
2. Examination and diagnosis in Oral Implantology 2.1 Clinical diagnosis 2.2 Prosthetic diagnosis 2.3 Occlusal diagnosis	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
3. Indications and contraindications in Oral Implantology. Types of totally or partially edentulous dental arches.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
4. Insertion of endosseous dental implants. Dental implant surgical	Lecture, Systematic and interactive	Oral presentations, Power-Point presentations

guides. 3D planning.	explanations.	
5. Implant supported dentures. Progressive bone loading.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
6. Taking impressions of the implants. Direct and indirect impression methods.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
7. Prosthetic abutments	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
8. White and red aesthetics	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
9. Conception and manufacturing of the superstructure.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
10. Cement-retained crowns and bridges. Screw-retained crowns and bridges	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
11.Single tooth restaurations	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
12. Special means-retained crowns and bridges. Mixt dentures – teeth and implant supported.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
13. The maintenance of implant supported dentures.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
14. Treating the complications in implant prosthetics. Repairing the dentures.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations

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- Bucur A. et al, COMPENDIU DE CHIRURGIE ORO-MAXILO-FACIALA vol. I Q Med Publishing, 2009

8.2 Practical courses	**Teaching method**	**Student’s practical activity**
1. Introduction in Implantology. The stages of implant treatment. Terminology	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
2. Examination and diagnosis in Oral Implantology -Clinical diagnosis	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.

-Prosthetic diagnosis -Occlusal diagnosis		
3. Indications and contraindications in Oral Implantology. Types of totally or partially edentulous dental arches.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
4. Insertion of endosseous dental implants - surgical guides. 3D planning software.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
5. Implant supported dentures. Progressive bone loading.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
6. Taking impressions of the implants. Direct and indirect impression methods.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
7. Prosthetic abutments. Red and white aesthetics.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
8. Conception and manufacturing of the superstructure.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
9. Cement-retained crowns and bridges. Screw-retained crowns and bridges	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
10. Single tooth restaurations	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
12. Special means-retained crowns and bridges.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
13. Combined dentures – teeth and implant supported.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
13. The maintenance of implant supported dentures.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.
14. Treating the complications in implant prosthetics. Repairing the dentures.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting methods to produce the implant supported dentures.

9. The corroboration of the subject's content with the expectations of the epistemic community members, professional associations and representative employers in the field.

- Permanent and constructive dialogue with the representatives of the Dentists Community in order to identify the needs and expectations of the employers in the field and adjusting the curriculum in order to best fit the needs of the current practical activity.
- The participation of the teachers at congresses, medical exhibitions and different forms of continuous medical education in order to maintain the information as up-to-date as possible.
- Constant contact with other professors in the field from other universities to coordinate the curriculum.

The studied notions are in agreement with the current regulations and are compatible with the activities that are conducted at a national level in the Dental Medicine field.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2. Evaluation method	10.3 Percent of final grade
10.4. Course	General evaluation criteria (coverage of acquired knowledge, logical coherence) The understanding of the theoretical and practical aspects is evaluated.	Written exam „multiple choice questions"	**70%**
10.5. Practical courses	Evaluation of practical abilities	Oral exam - case study	**30%**
10.6. The activity during the semester			
10.6. Minimal performance standards			
The ability to properly use the correct terminology. Obtaining the practical and theoretical notions for examining the patient from an implantologic point of view. Basic knowledge of implant supported dentures. Knowledge of physiology and anatomy of the maxillo-facial area. Diagnosis in implant supported denture cases. Knowing the implant's components. Knowing the steps of producing implant supported dentures and their maintenance.			

PRIMARY CARE AND OCCUPATIONAL HEALTH

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Medicine
1.3. Department	Community Medicine
1.4. Domain of study	Health

1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Primary Care and Occupational Health Vth year					
2.2. Responsible for lecture			Şef Lucr. Dr. Armand Râjnoveanu					
2.3. Responsible for practical activity			Şef Lucr. Dr. Răzvan Ionuţ Şef Lucr. Dr. Armand Râjnoveanu Asist. Univ. Dr. Bârsan Maria Asist. Univ. Dr. Andreea Socaciu Conf. Dr. Lucian Tefas – associate Prof. Dr. Aristotel Cocârlă – associate Dr. Andreea-Petra Ungur - associate				
2.4. Year of study	5	2.5. Semester	1	2.6. Form of evaluation	Theoretical and practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using textbooks, lecture notes, references					1
Individual study using on-line platforms, field research					1
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					
Tutoring					
Examination/ semester					1
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				2	
3.9. Total hours/semester				30	
3.10. Number of credits				1	

4. Prerequisites (if needed)

4.1. Curriculum	Semiology, Internal Medicine, Medical Imaging, Hematology, Pharmacology, Biochemistry
4.2. Competences	To complete and interpret the patient's medical history and to execute the physical exam. To request and interpret laboratory tests

5. Requisites (if applicable)

5.1. For lectures	- Students must attend lectures / practical activities with their mobile

	phones turned-off. Also, telephone conversations will not be tolerated during the lecture, nor leaving the lecture room to take personal phone calls. - The consumption of food and beverages is not allowed during the lectures / practical activities - The student's late arrival for the lecture and practical activities will not be tolerated as it proves to be disruptive to the educational process
5.2. For practical activities	- Students are required to have a lab coat, a stethoscope and a notebook

6. Acquired specific competences

Professional competences	Through the lecture and clinical training, we intend to provide the dental medicine student information that is necessary in the field of occupational pathology, respectively the diseases generated by the specific factors of the workplace. This kind of information might be valuable also in protecting dental students from hazards and risks that occur during their own activity. The theoretical information about occupational and work-related diseases is emphasized during the practical activities, by presenting cases of hospitalized patients diagnosed with occupational diseases, filmed materials with various working conditions that can generate occupational diseases and elements for a positive diagnosis of an occupational disease.
Transversal competences	The ability to communicate effectively with the patient. To demonstrate interest for professional development by engaging critical thinking skills. To demonstrate interest in research activities, such as the development of scientific articles. To demonstrate the ability to use digital media in order to obtain medical information.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The aim is that students assimilate an informational core regarding the relationship between workplace and health status. The students must gain the basic knowledge necessary in recognizing the main occupational diseases and the main data concerning their treatment and prophylactic measures.
7.2. Specific objectives	Upon completing the course, the students will be able to: - define what an occupational disease and a work-related disease is - name the differences between an occupational and a non-occupational disease - specify the circuit for pathogenetic mechanisms and the reporting of an occupational disease - follow-through with the occupational history taking and the physical exam of a patient by themselves - search for external markers of exposure (occupational stigmata) - choose the significant biotoxicological exposure and biological effect parameters for each toxic and know how to interpret them regarding their

	normal value.

8. Content

Lecture	Teaching methods	Observations
1. Occupational health: definition, institutional framework. Basic terms of ergonomics: ergonomic organization of the dental practice and the dental laboratory.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
2. Prophylaxis of stress and strain due to posture and occupational gestures imposed by dental practice.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
3. Fatigue and motor coordination neurosis: etiology, pathogenesis, clinical findings, prophylaxis.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
4. Features of the work environment and their effect on health status (noise, vibration, electromagnetic fields): early clinical findings, prophylaxis.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
5. Work injuries: definition, legislation, dental office work injury: causes and prevention.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
6. Occupational factors involved in the etiopathogenesis of dento-maxillary pathology; oro-dental findings in occupational pathology.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
7. Occupational-induced hypersensitivity reactions in the dental office and laboratory. Occupational dermatitis and asthma: early findings, prophylaxis.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation
8. Exposure to toxics in dental practice: arsenic, mercury, acrylic resins, metal dusts.	Lecture, systematic presentation, conversation	Oral presentations reinforced with PowerPoint presentation

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- Baxter PJ, Aw TJ, Cockroft A, Durrington P. Hunter's Diseases of Occupation, 10th edition, 2010.

Practical Activities	Teaching Methods	Activity to be done by students
Analysis of working conditions in the dental practice and the ergonomic organization of the professional activity.	Systematic presentation, conversation, problem solving	
The diagnosis for an occupational disease: main criteria, reporting, research, confirmation and recording of occupational diseases. Methodology of research for the working conditions and assessment of occupational risks.	Systematic presentation, conversation, problem solving, demonstrations, the investigation scheme and video examples.	
Clinical manifestations in the oral cavity (mucous membranes, teeth) of occupational poisonings with mercury, lead, arsenic, chromium.	Systematic presentation, conversation, problem solving, examples.	
Case studies with occupational hearing loss, vibration induced disease and occupational coordination neurosis.	Systematic presentation, conversation, problem solving, examples.	
Case studies with occupational dermatitis and occupational asthma.	Systematic presentation, conversation, problem solving, examples.	
Clinical cases of occupational illnesses by exposure to occupational irritants, silica dust and acrylic compounds.	Systematic presentation, conversation, problem solving, examples.	
The guidelines for medical examinations necessary that apply for dental units' employees.	Systematic presentation, conversation, problem solving, examples.	

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- Manu P, Niculescu T, Practica Medicinii Muncii, Ed. Medicală, Bucureşti, 1978.
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- Toma I. Practica Medicinii Muncii, Sitech, Craiova, 2006.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

In order to adapt the content of the discipline to the epistemic censorship, the discipline members organized working meetings with the members of the Romanian Society of Occupational Medicine, the Transylvanian Association of Occupational Medicine, dental specialists and representatives of the state institutions with special emphasis on Occupational Medicine. Also, the main issues were discussed with other teachers in the field at national conferences. They were aimed at: identifying the needs and expectations of employers in the field; coordination with other similar programs developed by the other faculties of medicine and dental medicine in the country.

10. Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	- according to the educational goals	- written exam: 20 multiple choice questions	80 %
10.5. Practical Activity	-	-	**-**
10.6. Activity during semester	- involvement in practical activities defined in the goals	- working on a project on a specific topic	20%
10.7. Minimum performance standard			
- obtaining a passing grade of 5 at the final examination			

DERMATOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Medicine
1.3. Department	6
1.4. Domain of study	Dermatology
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Dermatology**					
2.2. Responsible for lecture			Assist. Prof. dr. Ana Sorina Dănescu					
2.3. Responsible for practical activity			Assist. Prof. dr Ana Sorina Danescu					
2.4. Year of study	3	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					1
Individual study using on-line platforms, field research					0.5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					0.5
Tutoring					

Examination/ semester	2
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	2
3.9. Total hours/semester	30
3.10. Number of credits	1

4. Prerequisites (if needed)

4.1. Curriculum	Histology, Histopathology, Physiology, Physiopathology, Semiology
4.2. Competences	Doing the anamnesis and physical exam

5. Requisites (if applicable)

5.1. For lectures	NA
5.2. For practical activities	NA

6. Acquired specific competences

Professional competences	To recognize the skin lesion and establish the clinical diagnosis in dermatological diseases To recommend and interpret the investigations needed for the final diagnosis in dermatological diseases To recommend the correct treatment in dermatological disease and follow-up the therapy regarding efficiency and side effects
Transversal competences	To have the ability to communicate with the patient To show preoccupation for professional improvement To integrate dermatological knowledge into general medical one and into research activities

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	To acquire knowledge about cutaneous pathology To integrate the theoretical and practical knowledge gained in the previous study years in the discipline profile
7.2. Specific objectives	To recognize the elementary skin lesions To diagnose and treat the main dermatological diseases

8. Content

Lecture	Teaching methods	Observations
1. Introduction in dermatology	lecture	
2. Viral infections	lecture	
3. Bacterial infections	lecture	
4. Fungal infections	lecture	
5. Parasitic infections	lecture	
6. Urticaria	lecture	
7. Dermatitis	lecture	
8. Acnee. Rosacea. Perioral dermatitis	lecture	
9. Psoriasis. Lichen planus	lecture	
10. Autoimmune bullous diseases	lecture	

11. Benign cutaneous tumors	lecture	
12. Malignant cutaneous tumors	lecture	
13. Sexually transmitted diseases	lecture	
14. Diseases of the oral mucosa	lecture	

Bibliography: Braun Falco, Dermatology, 3rd edition

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Clinical activity	Case reports	Anamnesis Physical exam
	Slide show	
	Carrying out diagnostic and therapeutical procedures in the dermatology field	Wood lamp examination Dermoscopic examination Patch and prick tests Criotherapy

Bibliography: : Richard B. Weller, Hamish J. A. Hunter, Margaret W. Mann. Clinical Dermatology. Fifth Edition, ISBN-13: 978-0470659526

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

To acquire the basic knowledge about cutaneous pathology, mandatory in primary medical care

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	In accordance with the discipline objectives	Written exam	**60%**
10.5. Practical Activity	In accordance with the discipline objectives	Practical exam	**30%**
10.6. Activity during semester	Active involvement	Continuous evaluation	**10%**
10.7. Minimum performance standard– the content of the lecture			

THE APPLICATION OF LASERS IN DENTISTRY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I– Maxillofacial Surgery and Radiology
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**LASER APPLICATIONS IN DENTISTRY YEAR V**					
2.2. Responsible for lecture			Lecturer Dr. Crişan Bogdan DMD, MSc, PhD - on the vacancy of Associate Proffesor					
2.3. Responsible for practical activity			-					
2.4. Year of study	V	2.5. Semester	2	2.6. Form of evaluation	ES- Theoretical examination	2.7. Course type	content	DS
							mandatory	DA

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	-
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**-**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					20
Individual study using on-line platforms, field research					15
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					-
Tutoring					-
Examination/ semester					1
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge about dental anatomy and physiology of the dento-maxillary system. Knowledge about Medical Biophysics. Knowledge about local anesthesia in dentistry. Knowledge about conservative dentistry. Knowledge about endodontics. Knowledge about periodontics. Knowledge about prosthetics. Knowledge about oral surgery. Knowledge about implantology. Knowledge about esthetic dentistry.
4.2. Competences	The ability to analyze anatomo-clinical parameters in the study of clinical cases. The ability of establishing clinical diagnosis in the dentistry and oral-maxillofacial surgery.

5. Requisites (if applicable)

5.1. For lectures	- the lecture takes place in an amphitheater with a projection system, screen, monitor and computer; - ambient lighting and environment suitable for the conduct of the course; -students will attend lectures with their mobile phones turned off. Phone calls during lectures will also not be tolerated, nor will leaving the lecture room in order to receive personal phone calls. - the smoking, consumption of food or beverages during lecture will

	not be allowed - tardiness will not be tolerated as it is disruptive towards the learning process
5.2. For practical activities	-

6. Acquired specific competences

Professional competences	• Acquiring theoretical notions for laser applications in dentistry; • Acquiring theoretical notions related to the physics of lasers and laser types indications in dentistry;
Transversal competences	• Utilizing the acquired notions in new contexts • Applying theoretical notions in practical activities. • Establishing interdisciplinary correlations within the studied fields. • To have the ability to effectively communicate with the patient. • To demonstrate an interest towards professional improvement towards the constant training of analytic and synthetic thinking abilities. • To demonstrate involvement in research activities such as the elaboration of scientific articles.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	The course offers Vth year Medical Dentistry students of the Dental Medicine Faculty the theoretical notions linked with laser applications in dentistry.
7.2. Specific objectives	Introductory notions of physics-related principles of lasers and laser radiation; Acquiring theoretical knowledge of the laser and oral tissues interaction; Acquiring knowledge of laser parameters and types of laser use in dental medicine. The acquisition of knowledge related to laser applications in various fields of dentistry. Knowledge of the effects of low level laser energy. Protective measures and safety of lasers.

8. Content

Lecture	Teaching methods	Observations
1. Laser definition. Principles and characteristics of laser radiation.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
2. Laser radiation parameters and the main types of lasers used in dental medicine.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
3. Interaction of laser radiation with the tissues of the oral cavity.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
4. Laser applications in conservative dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
5. Laser applications in endodontic treatment.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
6. Applications of laser in prosthetic treatment.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations. and Video
7. Laser applications in periodontal treatment.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
8. Applications of laser in oral surgery.	Lecture, systematic,	Oral presentations, Power-Point

	interactive presentation	Presentations and Video.
9. Applications of laser in oral implantology.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
10. Laser applications in orthodontics and Pediatric Dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
11. Applications of laser in aesthetic dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
12. The principles and effects of laser radiation with low levels energy. Applications of low level laser therapy (LLLT) in dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
13. Protective and safety measures in the use of laser in dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.
14. Indications, contraindications and limitations of laser in dentistry.	Lecture, systematic, interactive presentation	Oral presentations, Power-Point Presentations and Video.

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9. **Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field**

- Permanent and constructive dialogue with representatives from the dental medicine communities – in view of identifying the needs and expectations of potential employers in the field and of adjusting the analytical curricula to the current necessities of active practice.
- Permanent participation from department members in scientific manifestations, forms of continual medical education, dental materials and equipment exhibits for current dental practice – in view of maintaining any theoretical and practical information included in the course structure as current as possible..
- Maintaining contact with other teaching staff members from the field, within similar

departments from other teaching institutions, in order to coordinate the curricula with other similar programs within other institution of higher learning.. • The studied notions are in accordance with current rules and regulations and are compatible with all dental medicine activities, nation-wide, on the clinical dental medicine segment.

10. Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria(covering area and the correctness of acquired knowledge, logical coherence) Understanding ability for fundamental problems and particularization Evaluation of theoretical knowledge	Written examination with multiple answer-type questions	**100%**
10.5. Practical Activity	-	-	**-**
10.6. Activity during semester	-	-	**-**
10.7. Minimum performance standard The ability to aptly utilize specialized terminology in context. The acquiring of theoretical and practical notions of specialized examination; The acquiring of theoretical and practical knowledge about physics of lasers and laser radiation principles Knowledge relating to the interaction of laser radiation with oral tissues Knowledge relating to laser parameters and types of laser use in dental medicine Acquiring the necessary knowledge for the laser applications in various fields of dentistry Knowledge relating to the effects of low level laser energy. Knowledge of protective measures and safety of lasers.			

MINIMAL INVASIVE DENTISTRY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	Universityof Medicineand Pharmacy "Iuliu Haţieganu"Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	III, Oral Rehabilitation
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form ofeducation	Full-time program

2. Information about the **discipline**

2.1. Course title	Minimally invasive dentistry
2.2. Responsible for lecture	Prof. Dr. Mindra Badea
2.3. Responsibles for practical activity	-

2.4. Year of study	5	2.5. Semester	I	2.6. Form of evaluation	Project evaluation	2.7. Course type	DO	
							DS	

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	**3.2. Course**	**1**	**3.3. Practical Activity**	**-**
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**-**
3.7. Distribution of time needed/week					Hours
a. Study using text books, lecture notes, references					15
b. Individual study using on-line platforms, field research					5
c. Preparing seminars/Laboratoryactivities, homework, projects, portfolios, essays					4
d. Tutoring					4
Examination/ semester					6
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Basic knowledge of anatomy, physiology and physiopathology of the oral cavity, dental propaedeutics and cariology.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheatre with projector system
5.2. For practical activities	No practical activities

6. Acquired specific competences

Professional competences	• The capacity of using the speciality terminology in an adequate manner and in context • Acquire notions of dental prevention for adults and the elderly. • Knowing various dental diagnostic methods: minimally invasive, clinical methods, visual methods (caries indices), clinical methods (diagnodent) and imagistic methods (radiography) • Obtaining knowledge of dental plaque control using different methods • Perfecting the capacity to assess the carious risk level and to share this information. Modern carious detection and assessment methods (ICDAS II, Diagnodent) • Acquiring the practical experience necessary in order to be able to use correctly the appropriate instruments for performing the dental caries prophylaxis and dental treatments preserving the maximum amount of hard dental tissues, using different methods and materials.
Transversal competences	• The capacity of utilizing the learned notions in a new context • To apply the theoretical knowledge in the practical activity • Establishing interdisciplinary correlations between the studied subjects

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Acquiring knowledge of minimally invasive treatments aiming to prevent oro-dental pathology for adults and elderly. Treating patients with general health concerns.
7.2. Specific objectives	• Acquiring knowledge of diagnosis in order practice a minimally invasive approach • Acquiring knowledge of dental prevention for chidlren, teenagers, adults and the elderly. • The introduction of dental plaque control notions. • Acquiring knowledge of the auxiliary means of hygiene and personalizing their usage. • Detailed study of some aspects of minimally invasive dentistry • Detailed study of topical fluoridation and of the products to be used. • Prophylactic issues regarding therapeutical approach at patients with general diseases. • Aquiring knowledge about cross-infections control in dental office • Practicing the literature review capacity and bibliographic research

8. Content

a. Lecture	Teaching methods	Observations
1. Minimally invasive dentistry –defintition, general issues **2.** Minimally invasive diagnosis of dental caries and indices for caries prevalence: DMF/dmf-T si DMF/dmf-S, ICDAS, Nyvad **3.** ,4. Clinicaland anamnestic evaluation of the cario-receptivity (CRA, McGill grid, CAMBRA, Cariograma, Diagnodent, Caries Scan, Cariosolv, diet questionnaires, oral hygiene habits) 5. Evaluation of the carioreceptivity based on saliva tests. Types of saliva tests 6. Protocol for individualised prevention of dental caries: parents, children, preschool children, adults, elderly, patients with special needs 7. Remineralisation therapy of early stage precavitary caries ; topical in-ofice and at-home applications of fluoride productsfor remineralisation 8. Conservative and minimally invasiv e treatment of early stage enamel caries (micro-abrasion, minimally invasive preparations, low-viscosity resin infiltrations) 9. Minimally invasive treatment of dental fluorosis (micro-abrasionand tri-calcicic phosphates) 10.Remineralisation therapy inelderly 11. Using electronical recording of periodontal statusfor motivating the patient. Evaluation of risk factorsfor marginal chronical periodontitis 12. , 13. Laser-therapy in dentistry	Lecture, interactive, systematic presentation	Oral presentations, Power-Point presentations

14. Ozonotherapy in dentistry		

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b. Practical Activities	**Teaching Methods**	**Activity to be done by students**
No practical activities		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Establishing a permanent and constructive dialogue with the representatives of the dental community – in order to identify the future employers' needs and expectations and to adapt the analytical program to the requirements of nowadays' dental practice.
- The continuous participation of the department members to scientific conferences, to different forms of continuous medical education and dental devices and dental materials exhibits – in order to maintain the cutting edge quality of the theoretical and practical knowledge.
- Establishing and maintaining contact with other professors in the field, tenured at different universities in order to be able to coordinate the analytical program of our department with that of the programs thought at other universities.
- The studied notions are in concordance with the current regulations and are compatible with the applied activities at the national level concerning clinical dental medicine.

10. Evaluation

Activity type	**10.1. Evaluation criteria**	**10.2. Evaluation**	**10.3 Percentage from the final grade**
10.4. Lecture	General evaluation criteria (range and	Project of	**100%**

	accuracy of accumulated knowledge, logical consistency, fluency of speech) The ability to understand the fundamental issues and customization.	literature review	
10.5. Practical Activity	No practical activities		
10.7. Minimum performance standard			
Acquiring the main caries prevention notions pertaining to the dental treatment speciality: • Cross-infection control • Main and auxiliary means of hygiene • Oral health status quantification methods • Topical fluoridation • Professional cleaning • The primary and secondary dental caries prophylaxis • Iartogeny prophylaxis • Oral hygiene in patients with general health concerns			

23.THE CURRICULA OF THE 6TH YEAR

MAXILLO-FACIAL SURGERY

1. Information about the program

8.1. University	”Iuliu Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca
8.2. Faculty	Dental Medicine
8.3. Department	DEPARTMENT I – Maxillofacial Surgery and Radiology
8.4. Field of study	Dental Medicine
8.5. Cycle of academic studies	Graduate degree
8.6. Study Program	Dental Medicine English Section
8.7. Qualification	Dentist
8.8. Mode of study	Full-time learning

9. Information about the subject

2.1. Subject name			**MAXILLOFACIAL SURGERY 6th YEAR**					
2.2. Course coordinator			Assoc. Prof. Dinu Cristian					
2.3. Practical courses coordinators			Lecturer Armencea Gabriel					
2.4. Study year	6	2.5. Semester	2	2.6. Evaluation type	Theoretical exam + Practical exam	2.7. Discipline regime	Content	**DS**
							Obligatoriness	**DO**

10. Total estimated time (hours/semester for educational activities)

3.1. Total hours/week	**4**	3.2. Theoretical	**1**	3.3. Practical	**3**
3.4. Total number of hours in the educational plan	**56**	**3.5. Theoretical**	**14**	**3.6. Practical**	**42**
3.4. **Time distribution / week**					No. of hours
Manual, course support, bibliography and notes study					17
Extra documentation from the library, online and in the field					21
Seminaries/practical courses, homework, reports, portfolios and essays					19
Tutoring					8
Exams/semester					4
Other activities					-
3.7. Total number of hours for individual study (a+b+c+d)			69		
3.8. Total number of hours/semester			125		
3.9. Total credits			5		

11. Preconditions (where applicable)

4.1. Curriculum	Head and neck anatomy. Physiology. Pathophysiology. Pathology. Dental radiology. Dental-maxillary apparatus anatomy and physiology. Oral and Maxillofacial Surgery and pathology.
4.2. Abilities	The ability to analyze the anatomo-clinical parameters while studying a clinical case. Critical analysis and interpreting of laboratory results and other paraclinical explorations. The ability to set the correct clinical diagnosis in the orofacial area. Correct prescriptions writing.

12. Conditions (where applicable)

5.1. For courses	- amphitheater with projection systems - students will keep their phones shut off during courses. No phone calls are allowed during the courses. Students are not permitted to leave the amphitheater in order to take personal phone calls. - food and beverage consumption is not allowed during the courses. - students are not allowed to be late for courses since their tardiness can be disruptive for the educational activity.
5.2. For practical courses	- laboratories that offer proper conditions for the practical courses to unfold - offices with dental chairs, treatment rooms, operating rooms - students will keep their phones shut off while the practical courses are unfolding. No phone calls are allowed during the practical courses. Students are not permitted to leave the laboratory in order to take personal phone calls. - food and beverage consumption is not allowed during the practical courses. - students are not allowed to be late for the practical courses since their tardiness can be disruptive for the educational activity.

13. Specific abilities acquired

Professional	Appropriation of theoretical and practical notions regarding the patient's

abilities	examination specific for this field. Acquiring knowledge of oral and maxillofacial pathology. Acquiring the necessary abilities to set the correct diagnosis and establish a correct treatment plan in salivary glands pathology and maxillofacial pain.
Transversal abilities	The use of the acquired knowledge in new contexts The implementation of theoretical notions in practical situations Establishing inter-disciplinary correlations between the studied subjects The ability to communicate with the pacient in an efficient way To show preoccupation for professional development by training the abilities of analytical and synthetical thinking To prove involvement in research activities by elaborating scientific articles

14. Aims of the subject (arising from the acquired specific abilities list)

14.1. General aims	The course offers Sixth year students of the Dental Medicine Faculty theoretical notions concerning oral and maxillofacial pathology. The practical courses aim to offer students the necessary skills to set a correct diagnosis and establish an adequate treatment plan in salivary glands pathology and maxillofacial pain.
14.2. Specific aims	Assimilating knowledge of oral and maxillofacial pathology. Appropriation of the necessary skills to set a correct diagnosis and establish an adequate treatment plan in salivary glands pathology and maxillofacial pain.

15. Content

15.1. Course	**Teaching methods**	**Observations**
1. The anatomy and physiopathology of salivary glands. Notions of semiology. Methods of exploring the salivary glands.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
2. The malformations of salivary glands. Salivary secretory disorders. Hyposialia, hypersialia.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
3. The wounds of the salivary glands. The fistulas of the salivary glands.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
4. The inflammations of the salivary glands: etiology. Acute non-lithiasic sialadenitis: acute parotiditis, chronic parotiditis.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
5. The inflammations of the salivary glands: etiology. Acute non-lithiasic sialadenitis: acute submaxilitis, chronic submaxilitis.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
6. Salivary lithiasis. Etiology. Clinical types. Submandibular lithiasis. Diagnosis principles and treatment.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
7. The lithiasis of the Stenon duct. The lithiasis of the parotid gland. Diagnosis	Lecture, Systematic and interactive explanations of	Oral presentations, Power-Point presentations

principles and.	topic related cases.	
8. The tumors of the salivary glands. General aspects. The classification of salivary glands tumors. Clinical types of salivary glands tumors. Benign tumors of the salivary glands.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
9. The malignant tumors of the salivary glands. The dentist's tasks. Treatment principles.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
10. The sialosis. General aspects. The Sjogren syndrome. The Mickulitz disease. The Mickulitz syndrome. The parotidomegaly.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
11. The pain in the oro-maxillo-facial area. General aspects, physiopathology and classification. The superficial somatic pain. The burning mouth syndrome. The deep somatic pain. The musculoskeletal pain.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
12. The deep somatic pain. The visceral pain. The pulpal pain. The vascular pain.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
13. The neurogenic pain. The paroxysmal neuralgic pain. The essential trigeminal neuralgia. The essential glossopharyngeal neuralgia.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
14. The neurogenic pain. The persistent neuralgic pain. Symptomatic or secondary facial neuralgias. The psychogenic pain.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations

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15.2. Practical courses	**Teaching methods**	**Students' practical activity**
1 – 4. Improving the knowledge on the clinical examination of the patients with oro-maxillo-facial diseases.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
5. Inserting the results in the clinical observation sheets and	Power-point presentations.	Interactive teaching. Practical courses with the participation of the

corroborating the clinical results with the paraclinic ones.	Interactive teaching.	students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
6. Improving the abilities concerning hygiene rules, asepsis and antisepsis in the ambulatory care and for internal patients in the oro-maxillo-facial surgery clinic.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
7. The evaluation of the patient with salivary gland diseases.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
8. Methods of exploring the salivary glands.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
9. The examination and case presentation in acute diseases of the salivary glands.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
10. The examination and case presentation in chronic diseases of the salivary glands.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
11. The examination of the patient with pain in the oro-maxillo-facial area.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
12. Complementary investigations in patients with pain in the oro-maxillo-facial area.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
13. The essential trigeminal neuralgia – case presentation.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
14. Symptomatic and secondary	Power-point presentations.	Interactive teaching. Practical courses with the participation of the

facial neuralgias – case presentation.	Interactive teaching.	students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.

Bibliography:

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- Alexandru Rotaru, Grigore Băciuţ, Horaţiu Rotaru, CHIRURGIE MAXILO-FACIALĂ, Vol. I si Vol. II, Editura Medicală Universitară "Iuliu Haţieganu" Cluj- Napoca, 2003
- Bucur A. & all, "Compendiu de Chirurgie oro-maxilo-facială" vol.II Editura QMed Publishing, Bucureşti 2009
- Al. Bucur, Gr. Băciuţ, M. Surpăţeanu, sub redacţia, *Managementul afecţiunilor chirurgicale oro-maxilo-faciale*, 2012, Editura Didactică şi Pedagogică, Bucureşti, ISBN 978-973-30-3136-9

9. The corroboration of the subject's content with the expectations of the epistemic community members, professional associations and representative employers in the field.

- Permanent and constructive dialogue with the representatives of the Dentists Community in order to identify the needs and expectations of the employers in the field and adjusting the curriculum in order to best fit the needs of the current practical activity
- The participation of the teachers at congresses, medical exhibitions and different forms of continuous medical education in order to maintain the information as up-to-date as possible.
- Constant contact with other professors in the field from other universities to coordinate the curriculum.
- The studied notions are in agreement with the current regulations and are compatible with the activities that are conducted at a national level in the Dental Medicine field.

10.Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation methods	Percent of final grade
10.4. Theoretical course	General evaluation criteria (coverage of acquired knowledge, logical coherence) The understanding of the fundamental and customization aspects is evaluated.	Written exam - multiple choice questions	**50%**
10.5. Practical course	Theoretical knowledge evaluation	Oral presentation (case presentation) choosing from the subjects presented during the theoretical and practical courses.	**50%**
10.6. The activity during the semester			
10.7. Minimal performance standards			
The ability to properly use the correct terminology. Obtaining the practical and theoretical notions for examining the patient Knowing the theoretical and practical notions concerning the local and loco-regional anesthesia			

techniques used in current dental practice. Knowing the anatomy and the physiology of the dento-maxilllary apparatus. The assimilation of the required knowledge concerning the socio-proffesional integration, as a future doctor.

ORTHODONTICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Conservative odontology
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Orthodontics**					
2.2. Responsible for lecture			Conf.Dr. Dana Festila					
2.3. Responsible for practical activity			Conf.Dr. Dana Festila S.L.Dr. Mircea Ghergie Asist.Dr. Olimpia Bunta Asist.Dr. Mihaela Pastrav Asist.Dr. Ioana Colceriu-Simon					
2.4. Year of study	VI	2.5. Semester	2	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					28
Individual study using on-line platforms, field research					6
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					2
Tutoring					2
Examination/ semester					2
Other activities					1
3.8. Total hours of individual study (a+b+c+d)				41	
3.9. Total hours/semester				125	
3.10. Number of credits				5	

4. Prerequisites (if needed)

4.1. Curriculum	Notions of orthodontics and dental radiology
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	amphitheater with a projection system
5.2. For practical activities	Laboratory with specific practical activities: Cabinet equipped with dental units

6. Acquired specific competences

Professional competences	• Capacity to properly use speciality terms • Knowing the morphology of various groups of teeth • Knowing the morphology of the dental arches • Acquireing notions of norlam oclusion • Acquireing general information about the reference positions of the maxilla and mandible : centric relation, posture, habitual bite • Acquiring practical experience through the use of specialist instruments for executing the necessary stages in establishing an orthodontic diagnosis • Acquiring necessary practical experience in utilising specialist instruments in the view of manipulating orthodontic appliances
Transversal competences	• Utilisation of notions from new context • Application of theoretic notions in the practical activity • Establishing a interdisciplinary correlation

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of dento-maxillary anomalies and possibilities of treatment
7.2. Specific objectives	• Appropriation of knowledge about growth and development of the dento-maxillary apparatus • Clinic and complementary examinations • Remembering the clinical table for dento-maxillary anomalies and etiological factors implicated in its production • Establishing a diagnostic and therapeutic plan • Knowledge of objectives of treatments • Knowledge of mobile orthodontic devices (classification, components, mode of action) • Appropriation of practical knowledge for realizing the mobile orthodontic devices • Prophylaxis and interception of the dento-maxillary anomalies • Practicing capacity for synthesizing documents bibliographic

8. Content

Lecture	Teaching methods	Observations
1. Functional ethiological factors of the orthodontic anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation

2. Definition and classification of functional appliances. Principles of action . Miofunctional appliances.	Lecture, systematic interactive exposure	Oral exposure power-point presentation
3. Inclined planes : definition, classification, action. Types of inclined planes. Indications	Lecture, systematic interactive exposure	Oral exposure power-point presentation
4. Inhibition functional appliances : indications, action	Lecture, systematic interactive exposure	Oral exposure power-point presentation
5. Activator and monoblock : description, indications, action	Lecture, systematic interactive exposure	Oral exposure power-point presentation
6.Balters Bionator: description, indications, action. Frankel appliances: description, indications, action	Lecture, systematic interactive exposure	Oral exposure power-point presentation
7. Twin Block : description, indications, action. Clear aligner/ Invisalign	Lecture, systematic interactive exposure	Oral exposure power-point presentation
8. Fixed appliances: history, advantages, disadvantages, components	Lecture, systematic interactive exposure	Oral exposure power-point presentation
9. Treatment phases of the fixed technique; objectives and means of obtaining them	Lecture, systematic interactive exposure	Oral exposure power-point presentation
10. Anchorage: means of obtaining orthodontic anchorage	Lecture, systematic interactive exposure	Oral exposure power-point presentation
11. Extra oral forces : classification, components, action, indications	Lecture, systematic interactive exposure	Oral exposure power-point presentation
12. Relapse and retention – causes of relapse, theories of retention; retention appliances	Lecture, systematic interactive exposure	Oral exposure power-point presentation
13. Adult orthodontic treatment : pre prosthetic, pre surgical treatments	Lecture, systematic interactive exposure	Oral exposure power-point presentation
14. Surgical methods associated to the orthodontic treatment	Lecture, systematic interactive exposure	Oral exposure power-point presentation

Bibliography

10. Cocarla E – Ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca, 1995.
11. Cocarla E – Stomatologie pediatrica , Ed. UMF „Iuliu Hatieganu”, Cluj-Napoca, 2000.
12. Cocarla E – Aparate ortodontice fixe – tehnici moderne, Ed.Med.Univ. „I.Hatieganu”, Cluj-Napoca,2002.

13. Mesaros M – Notiuni practice de ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca,2003
14. Rakosi T, Janos I, Graber M – Orthodontics- diagnosis, Thieme, 1993.
15. Houston WJB, Tulley WJ – A textbook of orthodontics , Wright, 1986.
16. Orton HS – Functional appliances in orthodontic treatment: an atlas of clinical prescription and laboratory construction, Quintessence, 1990.
17. Proffit WR, Fields J,Sarver D - Contemporary orhodontics , Mosby, Elsevier,2007.
18. Graber VV, Vanarsdall, Vig- Orthodontics.Current principles and techniqueS, Fifth edition, Mosby, Elsevier, 2012.

Practical Activities	**Teaching Methods**	**Activity to be done by students**
Diagnosis: clinical examination and patient history	Interactive exercises on real supports	Examination and patient files
Diagnosis: cast study	Recognizing teeth and occlusion. Measurements	Examination and measurement on casts
Diagnosis: photostatic study	Facial examination on virtual support	Examination of pictures
Daignosis: radiological examination	Virtual support	Examination of radiographs
Treatment planning	Interactive exercises on real and virtual supports (casts, pictures)	Conclusions of examination
Establishing the design of the orthodontic appliance	Interactive exercises on real supports (casts)	Drawing exercises
Application and use of the orthodontic appliances	Real support (patient)	Application and use of the orthodontic appliances exercises
Check-ups, activation of the removable and functional orthodontic appliances	Real support (patient)	activation of the removable and functional orthodontic appliances exercises
Muscle gymnastics	Real support (patient)	Demonstrations
Orthodontic extractions	Real support (patient)	Orthodontic extractions
Clinical cases	Real support (patient)	Prophylaxis
Clinical cases	Real support (patient)	Synthesis of acquired information and testing

Bibliography:

10. Cocarla E – Ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca, 1995.
11. Cocarla E – Stomatologie pediatrica , Ed. UMF „Iuliu Hatieganu”, Cluj-Napoca, 2000.
12. Mesaros M – Notiuni practice de ortodontie , Ed. Medicala Univ. “Iuliu Hatieganu” , Cluj-Napoca,2003
13. Mesaros M, Muntean A – Medicina dentara pediatrica, Ed.Med.Univ. “ Iuliu Hatieganu”, Cluj-

Napoca, 2012.
14. Rakosi T,Janas I, Graber M – Orthodontics-diagnosis, Thieme, 1993.
15. Proffit WR, Fields J,Sarver D - Contemporary orhodontics , Mosby, Elsevier,2007.
16. Graber VV, Vanarsdall, Vig- Orthodontics.Current principles and techniqueS, Fifth edition, Mosby, Elsevier, 2012.
17. McDonald F, Ireland AJ – Diagnosis of the orthodontic patient , Oxford University Press, 1998.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- . Permanent and constructive dialog with representative dentists from the community in the view of identification of the need and demands of employers in the domain
- Permanent participation from disciplinary members of scientific forms of medical education continues and exposure to apparatus and materials dedicated to the practical activities in dental medicine and orthodontics
- Maintaining contact with the other cathedras in the domain, teaching in other institutions of superior studies for the coordination and continual teaching with other similar programs of superior studies

Studied notions that are in concordance with the vigorous regulations and are compatible with the activities at a national level in the dental medicine and orthodontic segment

10. Evaluation

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General criteria for evaluation (covered area of studies and accumulated knowledge, logical coherence and fluent expression of the material) Capacity of understanding the problems Understanding the fundamental of the particulars	Examen scris tip intrebari redactionale	**50%**
10.5. Practical Activity	Evaluation of theoretical knowledge and practical ability	Practical exam	**50%**
10.6. Activity during semester			
10.7. Minimum performance standard			
- Recognition and diagnostic of dento-maxillary anomalies - Establishing therapeutic objectives - Prophylactic treatment and interception of dento-maxillary anomalies - Recognition and description of mobile orthodontic appliances			

PROSTHETIC DENTISTRY – REMOVABLE PARTIAL DENTURES

1. Information about the program

1.1.	Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca

1.2. Faculty	Dental Medicine
1.3. Department	Dental medicine/dep 4
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Removable partial dentures**					
2.2. Responsible for lecture			Assist. Univ. Dr. Ispas Ana					
2.3. Responsible for practical activity			Assist. Dr. Ispas Ana Assist. Dr. Crăciun Antarinia Assist. Dr. Manziuc Manuela Assist. Dr. Oana Almasa					
2.4. Year of study	6	2.5. Semester	11	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	4
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					26
Individual study using on-line platforms, field research					20
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					14
Tutoring					6
Examination/ semester					3
Other activities					
3.8. Total hours of individual study (a+b+c+d)				66(trim I)	
3.9. Total hours/semester				150 (trim I)	
3.10. Number of credits				6	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of the teeth morphology and dental arches.
4.2. Competences	Knowledge of technology to achieve the removable partial prosthodontics.

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with protection system.
5.2. For practical activities	Dental offices with dental units.

6. Acquired specific competence

Professional competences	Capacity to demonstrate selection and combination skills in theoretical and practical knowledge of designing partial removable dentures. Capacity to demonstrate cognitive skills and abilities on developing a treatment plan for removable partial denture.
Transversal competences	Capacity to demonstrate skills and abilities of working in a team, developing professional and ethical values; good communication skills, abilities in problem solving and making decisions.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	A comprehensive understanding of the complex issues involved in the scientific basis of removable prosthodontics required to establish a good treatment plan for the edentulous patient.
7.2. Specific objectives	Acquiring theoretical and practical knowledge related to the partial edentulous therapy. Knowledge of the components of the removable partial denture (RPD) and acrylic RPDs. Acquiring biomechanical knowledge of the removable partial denture and acrylic RPDs. Establishing a diagnosis and treatment plan for the removable partial denture. Performing the required clinical and laboratory procedures for ensuring an RPD. Surveying the diagnostic cast and performing the design of the removable partial denture on the diagnostic cast. Understanding the difference between a provisional acrylic removable partial denture and a removable partial denture. Practicing the synthesis and documentation capacity.

8. Content

o. Lecture	Teaching methods	Observations
1. Objectives and indications of prosthodontic treatment in removable partial denture. Preliminary examination of the partially edentulous patient.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
2. Final clinical examination of the partially edentulous patient. Diagnosis and treatment plan.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
3. Treatment plan. Objectives. Phases: pre-prosthetic and prosthetic treatment plan.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
4. The acrylic removable partial denture. Components: saddles and artificial teeth, palate plate, wrought wire clasp, acrylic clasp).	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
5. The removable partial denture (RPD). Components of RPD: saddles and artificial teeth.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
6. Components of the removable partial denture	Lecture; Systematic and	Oral presentation;

(RPD): mandibular and maxillary major connectors.	interactive presentation, problem solving;	Power point presentation;
7. Components of the removable partial denture (RPD): direct retainer. Type of direct retainers. Functions of the direct retainer.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
8. Cast clasp (circular clasps, Roach clasps, Ney clasps and particular clasps).	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
9. Precision and semi-precision attachments. Classification of the attachments. Minor connector.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
10. Biomechanics of the removal partial denture. Possible movements of the removable partial denture.	Lecture; Systematic and interactive presentation, problem solving	Oral presentation; Power point presentation;
11. Surveying the diagnostic cast. Principles of designing the metal framework. Treatment plan for Kennedy class I edentulous arches.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
12. Design of RPDs in Kennedy class II edentulous arches and Kennedy class III edentulous arches and Kennedy class IV edentulous arches. Making the design of the RPD on the diagnostic cast.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
13. Clinical and laboratory steps for making an RPD: preliminary oral examination, final oral examination. Specific pre-prosthetic procedures: impression (unique functional impression and compressive functional impression), try-in of the framework and recording the relationships of occlusion.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;
14. Try-in of the wax pattern. Transforming the wax pattern in the final denture. Try-in and adjustments of the denture. Monitoring the patients. Relining and rebasing.	Lecture; Systematic and interactive presentation, problem solving;	Oral presentation; Power point presentation;

Bibliography

1. **Liana Maria Lascu. Examinarea pacientului edentat parțial. Elemente structurale ale protezei parțiale mobilizabile scheletate. Ed. Medicală Universitară "Iuliu Hațieganu" Cluj-Napoca, 2006.**
2. **Liana Maria Lascu. Etape clinico-tehnice în realizarea protezei scheletate parțiale mobilizabile. Ed. Medicală Universitară "Iuliu Hațieganu" Cluj-Napoca, 2006.**
3. **Rodney D. Phoenix, David R. Cagna, Charles F. DeFreest. Stewart's Clinical Removable partial prosthodontics. 4th Edition, Quintessence, 2008.**
4. **Allan B. Carr David T. Brown. McCracken's removable partial prosthodontics.**

Practical Activities	Teaching Methods	Activity to be done by students

1. Preliminary examination of the partially edentulous patient whose treatment plan can be a removable partial denture.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
2. Preliminary impressions for obtaining the diagnostic cast.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
3. Indications of supplementary examinations: radiographs and diagnostic casts.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
4. Pouring the cast and performing the diagnostic cast.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
5. Final examination of the partially edentulous patient. Establishing the comprehensive diagnosis. Developing an appropriate treatment plan for the partially edentulous patient.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
6. Mounting the casts on the articulator.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
7. Surveying the diagnostic cast (identifying the most favorable path of insertion, tripoding the cast, placing the height of contour, locating and making	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures,	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic

the undercut area).	establishing the treatment plans. Knowledge seminars.	procedures which are involved in the treatment steps of fixed and mobile prosthetics.
8. Designing the treatment plan.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
9. Presentation and discussion of the principles of RPDs biomechanics.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
10. Repeating the analysis and design in Kennedy class I, II, III and IV.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
11. Accomplishing the prosthetic procedures for the partially edentulous patients.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
12. Accomplishing the prosthetic procedures for the partially edentulous patients.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
13. Accomplishing the prosthetic procedures for the partially edentulous patients.	Systematic presentation, discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Clinical examinations; Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.
14. Accomplishing the prosthetic	Systematic presentation,	Clinical examinations;

procedures for the partially edentulous patients.	discussions of the clinical cases, demonstrations of the prosthetics procedures, establishing the treatment plans. Knowledge seminars.	Establishing of the prosthetics treatment plan; Performing of the prosthetic procedures which are involved in the treatment steps of fixed and mobile prosthetics.

Bibliography:

1. Liana Maria Lascu. Examinarea pacientului edentat parțial. Elemente structurale ale protezei parțiale mobilizabile scheletate. Ed. Medicală Universitară "Iuliu Hațieganu" Cluj-Napoca, 2006.
2. Liana Maria Lascu. Etape clinico-tehnice în realizarea protezei scheletate parțiale mobilizabile. Ed. Medicală Universitară "Iuliu Hațieganu" Cluj-Napoca, 2006.
3. Rodney D. Phoenix, David R. Cagna, Charles F. DeFreest. Stewart's Clinical Removable partial prosthodontics. 4th Edition, Quintessence, 2008.
4. Allan B. Carr David T. Brown. McCracken's removable partial prosthodontics

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

This course is also applicable to general dental practitioners who want to improve and enhance their skills and abilities in the removable partial denture achievement.

10.Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulate knowledge, logical coherence). Ability to understand fundamental problems and customization.	Written exam 5 questions	**50%**
10.5. Practical Activity	Assessment of the theoretical knowledge and practical skills. The possibility of prefiguring a final prosthetic treatment by removable partial denture.	Oral exam	**40%**
10.6. Activity during semester	Accomplishing the prosthetic procedures. Surveying the diagnostic cast and making the design of removable partial denture.	Two tests; Making the design of the RPD;	**10%**

10.7. Minimum performance standard

Students should know the structural components of the removable partial denture.
Students should be able to demonstrate knowledge of the biomechanical principles of the removable partial denture.
Students should be able to establish proper treatment plans for the edentulous patients who receive removable partial dentures.
Students should able to demonstrate basic knowledge and the fundamentals of the various prosthetic

procedures for removable partial dentures.

PEDODONTICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Dental Medicine 2 (Conservative Odontology)
1.4. Domain of study	Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine (DMD)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Pedodontics**					
2.2. Responsible for lecture			Șef Lucr.Dr. Meda-Romana Simu					
2.3. Responsible for practical activity			Conf. Dr. Alexandrina Muntean Șef Lucr.Dr. Meda Simu Asist Dr. Raluca Diana Ghiran (Șuhani) Asist. Irina Lupșe Asist. Lavinia-Luminița Cosma					
2.4. Year of study	**6**	2.5. Semester	**XII**	2.6. Form of evaluation	**Theoretical exam+ Practical exam**	2.7. Course type	Content	**Specialty Discipline**
							Obligativity	**Obligatory Discipline**

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**6**	3.2. Course	**2**	3.3. Practical Activity	**4**
3.4. Total hours in the curriculum	**84**	**3.5. Course**	**28**	**3.6. Practical activity**	**56**
3.7. Distribution of time needed					Hours
Study using text books, lecture notes, references					5
Individual study in the library, using on-line platforms, field research					5
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					12
Tutoring					1
Examination/ semester					18
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				41/sem XII	
3.9. Total hours/semester				125 sem XII	
3.10. Number of credits				5 sem XII	

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of the anatomy and physiology of dento-maxillary system.
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system.
5.2. For practical activities	Cabinets with dental units.

6. Acquired specific competences

Professional competences	• Particularities of clinical and complementary examination in pediatric dental medicine • Behavioral particularities of the child and adolescent patient • Oral mucosal pathology in children • Dento-periodontal traumatic injuries during childhood and adolescence • Pedodontic treatment in children with general medical problems • Parodontopathies - peculiarities of diagnosis and treatment during childhood and adolescence • Medical emergencies in the pediatric dental office
Transversal competences	• Using similar concepts in new contexts • Application of theoretical concepts in practical activity • Establish interdisciplinary correlations in the studied areas.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	• Psychology and approach to the child in the dental office • Particularities of diagnosis and treatment of dental lesions in children and youth • Particularities of mucosal diseases, periodontal diseases, during childhood and adolescence • Dento-periodontal trauma in children and young people • Management of patients with general pathology • Prevention of dento-periodontal diseases and dento-maxillary anomalies during childhood and adolescence
7.2. Specific objectives	• Particularities of clinical and complementary examination in children and young people • Techniques of communication and approach of the child and adolescent patient • Mucosal disorders in children • Dento-periodontal traumatic lesions in children and adolescents • Periodontal diseases in children and young people • Elaboration and phasing of the complex treatment plan • Exercise of synthesis and bibliographic documentation.

8. Content

8.1. Lecture	Teaching methods	Observations
1. Traumatism of temporary teeth - clinical forms, diagnosis, treatment.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations.
2. Traumatism of young permanent teeth - clinical forms, diagnosis, treatment.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
3. Diseases of oral mucosa in children and adolescents - clinical forms, diagnosis,	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations

treatment.		
4. Periodontal diseases in children and adolescents - clinical forms, diagnosis, treatment.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
5. The therapeutic approach of children and adolescents with disabilities.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
6. Dental treatment of children with general disorders.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
7. Pain control in pediatric dentistry: anesthesia local, loco-regional, general, sedation.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
8. Medication in children and adolescents.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
9. Dental extraction in pediatric dentistry - indications, contraindications, preoperative preparation, postoperative control, local complications, general, monitoring.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
10. Prosthetic treatment in children and young adults, space maintenance, prosthetic treatment, conjunctival prosthetic treatment, complex oro-dental restorations.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
11. General emergencies in the pediatric dental office.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
12. Elaboration of the pediatric dental treatment plan.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
13. Prophylaxis of dento-maxillary anomalies in children and adolescents.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
14. Therapeutic approach of patients with labio-maxilo-palatine clefts during childhood and adolescence.	Lecture, systematic, interactive exposition	Oral exposure, Power Point presentations
8.2 Practical activity	**Teaching methods**	**Practical work done by students**
1. Complex clinical examination	Practical demonstration, interactive dialogue	Performing complementary examinations: Radiographies, study models
2. Pedodontic complex diagnosis	Practical demonstration, interactive dialogue	Development of positive / differential diagnosis
3. Individualized treatment plan, emergency treatment	Practical demonstration, interactive dialogue	Realization of the therapeutic plan in a clinical case or on the basis of examination of study models or photomontages
4. Complementary examinations	Practical demonstration, interactive dialogue	Examinations based on study model, Rx and photomontages

5. Diagnosis and therapeutic attitude in temporary teeth trauma	Practical demonstration, interactive dialogue	Elaboration of the diagnosis and determination of the therapeutic behavior in a case of trauma
6. Diagnosis and therapeutic attitude in young permanent teeth trauma	Practical demonstration, interactive dialogue	Elaboration of the diagnosis and determination of the therapeutic behavior in a case of trauma
7. Clinical and complementary examinations in periodontal disease in children	Practical demonstration, interactive dialogue	Recognition of periodontal disease in children and young people
8. Establishing the therapeutic attitude in children periodontitis	Practical demonstration, interactive dialogue	Recognition of periodontal disease and therapeutic attitude in children
9. Clinical diagnosis of mucosal diseases in children	Practical demonstration, interactive dialogue	Recognition of periodontal disease and therapeutic attitude in children
10. Anesthesia in children and young patients	Practical demonstration, interactive dialogue	Perform loco regional anesthesia in children
11. Extraction of temporary teeth	Practical demonstration, interactive dialogue	Performing temporary tooth extraction maneuvers
12. Extraction of permanent teeth	Practical demonstration, interactive dialogue	Performing permanent tooth extraction maneuvers
13. Prosthetic treatment in children and young patients	Practical demonstration, interactive dialogue	Establishing the therapeutic plan, making and applying space maintainers
14. Particular features of pedodontic treatment in children with general medical problems.	Practical demonstration, interactive dialogue	Evaluation of the possibilities of curative and prophylactic treatment in children acute and chronic general disorders

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  TARMURE V, Hipodontia . Diagnostic si posibilitati terapeutice, Ed. Med. Univ. "Iuliu Hatieganu", 2006

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

• Permanent and constructive dialogue with community representatives dentists - to identify needs and expectations of employers in the field and adapt curriculum to the needs of current practical activity.
• Permanent participation of the members of the discipline at scientific manifestations forms of continuing medical education and exhibition of equipment and materials for practical dental activity – in order to maintain theoretical and practical information entered in the discipline structure at current high levels.
• Maintain contact with other teachers in the field, from other universities, to coordinate content taught of similar programs.
• The concepts studied are consistent with the regulations and with the ongoing activities at national level preclinical dentistry segment.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (range and accuracy of accumulated knowledge, logical consistency, fluency of speech). The ability to understand the fundamental issues and customization.	Written exam.	**60%**
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills	Practical exam.	**40%**
10.6. Activity during semester	The continuity of training throughout the semester.	Check tests. **30% of the practical exam final mark**	
10.7. Minimum performance standard			
• Diagnosis and treatment of dento-periodontal traumatic injuries of temporary and permanent			

teeth
• Diagnosis and treatment of dento-periodontal lesions during childhood and adolescence
• Developing the treatment plan
• Prevention and prophylaxis of dental lesions and dento-maxillary anomalies during childhood and adolescence.
• Diagnosis and treatment of simple and complicated odon lesions of temporary and permanent young teeth
• Prevention and prophylaxis of odontous lesions and dento-maxillary anomalies during childhood and adolescence

ORAL REHABILITATION

1. Dates about the program

1.1. Higher education institution	”Iuliu Haţieganu”University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Rehabilitation 3
1.4. Domain of studing	Medicine
1.5. The cycle of studies	License
1.6. Program of studies	Dental medicine
1.7. Qualification	Dentist
1.8. Form of education	Day – with frequency

2. Dates about the department

2.1. Name of Department	**Oral Rehabilitation**							
2.2. Holder of course activities	Assoc. Prof. Dr. Ilea Aranka							
2.3. Holder of practical activities	Lecturer dr. Ionel Anca Assist Univ. dr. Pop Andreea Assist Univ. dr. Bordea Roxana Assist Univ. dr. Sava Arin							
2.4. Year of study	6	2.5. Semestre	1	2.6. Methods of evaluation	Theoretical and practical examination	2.7. The discipline regime	Content	DS
							Obligation	DI

3. Estimated total time (hours per semester of teaching activities)

3.1.Numebr of hours per week	**6**	3.2. Lecture	**2**	3.3. Practical activities	4
3.4. Total hours of the curriculum	**84**	**3.5. Lecture**	**28**	**3.6. Practical Activities**	**56**
3.4. **Time / week hours distribution**					hours
Study by handbook, course support, bibliography and notes					28
Additional documentation in the library, on specialized electronic platforms and in the field					18
Preparation of seminars / laboratories, topics, reports, portfolios and essays					14
Tutorial					2

Exams / semester	2
Other activities	2
3.7. Total hours of individual study (a+b+c+d)	66
3.8. Total hours per semestre	150
3.9. Number of credits	6

4. Precondition (where is necessary)

4.1. Of curriculum	Notions of Ododntology, Endodontics, Prosthetics, Periodontology, Maxillofacial Surgery, Implantology, Orthodontics, Internal Medicine, Pharmacology, Pathophysiology
4.2. Of skills	-

5. Conditions (where is necessary)

5.1. The Lecture	Amphitheater with projection system
5.2. Practical Work	Cabinets with specific facilities for practical activities

6. Specific skills acquired

Proffesional skills	• Acquisition of knowledge related to complex oral rehabilitation of patients. The holistic approach of the patient in the dental medicine office • The ability to decide on the opportunity of a dental operation in the context of the presence of a general condition. • The ability to evaluate the particularities of the dental treatment performed in patients with general conditions. • The ability to evaluate the bidirectional interrelationship between general disorders and oral cavity pathology. • How the therapeutic decision is influenced in the dental medicine cabinet by the metabolic and functional imbalances. • The way in which the therapeutic decision is influenced in the dental medicine cabinet by the complex chronic treatments of the patients. • Prevention of transmission of infectious diseases in the dental office
Transversal skills	• Integration of the concepts assimilated in Ododntology, Endodontics, Prosthetics, Periodontology, Maxillofacial Surgery, Implantology, Orthodontics, Internal Medicine, Pharmacology, Pathophysiology in the context of complex oral rehabilitation • The application of theoretical notions in practical activity • Establishing interdisciplinary correlations in the studied fields

7. The objectives of the discipline (based on the grid of specific skills acquired)

7.1. General objective of the department	• Acquiring knowledge about complex oral rehabilitation of pacifications. • The peculiarities of dental treatment in patients with general condition.
7.2. Specific	• The complex and interdisciplinary approach of the adult patient with

objectives	special care needs in the context of curative and palliative treatments • Specific training of the patient with comorbidities for the healing of the oral cavity. • Establishing the opportunity of the dental treatments in the patient with general conditions. • The specific training of the patient with associated conditions, the optimum moment of intervention and the post-intervention follow-up. • Complex rehabilitation of the functions of the dento-maxillary apparatus affected on stabilized dento-periodontal structures.

8. Content

8.1. Lecture	**Ways of teaching**	**Observations**
1. Dental treatments in patients with cardiovascular disorders - Bacterial endocarditis • Heart disease at risk for developing bacterial endocarditis • Odonto-periodontal disorders involved in the etiology of bacterial endocarditis • Dental procedures involved in the etiology of bacterial endocarditis • Prophylactic measures of bacterial endocarditis in cardiac patients at risk. The medical prescription in the dental office in the context of the patient's general conditions • Specific measures in dental extraction, periodontal surgery, impacted teeth, dental treatments, prosthetic restorations in patients at risk of bacterial endocarditis	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
2. Dental treatments for patients with cardiovascular diseases - Heart rhythm disorders • Prophylaxis of heart rhythm disorders in the dental office • Paroxysmal supraventricular tachycardia: signs and symptoms, crisis treatment in the dental office • Chronic atrial fibrillation: chronic treatment with anticoagulants and antiplatelet platelets and stomatologic bleeding treatments • The risks of the patient with atrial flutter and ventricular fibrillation in the dental office • Sinus bradycardia in the dental office: signs and symptoms, treatment and prophylaxy in the dental office • The risks of the patient carrying a cardiac peace-maker in the dental office	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
3. Dental treatments in patients with cardiovascular disorders - Ischemic heart disease • Emergency prophylaxis caused of ischemic heart disease in the dental office • Dental treatments in patients with stable and unstable angina	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations

• Dental treatments in patients with a history of myocardial infarction		
4. Dental treatments in patients with cardiovascular diseases – Hypertension • Prophylaxis of hypertensive crisis in the dental office • The particularities of the dental treatment in patients with high blood pressure	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
5. Dental treatment of the patient with heart failure	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
6. Dental treatments for pregnant and breastfeeding women • Influence of contraceptive treatment on dental operations • Paraclinical and imaging investigations in the pregnant patient • Curative and palliative dental treatments for pregnant women	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
7. Dental treatments for pregnant and breastfeeding women • Preparations and medicines for dental use with possible / or teratogenic effects • Risks of pregnant women in the dental office • Dental treatment of the breastfeeding women and its effects on lactation • The concept of prenatal and intrauterine stomatology	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
8. Dental treatments in hematological diseases • The risks of the patient with anemic syndromes and coagulation disorders in the dental office • Paraclinical investigations before bleeding treatments in patients with anemic syndromes and coagulation disorders • Specific preparation of the patient with coagulopathies in order to perform the dental extraction	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
9. Dental treatments in hematological diseases • The risks of the patient with myelodysplastic syndromes in the dental office • Paraclinical investigations before bleeding treatments in patients with acute and chronic leukemia • The specific training of the patient with myelodysplastic syndrome in order to perform the dental extraction	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
10. Oral rehabilitation of the patient with algal-dysfunctional syndrome of the temporo-mandibular articular joint. Oral rehabilitation of the patient with limitations of the opening of the oral cavity. Specific treatment in limiting mouth opening	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
11. Addicted patients in the dental office.Oral rehabilitation of the addicted patients of toxic subtances: alcohol,	Lecture, systematic,	Oral presentations,

analgesics, sedatives, hallucinogenic substances.	interactive presentation	Power-Point presentations
12. Oral rehabilitation and care of patients with oromaxilofacial malignancies • Preparation of the patient for irradiation treatment in the oromaxilofacial area • Dental treatment on irradiated fields	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
13. Oral rehabilitation and care of patients with oromaxilofacial malignancies • The peculiarities of the dental treatments after or during the oncological chemotherapy	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
14. The role of surgical prostheses devices in complex oral rehabilitation of patients with oromaxilofacial tumor or cystic pathology	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations

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6. Tratat de epidemiologie a bolilor transmisibile- Ivan Aurel, Editura Polirom Bucureşti 2002 , pag 259-309

8.2. Practical Work	**Teaching methods**	**Practical activities**
1. Examination of patients with general and dental conditions. History and examination of local and general objective. The medical prescription in the dental office in the patient with oral pathology in the context of general disorders.	Power-point presentations interactive teaching. Practical demonstration. The conception and writing of the medical prescription in the dental office in the patient with oral pathology in the context of general disorders.	Exoral, endoral and general clinical examination
2. Preparation of the observation sheet. Establishing the diagnosis of oral and dental disorders and the diagnosis of general disease.	Interactive discussions, power-point presentations. Practical	Preparation of the observation sheet by the students. Elaboration of the

	demonstration.	diagnosis.
3. Carrying out the treatment plan in the context of general conditions.	Interactive discussions. Model demonstrations and clinical cases	Staging of dental treatment in the context of the general condition.
4. Performing dental treatments, descaling, extractions and incisions in the suppuration of patients with valvular lesions.	Interactive discussions and demonstrations practice	Performing the proper techniques
5. Performing dental treatments, descaling, extractions and incisions of suppurations in patients with ischemic heart disease.	Interactive discussions and practical demonstrations	Performing the proper techniques
6. Performing dental treatments, descaling, extractions and incisions of suppurations in patients with high blood pressure	Interactive discussions and practical demonstrations	Performing the proper techniques
7. Performing dental treatments, scalling, extractions and incisions of suppurations in patients with myocardial infarction.	Interactive discussions and practical demonstrations	Performing the proper techniques
8. Performing dental treatments in pregnant women.	Interactive discussions and practical demonstrations	Performing the proper techniques
9. Performing dental treatments on breastfeeding women. Dental treatment in patients undergoing contraceptive treatment.	Interactive discussions and practical demonstrations	Performing the proper techniques
10. Performing dental treatments, descaling, extractions and incisions in suppurations in patients with hemophilia and hemorrhagic diathesis.	Interactive discussions and practical demonstrations	Performing the proper techniques
11. Performing dental treatments, descaling, extractions and incisions in suppurations in patients with anemic syndrome and chronic leukemia.	Interactive discussions and practical demonstrations	Performing the proper techniques
12. Prevention and post-irradiation of patients. Performing dental treatments in patients undergoing chemotherapy.	Interactive discussions and practical demonstrations	Performing the proper techniques
13. Performing dental treatments in patients with algal-dysfunctional syndrome of the mandibular temporal joint and with limitations of the mouth opening. Treatment of ATM dysfunctions.	Interactive discussions and practical demonstrations	Efectuarea consultaţiilor profilactice
14. Practical examination - case presentation	Testing knowledge through discussions related to the presented case	Meeting the scale of maneuvers performed during the lab
References: 7. Reabilitare Orala –G.Baciut, M.Baciut, R.S.Campian, C.Balog, D. Pop – Ed medicala Universitara		

Iuliu Hatieganu, Cluj Napoca, 2002, ISBN 973-8019-90-7
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9. Implicatiile multidisciplinare in durerea orala si cranio-faciala- A. Rotaru, C. Sarbu, R.S. Campian, I. Munteanu, H. Rotaru – ED. Clusium, Cluj Napoca, 2001, ISBN 973-555-299-X
10. Medical problems in dentistry - C. Scully, R. Cawson, Elsevier Limited 2005
11. Afectiunile buco-dentare si sarcina – P.Vartej, M. Gafar, H. Panaite, Ed. All Educational S.A., 1998,ISBN 973-9337-40-6
12. Tratat de epidemiologie a bolilor transmisibile- Ivan Aurel, Editura Polirom Bucureşti 2002 , pag 259-309

9. Corroborating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field related to the program

- Permanent and constructive dialogue with representatives of the community of dental practitioners - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical activity
- Permanent participation of the members of the chair in scientific manifestations, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, graduates in other higher education institutions, for coordinating the content taught with other similar programs within other higher education institutions.
- The concepts studied are in accordance with the regulations in force and are compatible with the activities carried out at national level in the segment of clinical dental medicine.

10.Evaluation

Type of activity	10.1Evaluation criterias	10.2. Evaluation methods	Weight in the final grade
10.4. Lecture	General evaluation criteria (coverage area and correctness of accumulated knowledge, logical coherence, fluency in written expression) Ability to understand fundamental problems and to customize	Written exam	**40%**
10.5. Practical work	Assessment of practical knowledge	Practical exam	**40%**
10.6. Activity during the semester	Evaluation of practical skills and their theoretical knowledge Presentation of a case of oral rehabilitation performed by the student during the internships	Practical exam	**20%**
10.6. Minimum standard of performance			
The ability to design and carry out a complex oral rehabilitation plan, in the context of the presence of general disorders.			

- Establishing the correct local and general diagnosis
- Assessment of metabolic and functional balance in the patient with general conditions
- Elaboration of the stages of dental treatment
- Specific training of the patient with general conditions in the dental office
- Opportunity for dental treatment in the context of general disorders
- Risk assessment of the patient with general conditions in the dental office
- Follow-up of the patient with comorbidities in the dental medicine office

PROFESSIONAL ORGANIZATION AND LEGISLATION

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	III – Oral Rehabilitation
1.4. Domain of study	Health
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Professional Organization and Legislation					
2.2. Responsible for lecture			Lecturer Dr. Mester Alexandru					
2.3. Responsible for practical activity			Assist. Prof. Drd. Aghiorghiesei Ovidiu Assist. Prof. Drd. Toparcean Adina-Maria					
2.4. Year of study	6	2.5. Semester	2	2.6. Form of evaluation	Theoretical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	4	3.2. Course	2	3.3. Practical Activity	2
3.4. Total hours in the curriculum	56	**3.5. Course**	28	**3.6. Practical activity**	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					35
Individual study using on-line platforms, field research					26
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					19
Tutoring					5
Examination/ semester					4
Other activities					5
3.8. Total hours of individual study (a+b+c+d)				94	
3.9. Total hours/semester				150	

3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	Ethics notion
4.2. Competences	Not necessary

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system
5.2. For practical activities	Laboratories with facilities specific to practical activities

6. Acquired specific competences

Professional competences	1. To know and to understand the basic notions of organisation within the dental office 2. Ability to understand and to operate with legislative technique
Transversal competences	1. To establish interdisciplinary correlations within the studied domains. 2. To apply theoretical notions in practical activities.

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	1. To know the legislation in force corresponding to the practice of dental medicine. 2. To know the basic concepts of organization in the dental office.
7.2. Specific objectives	1. To apply the legislative normative acts correctly 2. To establish interdisciplinary correlations within the studied domains.

8. Content

Lecture	Teaching methods	Observations
1. The legislation of dental practice in the European Union and worldwide. Purpose of the legislative course	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
2. The evolution of medical legislation	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
3. Classification and hierarchy of normative acts	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
4. The structure of the normative acts	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
5. Information of legislature and legislative technique	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
6. The release and the competence of creating the normative acts	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
7. Romanian Constitution and European normative acts with application in dentistry	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
8.The organization of the dental office (as healthcare provider)	Lecture, systematic and interactive exposure	Oral, Power-Point presentations

Legislation and procedure for assessing the quality of the medical act in the dental office		
9. Legislative regulation of the professional practice of the dentist	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
10. Legislation and relevant authorities regarding the patient-dentist relationship	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
11. College of dentists in Romania and European Union – organization and functioning	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
12. Professional organizations of public and private law	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
13. Current regulations on personal data protection. Implementing the personal data protection notions in the dental office	Lecture, systematic and interactive exposure	Oral, Power-Point presentations
14. Legal responsibility of the dentist. Alert mechanism	Lecture, systematic and interactive exposure	Oral, Power-Point presentations

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1. European Union. European Economic and Social Committee. The state of liberal professions concerning their functions and relevance to European Civil Society. Visits and Publications Unit. Brussel. 2014.
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4. FDI World Dental Federation. Dental Ethics Manual 2. 2018. Quintessence Publishing.
5. Cruz L. Legal Aspects of General Dental Practice. Churchill Livingstone. 2006.
6. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)
7. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA
8. Lambden P. Dental law and ethics. Abingdon: Radcliffe Medical Pres Ltd. 2002
9. Cruz L. Legal Aspects of General Dental Practice. Churchill Livingstone. 2006.

a. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. The way medical practice is conditioned by legislation.	Presentations, discussions, guidelines and instructions on the	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in

	application of normative requirements.	a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
2. The liberal nature of dental practice as it is defined by the law. The consequences on training need of the dentist.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
3. Defining moral values. Defining behavioural values in concordant, discordant or antagonistic forms.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
4. What is the normative act? Governing society through laws. Harmonizing legislation with medical notions and medical training.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
5. The structure of a normative act. Types of normative acts: treaties, directives, laws, regulations.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
6. Hierarchy of normative acts. Correlation and harmonization of the content of the normative act in relation to the higher normative act (e.g. from the dental field).	Presentations, discussions, guidelines and instructions on the application of	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in

	normative requirements.	a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
7. Legislative authorities. Limits of legislative authority of professional associations and healthcare providers. Internal regulations of the dental office.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
8. Legislation regulation the professional training and obligations of the dentist in the European Union (DIRECTIVE 2005/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on the recognition of professional qualifications)	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
9. Medical data management. General Data Protection Regulation (REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation); DIRECTIVE (EU) 2016/680 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA)	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
10. The law of health – Public Health, National Health Programs, Primary Health Care	Presentations, discussions,	Developing search abilities and identifying normative acts.

	guidelines and instructions on the application of normative requirements.	Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
11. The law of health – Health insurance. The framework contract, basic service package rules for dental services.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
12. Normative acts regulating the establishment and organization of the dental office. Ordinances on the organization and operation of dental offices. Regulations regarding the technical conditions of the dental office.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
13. The law of health – Exercise of the dental profession. Organization and functioning of the College of Dentists in Romania and European Union. Legal notions about malpractice. Preparation of the informed consent.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
14. Normative acts issued by the public authority in dental medicine in Romania and European Union.	Presentations, discussions, guidelines and instructions on the application of normative requirements.	Developing search abilities and identifying normative acts. Developing the ability to understand legal provisions in a broad legislative context. Simulation of different situations and the legal possibilities for solving them.
Bibliography: 1. European Union. European Economic and Social Committee. The state of liberal professions concerning their functions and relevance to European Civil Society. Visits and Publications Unit. Brussel. 2014.		

2. Directive 2005/36/ec of the European Parliament and of the Council. 7 September 2005. On the recognition of professional qualifications.
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4. FDI World Dental Federation. Dental Ethics Manual 2. 2018. Quintessence Publishing.
5. Cruz L. Legal Aspects of General Dental Practice. Churchill Livingstone. 2006.
6. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)
7. Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA
8. Lambden P. Dental law and ethics. Abingdon: Radcliffe Medical Pres Ltd. 2002
9. Cruz L. Legal Aspects of General Dental Practice. Churchill Livingstone. 2006.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

The content of the discipline is in accordance with the normative requirements, namely the knowledge of the legislation in the field, the obligations and rights of the dentist as provided by the Law of Health.

The data and information are in line with the course support provided and are in agreement with the liberal character of the dental practice, respectively with the private practice in over 95% of the cases.

The correlation of information and training needs in legal and administrative field due to the fact that the profession of dentist has a dual role, the doctor and the manager.

The dentist has the status of entrepreneur and legal representative (about 15,000 dental offices, about 20,000 dental practitioners) of the healthcare provider, and the Discipline of Organization and Professional Legislation provides basic knowledge for a doctor's assumption of these responsibilities.

10. Evaluation

Activity type	**10.2 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	1. Assimilation of information on the legal framework and the specific legislation in the dental field. 2. Ability to understand organizational issues and to identify cases regulated by normative acts.	Written exam	**60%**
10.5. Practical Activity	Assessing the level of assimilation of information and the ability to link different activities with the legislative framework regulating the respective activities.	Essay	**30%**
10.6. Activity during semester	Involvement in practical and theoretical		**10%**

	activities.		
10.7. Minimum performance standard			
Acquisition of the main notions: organization and deontology applied in the dental office.			

MEDICAL DEONTOLOGY AND BIOETHICS

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	III - Oral Rehabilitation
1.4. Domain of study	Health
1.5. Level of course	License - (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor – Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			MEDICAL DEONTOLOGY AND BIOETHICS					
2.2. Responsible for lecture			Lecturer Dr. Mester Alexandru					
2.3. Responsible for practical activity			Lecturer Dr. Mester Alexandru Assist. Prof. Drd. Aghiorghiesei Ovidiu					
2.4. Year of study	6	2.5. Semester	2	2.6. Form of evaluation	Written exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**2**	3.2. Course	**1**	3.3. Practical Activity	1
3.4. Total hours in the curriculum	**28**	**3.5. Course**	**14**	**3.6. Practical activity**	**14**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					
Individual study using on-line platforms, field research					
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					
Tutoring					
Examination/ semester					2
Other activities					
3.8. Total hours of individual study (a+b+c+d)					
3.9. Total hours/semester					30
3.10. Number of credits					1

4. Prerequisites (if needed)

4.1. Curriculum	Ethics notions. Deontology notions.
4.2. Competences	Not necessary

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system.
5.2. For practical activities	Laboratories with facilities specific to practical activities - teamwork

6. Acquired specific competences

Professional competences	Knowledge of deontology and ethics in the field of dental medicine
Transversal competences	Establishing interdisciplinary correlations within the studied domains

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of the dentist's code of ethics. Knowledge of the basic concepts of medical ethics
7.2. Specific objectives	Applying theoretical notions to practical work Establishing interdisciplinary correlations within the studied domains

8. Content

p. Lecture	Teaching methods	Observations
1. Ethical and moral concepts that underpin medical deontology	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
2. The historical evolution of moral values. Cultural, religious, and economic conditioning of the norms of conduct	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
3. Values of Ethics and Conduct Applied to Contemporary Society Worldwide	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
4. The concept of "medical deontology". The concept of "bioethics". Contemporary applications.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
5.Dental Practitioner Code of Ethics. The procedure for development, updating and application.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
6. Current codes of ethics. A comparative approach to the ethical code in Romania.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
7. Deontological norms on dental practitioner practice.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
8. Regulation of the professional competences.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
9. The relationship between the dentist, the patient and the medical team.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
10. The advertising regime in dentistry.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
11. Deontological norms in the relationship between doctors.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
12. Disciplinary offenses and their sanctions.	Lecture, systematic and	Oral, PowerPoint

	interactive exposure	presentations
13. Legal Requirements for the Code of Ethics.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations
14. The disciplinary commissions of the College of Dentists in Romania and in the European Union. Organization, skills and functioning.	Lecture, systematic and interactive exposure	Oral, PowerPoint presentations

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2. David Ozar, David Sokol. Dental Ethics at Chairside. 2nd Edition. 2002. Georgetown University Press
3. James Rule, Robert Veatch. Ethical questions in dentistry. 2nd Edition. 2004.
4. FDI World Dental Federation. Dental Ethics Manual 2. 2018. Quintessence Publishing
5. Codul deontologic al medicului dentist (Monitorul Oficial nr. 408/18.06.2010)
6. ADA Code of Ethics: Principles, Code of Professional Conduct: & Advisory Opinions

q. Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. The social impact of the dentist	PowerPoint presentations, interactive teaching	Essays
2. Aims and ethical principles applied in dental medicine	PowerPoint presentations, interactive teaching	Essays
3. The professional responsibility of the dentist	PowerPoint presentations, interactive teaching	Essays
4. Confidentiality and informed consent	PowerPoint presentations, interactive teaching	Essays
5. Implications of the business environment in dental practice	PowerPoint presentations, interactive teaching	Essays
6. The roles of the dental office in the community	PowerPoint presentations, interactive teaching	Essays
7. Research ethics in dentistry	PowerPoint presentations, interactive teaching	Essays
8. Ethical decision making	PowerPoint presentations, interactive teaching	Essays
9. Medical deontology and ethics in Romania and Europe. Particular aspects in dentistry.	PowerPoint presentations, interactive teaching	Essays
10. Presentation and knowledge of the status of the dental practitioner's code of ethics	PowerPoint presentations, interactive teaching	Essays
11. Dental Practitioner Code of Ethics - Relationship between dentist and patient	PowerPoint presentations, interactive teaching	Essays
12. The Code of Ethics of the Dentist - Relationships between Doctors	PowerPoint presentations, interactive teaching	Essays
13. The Code of Ethics of the Dentist - Advertising	PowerPoint presentations, interactive teaching	Essays
14. Legal responsibility of the dentist	PowerPoint presentations, interactive teaching	Essays
Bibliography:		

1. Lambden P. Dental law and ethics. Abingdon: Radcliffe Medical Pres Ltd. 2002
2. David Ozar, David Sokol. Dental Ethics at Chairside. 2nd Edition. 2002. Georgetown University Press
3. James Rule, Robert Veatch. Ethical questions in dentistry. 2nd Edition. 2004.
4. FDI World Dental Federation. Dental Ethics Manual 2. 2018. Quintessence Publishing
5. Codul deontologic al medicului dentist (Monitorul Oficial nr. 408/18.06.2010)
6. ADA Code of Ethics: Principles, Code of Professional Conduct: & Advisory Opinions

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with representatives of the dentist community - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical work
- Permanent participation of the members of the chair at scientific events, forms of continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to keep theoretical and practical information introduced in the structure of the discipline at a high level of actuality.
- Maintaining contacts with other teachers in the field, titled in other higher education institutions, to coordinate the content taught with other similar programs within other higher education institutions. The concepts studied are consistent with the regulations in force and are compatible with the national activities in the preclinical segment of dental medicine.

10.Evaluation

Activity type	**10.3 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage and correctness of accumulated knowledge, logical coherence, fluency of expression). Ability to understand fundamental problems and customization	Written exam	**60%**
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills.	Essay	**30%**
10.6. Activity during semester	Involvement in practical and theoretical activities.		**10%**
10.7. Minimum performance standard			
Acquisition of the main notions: organization and deontology applied in the dental office.			

ORAL PATHOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy ”Iuliu Haţieganu”, Cluj-Napoca
1.2. Faculty	Dental Medicine

1.3. Department	Dental Medicine 2
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about **the** *discipline*

2.1. Course title			**Oral Pathology**				
2.2. Responsible for lecture			Lecturer dr. Doina Rotaru				
2.3. Responsible for practical activity			Lecturer dr. Doina Rotaru Dr. Asst. Pastrav Ovidiu Dr. Asst. Moga Radu Dr.Asst. Hrab Dana Dr. Asst. Timis Lucia Dr. Asst. Pop Dan Dr.Asst. Bud Marius Dr.Asst. Culic Carina				
2.4. Year of study	6	2.5. Semester	1	2.6. Form of evaluation	Theoretical exam + practical exam	2.7. Course type	Mandatory

3.The total estimated time (hours/semester for teaching activity)

3.1. Total hours/ week	5	3.2. Course	2	3.3. Practical Activity	3
3.4. Total hours in the curriculum	**70**	**3.5. Course**	**28**	**3.6. Practical activity**	**42**
3.7. Distribution of time needed/ week					Hours
Study using text books, lecture notes, references					23
Individual study using on-line platforms, field research					10
Preparing seminars / Laboratory activities, homework, projects, portfolios, essays					10
Tutoring					2
Examinations/ semester					10
Other activities					-

3.8. Total hours of individual study (a+b+c+d)	55
3.9. Total hours/semester	125
3.10. Number of credits	5

4. Prerequisites (if needed)

4.1. Curriculum	The anatomy of head and neck notions
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Amphitheater with projection system Students will not be present at practical activities with their mobile phones on. Also, phone conversations will not be tolerated during class or, students leaving the course to take over personal calls. It is prohibited consumption of food and drinks during courses / practical activities. It will not be tolerated the delay to practical activities or the course, because it proves to be disruptive towards the learning process.
5.2. For practical activities	Laboratories with specific practical activities Each student must complete their portfolios and the skills notebook with all the specifics (Alternatively - offices with dental units for clinical disciplines, salons, intervention halls for surgical disciplines)

6. Acquired specific competences

Professional competences	• The ability to use the theoretical and practical notions of oral pathology adequately and in context; • Knowing the tools for examining patients with different types of disorders in the field of oral pathology; • Knowing and choosing the examination methods, complementary examinations and treatment, individualized, according to the given clinical situation; • Biological orientation, selection of treatment protocols for each individual patient; • Developing the capacity of synthesis of the information obtained, developing the ability to establish a complete and complex diagnosis; • Improving the ability to replicate the theoretical knowledge about diagnosis, differential diagnosis and treatment of disorders in the field of oral pathology; • Achieving the practical experience necessary for the complex cases, with associated systemic disorders treatment of outbreak disease.
Transversal competences	• Use of assimilated notions in particular contexts, specific to each case; • Applying theoretical notions in practical work;

	• Complex treatment of the patient, establishment of interdisciplinary correlations.

7. Course objectives (derived from the acquired specific competences)

7.1 General objectives	The knowledge of normal morphology and histological structure of the oral mucosa, the defense mechanisms of the oral cavity, the basic lesions of the oral mucosa, the normal physiological variations and oral manifestations of systemic diseases.
7.2 Specific objectives	To acquire the knowledge of normal oral mucosa aspect and the variations of the normal; To acquire the knowledge of risk factors in malignancy; Learning and detecting the predisposing factors with malignant potential, premalignant lesions and the main forms of onset of oral cancer; To perform the oncological preventive examination in the dental office. Learning the steps of developing the positive clinical, ethiological and differential diagnosis and the evolving nature of the main diseases of the oral cavity lining; To develop the capacity to conduct the treatment of the oral mucous membrane disorders; Practicing synthesis capacity and bibliographic documentation.

8. Content

a. Lecture	**Teaching methods**	**Observations**
1. The object of Oral Pathology. The clinical and ethiological classification. The elementary lessions. The variations of the normal and anomalies of unknown ethology of the oral mucosa.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
2. The patient examination and the Oral pathology diagnosis.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
3. Aphthae. Isolated aphthae (basic lesion). Minor aphthae. Major aphthae. Herpetiform aphthae. Behcet's disease. Particular forms (Crohn's disease, haemorrhagic rectocolitis, haematological deficiencies).	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
4. Elements of diagnosis and differential diagnosis of oral ulcerations	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
5. Blistering disorders of the oral cavity. Herpes. Chickenpox. Shingles. Foot-hand and mouth disease hand. Herpangina.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point

6. Bullous conditions. The mechanism of bulla formation. Erythema multiforme. Stevens-Johnson syndrome. Lyell's syndrome. Pemphigus vulgaris. Bullous pemphigoid. Cicatricial pemphigoid	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
7. White lesions. Normal and pathological keratinization. The classification of the white lesions. Leukoplakia. White lesions of irritative cause. White lesions associated with dermatological disorders: oral lichen planus, lupus erythematosus, dermatomyositis. White lesions of infectious etiology: chronic thrush, hairy leukoplakia, tertiary syphilis. Congenital and hereditary white lesions: white sponge naevus, Darier's disease. Other white lesions.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
8. Pigmented lesions. Lentigo.Malignant melanoma. Pigmented naevi. Tattoos. Addison'a disease. Peutz-Jeghers syndrome. Racial pigmentation. Vascular lesions. Kaposi's sarcoma. Diffuse mucosal pigmentation.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
9. Premalignant lesions. Erythroplasia (erythroplakia). Speckled leukoplakia. Idiopathic leukoplakia. Sublingual keratosis. Proliferative verrucous leukoplakia. Smokeless tobacco-induced keratoses. Chronic hyperplastic candidosis. Oral submucous fibrosis. Chronic actinic cheilitis. Syphilitic leukoplakia.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
10. Oral manifestations in some systemic and infectious diseases (anaemias, leukaemias, lymphomas, haemorrhagic diseases, sarcoidosis, Crohn's disease, lupus erythematosus, tuberculosis, syphilis).	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
11. Complications of topic and systemic drug treatment. Oral reactions to drugs. Local reaction to drugs (chemical burns). Systemically mediated reactions (lichenoid reactions, acute erythema multiforme, toxic epidermal necrolysis), other drug effects (gingival hyperplasia, oral pigmentation, dry mouth, oral ulcers)	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
12. Candidosis. Systemic mycoses. Xerostomia	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point

13. Tongue disorders. The sore tongue (ulcers involving the tongue, glossitis, the sore, physically normal tongue, geographical tongue), lingual varicosities, hairy tongue, median rhomboid glossitis.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point
14. Oral manifestations in HIV infection. Oral lesions in HIV/SIDA. The doctor`s role in monitoring patients. The prevention of HIV infection in dental offices.	Lecture, systematic exposition, interactive	Oral expositions, presentations, Power-Point

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Doina Iulia Rotaru – De la teorie la practica in patologia orala, Editura Medicală Universitară Iuliu Haţieganu Cluj Napoca , 2016

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C. Burlibasa - Chirurgie orala si maxilo-faciala, Ed. Medicala, Bucuresti, 1999.

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Neville BW, et al. Oral and Maxillofacial Pathology. 2nd edition. Philadelphia: WB Saunders, 2002.

Regezi JA, et al. Oral Pathology. Clinical Pathologic Correlations. 4th edition. St Louis: Saunders, 2003.

Eversole R, Mason DK, Millard HD, eds. Oral mucosal diseases. In: Second World Workshop in Oral Medicine. Michigan, University of Michigan, 1995: 108-59.

b. Practical Activities	**Teaching methods**	**The practical activity done by**

		students
1. The elementary lesions. The variations of the normal and anomalies of unknown ethiology of the oral mucosa.	Presentations, power point, interactive teaching.	Recognition exercises and description of elementary lesions, normal variations and abnormalities of unknown etiology of oral mucosa on patients and slides.
2. The patient examination and the oral pathology diagnosis steps.	Examination exercises on patients, to determine the elaborative diagnostic steps, demonstrations on patients	Examination exercises and the elaboration of the diagnosis
3. Aphthae. Clinical aspects. The patient investigation in regards to aphthae.	Recognition exercises and description of aphthous lesions on patients and slides	Description exercises of injuries and the specific indications for complementary examinations
4. Elements of diagnosis and differential diagnosis of oral ulcerations	Recognition exercises and description of oral ulcerative lesions in patients and on slides	Description exercises of the lesions, to determine the elements of diagnosis and differential diagnosis of oral ulcerative lesions.
5. Blistering disorders of the oral cavity. Clinical aspects. Elements of diagnosis and differential diagnosis.	Recognition exercises and description of vesicular and blistering lesions of the oral cavity on patients and slides	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis of vesicular and bullous lesions of the oral cavity
6. Review	Summary of the: - elementary lesions, - diagnostic steps in oral pathology, - ulcerative, vesicular and bullous lesions of the oral cavity. Exercises for the recognition and description of the lesions.	Knowledge testing

7. White lesions. Normal and pathological keratinization. Leukoplakia. Oral lichen planus. Lupus erythematosus. Clinical aspects. Diagnosis and differential diagnosis. Patient monitoring.	Recognition exercises and description of the white lesions of the oral mucosa; demonstrations on patients and slides	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis of white lesions of the oral mucosa.
8. Pigmented lesions. Clinical aspects. Elements of diagnosis and differential diagnosis.	Recognition exercises and description of pigmented lesions of the oral mucosa; demonstrations on patients and on slides.	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis of pigmented lesions of the oral mucosa.
9. Premalignant lesions - diagnosis and differential diagnosis. Erythroplasia (erythroplakia). Speckled leukoplakia. Idiopathic leukoplakia. Sublingual keratosis. Proliferative verrucous leukoplakia. Smokeless tobacco-induced keratoses. Chronic hyperplastic candidosis. Oral submucous fibrosis. Chronic actinic cheilitis. Syphilitic leukoplakia.	Recognition exercises and description of premalignant lesions of the oral mucosa, demonstrations on patients and slides	Dscription exercises of the lesions, mentioning the diagnosis and differential diagnosis of pre-malignant lesions of the oral mucosa
10. Oral manifestations in some systemic and infectious diseases. Clinical aspects. The dentist`s role in patient monitoring and their treatment.	Recognition exercises and description of oral manifestations of some systemic and infectious diseases. Demonstrations on patients and slides.	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis of oral lesions in some infectious, and systemic diseases.
11. Complications of topic and systemic drug treatment. Clinical aspects. Diagnosis. Differential diagnosis.	Recognition exercises and description of lesions. Demonstrations on patients and slides.	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis.

12. Candidosis. Systemic mycoses. Xerostomia. Clinical aspects. Diagnosis. Differential diagnosis.	Exercises for the recognition and description of the lesions of the oral fungal infection, diagnosis and differential diagnosis items. Demonstrations on patients and slides.	Description exercises of the lesions, mentioning the diagnosis and differential diagnosis elements.
13. Tongue disorders. Glossodynia. Clinical aspects.	Exercises for recognition and description of tongue disorders, diagnosis and differential diagnosis elements. Demonstrations on patients and slides.	Exercises for description of the lesions, accurate determination of diagnosis elements of tongue disorders.
14. Oral manifestations in HIV infection. Oral lesions in HIV/SIDA. The doctor`s role in monitoring patients. The prevention of HIV infection in dental offices.	Exercises for recognition and description of oral manifestations in HIV infection, diagnosis and differential diagnosis elements. Demonstrations on patients and slides.	Exercises for description of the lesions, mentioning the diagnosis and differential diagnosis of oral manifestations in HIV infection

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9.Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue with the representatives of dentists` community - in order to identify the needs and expectations of employers in the industry and to adapt curriculum to the needs of current practical activity -Permanent participation of our staff in scientific performances, forms of continuing medical education, dental equipment and dental material exhibitions for our practical activities -all these in order to maintain theoretical and practical information in dentistry field - introduced in the structure of the discipline at a high level of actuality.
-Maintaining contact with other teachers/representatives in the field, holders of other higher education institutions, to coordinate taught content with similar programs in other higher education institutions.
-Studied concepts to be consistent with the regulations and compatible with the activities undertaken at national level for preclinical dentistry field.

10. Connecting the course content with the demands of the epistemic community

Activity type	**10.1 Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	General evaluation criteria (coverage and gained knowledge accuracy, logical consistency, fluency of speech) ability to understand the fundamental issues and customization	Written exam- multiple choice questions and editorial questions	**50%**
10.5. Practical Activity	Assessment of theoretical knowledge and practical skills	Practical exam	**25%**
10.6. Activity during the semester	Continuing training/preparation during the semester	Verification tests	**25%**

10.7. Minimum performance standard
- Knowing the core notions of structure and ecosystem of the oral mucosa mouth. - Basic oral lesions – definition. - The normal and abnormal variations of the oral mucosa of unknown etiology: enumeration, clinical features. - Keratosis lesions - leukoplakia - definition, clinical forms, therapy; oral lichen planus - clinical picture, management. - Ulcerative lesions: elements of diagnosis and differential diagnosis of oral ulcerative lesions - Vesicular and bullous lesions: herpes, shingles, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome, pemphigus vulgaris, bullous pemphigoid, cicatricial pemphigoid - main clinical manifestations - Tumorous lesions: squamous cell carcinoma - clinical elements. - Pigmented lesions - melanoma - clinical elements.

GERONTOLOGY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	4 Dental Medicine
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Dentist
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Geriatric Dentistry**					
2.2. Responsible for lecture			Conf. Dr. Alina Monica Picos					
2.3. Responsible for practical activity			Lect. Dr. Ana Ispas Assit. Dr. Corina Tisler					
2.4. Year of study	6	2.5. Semester	12	2.6. Form of evaluation	Theoretical exam and practical exam	2.7. Course type	Content	DS
							Mandatory	DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	3	3.2. Course	1	3.3. Practical Activity	2
3.4. Total hours in the curriculum	42	**3.5. Course**	14	**3.6. Practical activity**	28
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					13

Individual study using on-line platforms, field research	10
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays	5
Tutoring	5
Examination/ semester	1
Other activities	-
3.8. Total hours of individual study (a+b+c+d)	33
3.9. Total hours/semester	75
3.10. Number of credits	3

4. Prerequisites

4.1. Curriculum	Notions regarding medical semiology , fixed and mobile dental prosthetics
4.2. Competences	-

5. Requisites

5.1. For lectures	Projection system within the amphitheatre
5.2. For practical activities	Dental unit offices

6. Acquired specific competences

Professional competences	• Utilizing the specialty's terminology in accordance to the context . • Adopting a prompt and correct medical attitude towards the elderly patient in order to increase their quality of life. • General knowledge of the morphological and physiological changes due to the ageing of the tissues, organs and the human organism's systems and understanding of the pathological risks during the ageing process and the importance of the inter-disciplinary collaboration during the dental treatment period. • Bucco-dental pathology related knowledge associated with the ageing process of the human body. • Establishing and conducting dental treatments in accordance to the biological age of the elderly patients while taking into consideration their overall health.
Transversal competences	• Applying the theoretical notions upon treatment practice. • Applying the theoretical notions upon the practical activity. • Establishing inter-disciplinary correlations between the studied fields.

7. Course objectives

7.1. General Objectives	Acquiring knowledge regarding bucco-dental pathology of the elderly patients and the therapeutic conduct used in the context of the overall health and the progressive involution of the human body.
7.2. Specific objectives	• Acquiring knowledge regarding the general morphological and physiological changes due to the ageing process and the implications over the therapeutic attitude of the dentist. • Acquiring knowledge regarding the necessary adjusting of the general

	dental treatments required for the elderly patients' general pathology in order to avoid certain risks and achieving the therapeutic success which increases their life quality. • Acquiring knowledge regarding the dento-maxillary changes caused by ageing. • Learning the specific dental treatments required for the healthy elderly patient. • Learning the specific dental treatments required for the elderly patient displaying an overall complex pathology. The therapeutic approach for the disabled elder. • Using the ability to research and summarize the bibliography.

8. Content

Lectures	Teaching methods	Observations
1. The ageing concept as a component of the life-cycle. Ageing theories: evolutionary and non-evolutionary theories. The evolution of the present population's life-span and its consequences.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
2. Neuropsychiatric ageing and doctor-patient collaboration. General aspects of aging at the level of sensory perception and the implications on dental treatments.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
3. General aspects of ageing upon the tegumentary level, renal, respiratory, locomotor apparatus and their implications on dental treatments	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
4. General aspects of ageing upon the cardiovascular and endocrine level, the immune system and their implications on the dental therapeutic conduct.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
5. The ageing process of the digestive system. ADM morpho-functional integrity and the elder's nutrition.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
6. The medical prescribtion for elders: potential risks of the elder's polymedication.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
7. The ageing of the ADM. The ageing of the dental pulp and the periodontal; the implications upon the dental treatments.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
8. The ageing of the ADM: bone changes upon the orofacial level, ATM changes	Lecture, systematic interactive presentation	Oral presentation, Power-

upon the solid dental tissue.		Point presentation
9. Aging of the salivary glands and mucous membranes of the oral cavity. The hyposalivation of the elderly.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
10. Dental attrition in the elderly patient: ways of evaluation, modern treatment options.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
11. Dental caries of the elderly: treatment and prophylaxis.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
12. The specificity of fixed prosthetic treatments in the elderly patient.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
13. Partially removable prosthesis in the elderly patient. Reconditioning of the old removable prostheses. Immediate total prosthesing.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation
14. The total upper-implant prosthesing on the prosthetically unfavorable base of the elderly. Maintainting the therapeutic results on the elderly patient.	Lecture, systematic interactive presentation	Oral presentation, Power-Point presentation

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Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. The clinical examination of the elderly patient and the process of applying the survey for geriatric assessment of the general health status, collaboration with the family doctor.	Power-point presentation,interactive teaching, practical demonstration on the patient.	The examination of the elderly patient, filling in the gerontological file and the questionnaire for geriatric cases and dental attrition, establishing the diagnosis in a clinical case.
2. Evaluation of complementary examinations in elderly with partially	Power-point presentation,interac	Interpreting the complementary

edentated parodontopathy of senescence (atrófica). Case analysis on bimaxillary study models. Establishing the diagnosis, therapeutic goals and the stage hierarchy of the prosthetic treatment.	tive teaching, practical demonstration on the patient.	examinations, diagnosis, establishing the treatment plan.
3. Performing therapeutical and prophylactic dental therapies in the elderly patient with focal infection / disability.	Interactive teaching, practical demonstration on the patient.	Performing dental treatments to elderly patinents in accordance to the cause. Discussing the focal infection risks of the elderly.
4. Maintaining prosthetic treatment results. Performing calculus removal and prophylactic fluoridation on the elderly patient.	Power-point presentation,interac tive teaching, practical demonstration.	Performing calculus removal followed by fluoridation on the patient.
5. Establishing the prosthetic treatment plan for the partially edentated elderly patient with serious cardiovascular, neurological, renal diseases	Interactive teaching, questioning.	Assessing students' knowledge, planning therapeutic stages in prosthetic treatment for the cardiovascular patient.
6. Establishing the prosthetic treatment plan for the partially edentated elderly patient with a serious health condition. Indicating composite prosthetic treatments.	Interactive teaching, questioning	Establishing the treatment plan in correlation with the general health status.
7. Performing endodontic treatments on the elderly. The health education of the patient and the bucco-dental hygiene in the elderly with disabilities.	Interactive teaching, practical demonstration on the patient.	Performing dental treatments in the elderly, centered on the causes. Demonstration of tooth brushing techniques.
8. Examination of the partially edentated elderly patient with periodontal disease, assessment of periodontal status, diagnosis and therapeutic plan.	Interactive teaching, practical demonstrations on the patient, questioning.	Examination and completion of the patient's gerontological record; performing a periodontometry.
9. Qualitative and quantitative assessment of salivary secretion in the elderly patient using salivary tests. Diagnosis of hyposalivation.	Practical demonstrations, interactive presentation	Qualitative and quantitative determination of salivary secretion through specific tests. Interactive discussion about the effects of hyposalivation.
10. Elderly's health education: dental brushing methods, maintenance methods and fixed and mobile dentures hygiene.	Lecture, systematic interactive presentation,	Performing dental brushing demonstrations for the

	practical demonstration on the patient	patient.
11. Dental attrition assessment in the elderly, detecting the favorable and etiological factors of the pathological dental attrition, establishing and applying the therapeutic and prophylactic measures. Diagnosis and treatment of cement cavities.	Lecture, systematic interactive presentation, practical demonstration on the patient	Using the BEWE index and applying prophylactic-curative measures to patients with pathological dental attrition. Performing an obturation to a patient diagnosed with cement cavities.
12. Performing atypical dental preparations on monoradicular and pluriradicular teeth in order to achieve PPF / PFU in the elderly patient with periodontal disease and gingival retraction.	Lecture, systematic interactive presentation, practical demonstration on the patient	Performing dental preparations with precise upper-gingival limits.
13. Evaluating the elderly patient partially edented subtotal before the last teeth are extracted for immediate total prosthesis. Reconstruction of partial / total removable worn prostheses	Systematic interactive presentation, practical demonstration on the patient, questioning	Assessing the student's knowledge.Examinating patient, interpreting complementary examinations.Imprinting in order to rebatch a total prosthesis.
14 Analyzing a case of total edentation through clinical examination, CTCB analysis, OPT, and establishing the treatment plan by upper-implanted prosthesis in the totally endented elderly patient suffering from a deficient prosthetic base.	Interactive teaching, questioning.	Making the upper-implantation prosthetic treatment plan for the elderly.

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12. Reyes L, Herrera D, Kozarov E, Roldán S, Progulske-Fox A.Periodontal bacterial invasion and infection: contribution to atherosclerotic pathology. J Clin Periodontol. 2013 Apr;40 Suppl 14:S30-50
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9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- Permanent and constructive dialogue between the student and representatives of the dentist community - in order to identify the needs and expectations of employers in the field and to adapt the analytical program to the needs of the current practical work.

- Permanent involvement of the members of the chair in scientific events, forms of continuous medical education and exhibitions of equipment and materials focused on the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the subject up to date.
- Keeping in touch with other teachers in the field from similar programs within various higher education institutions.
- The concepts studied are in compliance with the present regulations and they are compatible with the activities carried out on a national level in the preclinical dentistry segment.

10.Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation**	**10.3 Percent from the final grade**
10.4. Lecture	Coverage and accuracy of the acquired knowledge, logical coherence, fluency of expression.Ability to comprehend fundamental problems and customization.	Multiple-choice exam	70%
10.5. Practical Activity	Assessing theoretical knowledge and practical skills.	Practical exam	30% (of which 10% for item 10.6)
10.6. Activity during semester	Continuity of training during the semester.	Periodical tests.	10% (included in paragraph 10.5)
10.7. Minimum performance standard			
• The student must obtain at least grade 5 after medical discussion of the clinical case prepared in the 12th clinical semester. • Knowing the risks of dental treatments in the elderly and implicit preventive measures			

ORAL IMPLANTOLOGY

1. Information about the program

1.1. University	”Iuliu Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	I– Maxillofacial Surgery and Radiology
1.4. Field study	Health
1.5. Cycle of academic studies	Graduate degree
1.6. Study Program	Dental Medicine English Section
1.7. Qualification	Dentist
1.8. Form of study	Full-time learning

2. Information about the subject

2.1. Subject name			**ORAL IMPLANTOLOGY – SIXTH YEAR**					
2.2. Course coordinator			Prof. Dr. Băciuţ Mihaela					
2.3. Practical courses coordinators			Lecturer Crisan Bogdan					
2.4. Year of study	6	2.5. Semester	1	2.6. Evaluation type	Theoretical exam + Practical exam	2.7. Discipline regime	Content	DS
							Obligatoriness	DO

3. Total estimated time (hours/semester for educational activities)

3.1. Total hours/week	**5**	3.2. Theoretical	**2**	3.3. Practical	3
3.4. Total number of hours in the educational plan	**70**	**3.5. Theoretical**	**28**	**3.6. Practical**	**42**
3.4. **Time distribution / week**					Ore
Manual, course support, bibliography and notes study					28
Extra documentation from the library, online and in the field					8
Seminaries/practical courses, homework, reports, portfolios and essays					12
Tutoring					4
Exams/semester					3
Other activities					-
3.7. Total number of hours for individual study (a+b+c+d)				55	
3.8. Total number of hours/semester				125	
3.9. Total credits				5	

4. Preconditions (where applicable)

4.1. Curriculum	Dental-maxillary apparatus anatomy. Dental-maxillary apparatus

	physiology. Pathophysiology. Dental anesthesia. Oral and maxillo-facial surgery. Oral Pathology. Periodontology.
4.2. Abilities	The ability to analyze the anatomo-clinical parameters while studying a clinical case. The ability to set the correct clinical diagnosis in the oro-maxillo-facial field. Critical analysis and interpreting of laboratory results and other paraclinical explorations. Practical abilities in performing local and loco-regional nerve blocks in the maxillo-facial region. Practical abilities of assisting in oral surgery interventions.

5. **Conditions** (where applicable)

5.1. For courses	- location for course unfolding – amphitheater with projection systems - students will keep their phones shut off while the courses are unfolding. No phone calls are allowed during the courses. Students are not permitted to leave the amphitheater in order to take personal phone calls. - food and beverage consumption is not allowed during the courses. - students are not allowed to be late for courses since their tardiness can be disruptive for the educational activity.
5.2. For practical courses	- laboratories that offer proper conditions for the practical courses to unfold - offices with dental chairs, treatment rooms, operating rooms - students will keep their phones shut off while the practical courses are unfolding. No phone calls are allowed during the practical courses. Students are not permitted to leave the laboratory in order to take personal phone calls. - food and beverage consumption is not allowed during the practical courses. - students are not allowed to be late for the practical courses since their tardiness can be disruptive for the educational activity. - proper attitude towards the patient, doctors and teachers.

6. **Specific abilities acquired**

Professional abilities	Appropriation of theoretical and practical notions regarding the patient's examination specific for this field. Basic knowledge on dental implants. Acquiring knowledge of diagnosis in oral and maxillo-facial implantology.
Transversal abilities	The use of the acquired knowledge in new contexts The implementation of theoretical notions in practical situations Establishing inter-disciplinary correlations between the studied subjects Gaining the ability to communicate efficiently with the patients To demonstrate concern for constant professional improvement by training the analytical and synthetical thinking Taking part in research

7. **Aims of the subject (arising from the acquired specific abilities list)**

7.1. General aim of the subject	The course offers Sixth year students of the Dental Medicine Faculty theoretical notions concerning oral implants. It provides knowledge of oral

	and maxillo-facial implantology diagnosis, dental implant components, surgical protocols, bone augmentation for oral implantology, dental implant maintenance. The practical courses' objective is to teach practical aspects concerning the implant's parts, diagnosis in oral and maxillo-facial implantology, surgical protocols, bone augmentation and reconstruction, dental implant maintenance.
7.2. Specific aims	Studying basic notions concerning oral implants. Acquiring knowledge of diagnosis in oral and maxillo-facial implantology. Studying the implant's parts. Implant insertion stages. Bone augmentation and reconstruction. Dental implant maintenance.

8. Content

8.1. Course	**Teaching method**	**Observations**
1. Introduction. History. Rationale for implants. Nomenclature	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
2. Prosthetic options. Anatomic bases. Bone physiology and metabolism.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
3. Medical evaluation. Diagnosis evaluation of the oral implantology patient.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
4. Radiological diagnosis. Bone types. Classification.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
5. Occlusal evaluation in oral implantology.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
6. Prosthetic evaluation in oral implantology. Totally and partially edentulous arch classification.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
7. "Overdenture" therapeutic options. Posterior maxillary region treatment options.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
8. Biomaterials. Clinical biomechanics.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
9. Peri-implant tissues.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
10. Augmentation and restoration of the edentulous ridge.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
11. Root form implants. Progressive bone loading.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
12. Bone density – influence on the	Lecture, Systematic and	Oral presentations, Power-

treatment plan. Autogenous bone grafts.	interactive explanations.	Point presentations
13. Screw retained and cement retained implant supported prosthetic restorations. Occlusal aspects.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations
14. Implant and implant supported dentures maintenance.	Lecture, Systematic and interactive explanations.	Oral presentations, Power-Point presentations

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Bucur A. et al, COMPENDIU DE CHIRURGIE ORO-MAXILO-FACIALĂ vol. I Q Med Publishing, 2009

8.2. Practical courses	**Teaching method**	**Students' practical activity**
1. Dental cast and x-ray study of the bone support in oral implantology.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
2. Knowing how to use implantology kits	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
3. Dental model study of different types of edentation.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
4. Implant choice depending on the type of edentation (Misch and Judy classification).	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
5. Using the implant kit for applying endosseous implants in the visceral skull (mandible).	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
6. Using the implant kit for applying endosseous implants in	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral

the visceral skull (maxilla).		implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
7. Sinus lift options – skull study.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
8. Lateralization Technique and Inferior Alveolar Nerve Transposition – skull study.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
9. Learning impression techniques for implant supported prosthetic restorations.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
10. Inter-maxillary relation determination based on functional occlusion principles.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
11. Learning the use of the face-bow in oral implantology.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
12. Dental implant loading.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
13. Caring for patients with oral implants.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
14. Indications and counter indications in oral implantology.	Interactive teaching	Interactive teaching. Practical courses that consist of presenting oral implantology patients, dental cast study, x-ray study, patient consultation, assisting in surgical interventions.
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9. The corroboration of the subject's content with the expectations of the epistemic community members, professional associations and representative employers in the field.

- Permanent and constructive dialogue with the representatives of the Dentists Community in order to identify the needs and expectations of the employers in the field and adjusting the curriculum in order to best fit the needs of the current practical activity
- The participation of the teachers at congresses, medical exhibitions and different forms of continuous medical education in order to maintain the information as up-to-date as possible.
- Constant contact with other professors in the field from other universities to coordinate the curriculum.
- The studied notions are in agreement with the current regulations and are compatible with the activities that are conducted at a national level in the Dental Medicine field

10. Evaluation

Type of activity	10.1. Evaluation criteria	10.2. Evaluation method	Percent of final grade
10.4. Course	General evaluation criteria (coverage of acquired knowledge, logical coherence) The understanding of the fundamental and customization aspects is evaluated.	Written exam	**70%**
10.5. Practical courses	Evaluation of practical abilities	Oral exam - case study – oral implantology patient	**30%**
10.6. The activity during the semester			
10.7. Minimal performance standards			
The ability to properly use the correct terminology. Obtaining the practical and theoretical notions for examining the patient from an implantology point of view. Acquiring knowledge about diagnosis in oral and maxillofacial implantology Learning the implant's components. Learning implant's insertion steps. Basic knowledge of bone augmentation in oral implantology. Learning how to perform maintenance work with implant supported restorations.			

CRANIO-MAXILLO-FACIAL SURGERY

1. Information about the program

15.3. University	”Iuliu Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca
15.4. Faculty	Dental Medicine
15.5. Department	DEPARTMENT I –Maxillofacial Surgery and Radiology
15.6. Field of study	Dental Medicine
15.7. Cycle of academic studies	Graduate degree
15.8. Study Program	Dental Medicine English Section
15.9. Qualification	Dentist
15.10. Mode of study	Full-time learning

2. Information about the subject

2.1.Subject name			**CRANIO-MAXILLOFACIAL SURGERY 6th YEAR**					
2.2. Course coordinator			Assoc. Prof. Cristian Dinu (vacancy)					
2.3. Practical courses coordinators			Lecturer Onisor Florin Lecturer Armencea Gabriel					
2.4. Study year	6	2.5. Semester	1	2.6. Evaluation type	Theoretical exam + Practical exam	2.7. Discipline regime	Content	DS
							Compulsoriness	DO

3. Total estimated time (hours/semester for educational activities)

3.1. Total hours/week	**5**	3.2. Theoretical	**2**	3.3. Practical	**3**
3.4. Total number of hours in the educational plan	**70**	**3.5. Theoretical**	**28**	**3.6. Practical**	**42**

3.4. **Time distribution / week**	No. of hours
Manual, course support, bibliography and notes study	35
Extra documentation from the library, online and in the field	25
Seminaries/practical courses, homework, reports, portfolios and essays	15
Tutoring	5
Exams/semester	-
Other activities	-

3.7. Total number of hours for individual study (a+b+c+d)	80
3.8. Total number of hours/semester	150
3.9. Total credits	6

4. Preconditions (where applicable)

4.1. Curriculum	General and head and neck anatomy. Physiology. Pathophysiology.General and Dental-maxillary apparatus semiology. Genetics. Internal Medicine. Pediatrics. Oral and Maxillo-facial Surgery. Orthodontics and dentofacial orthopedics. Occlusology.

4.2. Abilities	The ability to analyze the anatomo-clinical parameters while studying a clinical case. Critical analysis and interpreting of laboratory results and other paraclinical explorations. The ability to set the correct clinical diagnosis of orofacial deformities.

5. **Conditions** (where applicable)

5.1. For courses	- amphitheater with projection systems - students will keep their phones shut off during courses. No phone calls are allowed during the courses. Students are not permitted to leave the amphitheater in order to take personal phone calls. - food and beverage consumption is not allowed during the courses. - students are not allowed to be late for courses since their tardiness can be disruptive for the educational activity.
5.2. For practical courses	- laboratories that offer proper conditions for the practical courses to unfold - offices with dental chairs, treatment rooms, operating rooms - students will keep their phones shut off while the practical courses are unfolding. No phone calls are allowed during the practical courses. Students are not permitted to leave the laboratory in order to take personal phone calls. - food and beverage consumption is not allowed during the practical courses. - students are not allowed to be late for the practical courses since their tardiness can be disruptive for the educational activity.

6. **Specific abilities acquired**

Professional abilities	Appropriation of theoretical and practical notions regarding the patient's examination specific for this field. Acquiring theoretical and practical knowledge of Plastic and Reconstructive Oro-Maxillo-Facial Surgery: craniocerebral and craniofacial trauma, dentofacial deformities, congenital and acquired craniofacial malformations, complex craniofacial malformative syndromes, defect reconstruction in the cranio-maxillofacial region, temporomandibular joint pathology.
Transversal abilities	The use of the acquired knowledge in new contexts The implementation of theoretical notions in practical situations Establishing inter-disciplinary correlations between the studied subjects The ability to communicate with the pacient in an efficient way To show preoccupation for professional development by training the abilities of analytical and synthetical thinking To prove involvement in research activities by elaborating scientific articles

7. **Aims of the subject (arising from the acquired specific abilities list)**

7.1. General aim of the subject	The course offers Sixth year students of the Dental Medicine Faculty theoretical notions concerning plastic and reconstructive craniofacial surgery : craniocerebral and craniofacial traumatology, dentofacial anomalies, congenital and acquired craniofacial malformations, complex craniofacial malformation syndromes, the reconstruction of tissued defects in the cranio-maxillofacial area.

	The practical courses aim to facilitate the assimilation of practical notions regarding the plastic and reconstructive cranio-maxillofacial surgery: craniocerebral and craniofacial traumatology, dentofacial anomalies, congenital and acquired craniofacial malformations, complex craniofacial malformation syndromes, the reconstruction of tissue defects in the cranio-maxillofacial area.
7.2. Specific aims	Assimilating the theoretical and practical notions regarding plastic and reconstructive cranio-maxillofacial surgery: craniocerebral and craniofacial traumatology, dentofacial anomalies, congenital and acquired craniofacial malformations, complex craniofacial malformation syndromes, the reconstruction of tissue defects in the cranio-maxillofacial area, the pathology of the temporomandibular joint.

8. Content

8.1. Course	**Teaching method**	**Observations**
1.Cranio-cerebral trauma: etiology, classification, physiopathology, clinical examination, anatomical pathology. Open cranio-cerebral injuries – classification. Cranio-cerebral wounds. The emergency care of traumatic wounds.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
2. Fungus cerebri. Cerebrospinal fluid fistulas. The treament of fistulas. Epicranial hematoma. Extradural hematoma. Subdural hematoma. Intracerebral hematoma.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
3.The classification of craniocerebral injuries taking the Glasgow scale into consideration. Minor injuries. Moderate injuries. Severe trauma.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
4.Cranio-maxillofacial anomalies: etiology, incidence, treatment indications, the classification of anomalies, the surgical treatment of the mandibular dentoalveolar anomalies.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
5.The anatomical mandibular prognathism: etiology, clinical symptoms, differencial diagnosis, surgical treatment, preoperative management, the surgical treatment itself – surgery in the area of the mandibular condyle, the mandibular branch, the angle of the mandible and of the body of the mandible.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
6. The anatomical mandibular retrognathism: etiology, clinical symptoms, differencial diagnosis, surgical treatment, preoperative management, the surgical treatment itself – surgery in the area of the mandibular condyle, the mandibular branch, the angle of the mandible, the body of the mandible and also the of the subapical alveolar process.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations

7. The open bite. The anatomical mandibular laterognathism: etiology, clinical symptoms, differencial diagnosis, surgical treatment, preoperative management, the surgical treatment itself.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
8.The anomalies of the maxillary frontal group: superior proalveolia, superior retroalveolia, supraalveolia, superior lateralsupraalveolia. Maxillary retrognathism: Le Fort I, II, III surgical treatment. The maxillary endognathism.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
9.The maxillary prognathism. The contour anomalies of the chin: progenia, retrogenia. Micrognathism with a decreased lower facial height and eugnathic bite.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
10. Excess contour anomalies of the body of the mandible. Anomalies regarding the number: supernumerary teeth. Positional dental anomalies: tipping and translation.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
11.Cranio-maxillofacial malformations. Complex craniofacial malformative syndromes. Congenital malformations of the face and jaws. First and second branchial arch syndromes.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
12. Congenital facial clefts. Etiology and classification. Anatomo-clinical types. Clinical aspects of congenital facial clefts. Plastic surgical treatment of the congenital facial clefts.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
13. Reconstructive microsurgery of the head and neck. The surgical treatment of the facial nerve paralysis.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations
14. The pathology of the temporomandibular joint.	Lecture, Systematic and interactive explanations of topic related cases.	Oral presentations, Power-Point presentations

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- May M., Schaitkin B.M.: *Facial Paralysis. Rehabilitation Techniques,* Thieme, New York, 2003.
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maxilo-faciale, 2012, Editura Didactică şi Pedagogică, Bucureşti, ISBN 978-973-30-3136-9		
8.2. Practical courses	**Teaching method**	**Students' practical activity**
1. The evaluation of the patient with craniocerebral injuries.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
2. The review of the lesions in a patient with craniocerebral injuries.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
3. The suturing of the cervico-facial wounds.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
4. Case presentations – patients with craniocerebral injuries.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
5. Case presentation – sagittal dento-facial anomalies.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
6. Discussing the treatment steps for patients with dentofacial anomalies (diagnosis, orthodontic treatment, preoperative planning, surgical treatment)	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
7.Case presentation - transversal dento-facial anomalies.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
8. Case presentation – vertical dento-facial anomalies.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
9. Case presentation – the treatment of dento-facial anomalies using osteodistraction.	Power-point presentations. Interactive	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and

	teaching.	maxillo-facial pathologies. Case study, case presentations.
10. Case presentation – labio-maxillo-palatine clefts.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
11. Discussing the complex treatment methods (surgical, orthodontic, phoniatric).	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
12. Case presentation – labio-maxillo-palatine clefts. Suture removal after plastic surgery of the lip.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
13. Case presentations – temporomandibular joint ankylosis.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.
14. Case presentations – microsurgical reconstruction for bone and soft tissue defects.	Power-point presentations. Interactive teaching.	Interactive teaching. Practical courses with the participation of the students in the surgical treatment of oral and maxillo-facial pathologies. Case study, case presentations.

Bibliography:

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- Ovidiu Iliescu: *Tratamentul chirurgical al anomaliilor dento-maxilare grave*, Editura Militară, 1978
- Epker BN, Wolford LM: *Dentofacial deformities. Surgical-orthodontic correction.* St. Louis, 1980, Mosby.
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- Baker S.R.: *Microsurgical reconstruction of the head and neck,* Churchill Livingstone, New York, 1989.
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- Al. Bucur, Gr. Băciuţ, M. Surpăţeanu, sub redacţia: *Managementul afecţiunilor chirurgicale oro-maxilo-faciale*, 2012, Editura Didactică şi Pedagogică, Bucureşti, ISBN 978-973-30-3136-9

9. The corroboration of the subject's content with the expectations of the epistemic community members, professional associations and representative employers in the field.

- Permanent and constructive dialogue with the representatives of the Dentists Community in order to identify the needs and expectations of the employers in the field and adjusting the curriculum in order to best fit the needs of the current practical activity
- The participation of the teachers at congresses, medical exhibitions and different forms of continuous medical education in order to maintain the information as up-to-date as possible.
- Constant contact with other professors in the field from other universities to coordinate the curriculum.
- The studied notions are in agreement with the current regulations and are compatible with the activities that are conducted at a national level in the Dental Medicine field

10. Evaluation

Type of activity	**10.1. Evaluation criteria**	**10.2. Evaluation methods**	**Percent of final grade**
10.4. Theoretical courses	General evaluation criteria (coverage of acquired knowledge, logical coherence) The understanding of the fundamental and customization aspects is evaluated.	Written exam - multiple choice questions	**50%**
10.5. Practical courses	Theoretical knowledge evaluation	Oral presentation (case presentation) selecting from the subjects presented during the theoretical and practical courses.	**50%**
10.6. The activity during the semester			
10.6. Minimal performance standards			
The ability to properly use the correct terminology. Obtaining the practical and theoretical notions for examining the patient. Knowing the anatomy and the physiology of the dento-maxilllary apparatus. The assimilation of the required knowledge concerning the socio-proffesional integration, as a future doctor.			

PHYSIOTHERAPY

1. Dates about the program

1.1. Higher education institution	”Iuliu Haţieganu”University of Medicine and Pharmacy, Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Rehabilitation 3
1.4. Domain of study	Health
1.5. The cycle of studies	License
1.6. Studing Program	Dental Medicine
1.7. Calification	Doctor -Dentist

1.8. Form of education	Frequently

2. Dates about the discipline

2.1. Discipline's name	**PHISIOTERAPY**							
2.2. Holder of course activities	**Associate Prof. Vacancy 10**							
2.3. Holder of practical work activities	Associate Prof. Vacancy 10 Asist. Univ. dr. Lazăr Adela Cristina Asist. Univ. dr. Băbțan Anida Maria							
2.4. Year of study	**6**	2.5. Semestre	**2**	2.6. Evaluation methods	Theoretical exam + Evaluation of the activity during the semester	2.7. The discipline regime	Content	**DS**
							Obligativity	**DI**

3. Estimated total time (hours per semester of teaching activities)

3.1.Number of hours per week	**3**	3.2. from which: lecture	**1**	3.3. Practical work	**2**
3.4. Total hours of the curriculum	**42**	**3.5.** from which: lecture	**14**	**3.6.** Practical work	**28**
3.4. **Time / week fund distribution**					Hours
Study by handbook, course support, bibliography and notes					**4**
Additional documentation in the library, on specialized electronic platforms and in the field					**2**
Preparation of seminars / laboratories, topics, reports, portfolios and essays					**2**
Tutorial					
Exams / semester					
Other Activities					
3.7. Total hours of individual study (a+b+c+d)			**8**		
3.8. Total hours per semestre			**50**		
3.9. Number of credits			**2**		

4. Preconditions (where is necessary)

4.1. of curriculum	Knowledge of dental medicine, physiology, biophysics
4.2. of skills	

5. Conditions (where is necessary)

5.1. Lecture	Amphitheater with projection system
5.2. Practical works	Laboratories with specific equipment for practical activities

6. Specific accumulated skills

Professional skills	• The ability to use the specialized terminology properly and contextually • Knowledge of the concepts regarding the procedures of general physiotherapy, balneology, phototherapy and electrotherapy • Knowledge of the modalities of applicability of physiotherapeutic methods in various pathologies in the oro-maxillofacial sphere • Acquiring some knowledge regarding the professional risk for the osteo-articular apparatus and ergonomic techniques to limit this risk
Transversal	• Using assimilated notions in new contexts

skills	• The application of theoretical notions in practical activity • Establishing interdisciplinary correlations in the studied fields

7. Discipline Objectives (based on the grid of specific skills accumulated)

7.1. General objective	• Acquiring knowledge about alternative methods of classical dental medicine - physiotherapeutic methods
7.2. Specific Objective	• Acquiring the concepts of general physiotherapy • Acquiring knowledge about the mechanisms of action of the therapeutic factors used in physiotherapeutic procedures • Knowledge of the pathology within the dental medicine that can be treated by physiotherapy procedures • Acquisition of the concepts regarding the professional risk for the osteo-articular apparatus • Acquiring the skills to use physiotherapy equipment in the dental office

8. Content

8.1. Lecture	Methods of Teaching	Observations
1. History of physiotherapeutic applications	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
2. The mechanisms of action of the therapeutic factors used in physiotherapeutic procedures	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
3. Hydrotherapy and thermotherapy; applications in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
4. Balneology and its implications in oro-maxillofacial pathology	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
5. Phototherapy and heliotherapy in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
6. Low power laser therapy (LLLT) and its applications in dentistry	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
7. Ultrasound therapy: their applications in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
8. Methods of electrotherapy: galvanic current and ionophoresis, applications in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
9. Electrotherapy methods: diadynamic currents, low-frequency pulsed currents (TENS), applications in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
10. Climatotherapy: climatic zones in Romania and clinical applications	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
11. Peloid therapy and applications in dental medicine of sludge	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
12. Kinetotherapy and massage: principles, methods and applications in dental pathology	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations
13. Specific applications of physiotherapeutic	Lecture, systematic,	Oral presentations, Power-

procedures in dental medicine	interactive presentation	Point presentations
14. Specific applications of physiotherapeutic maneuvers in dental medicine	Lecture, systematic, interactive presentation	Oral presentations, Power-Point presentations

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1. Pop Liviu. Curs de balneofizioterapie şi recuperare medicală. Cluj Napoca, 1994
2. Bocu Traian, Tache Simona. Elemente de profilaxie şi terapie prin mişcare. Cluj Napoca; Editura Medicală Universitară „Iuliu Haţieganu", 2001
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8.2. Practical Works	**Methods of Teaching**	**Practical activities**
1. Knowledge of the usual devices used in physiotherapy	Power-point presentation, interactive teaching	Interactive talks,
2. Specific setting of the working parameters of the physiotherapy apparatus	Power-point presentation, devices presentation	Practice the working equipment settings as directed
3. Knowledge of the pathology in dental medicine that can be treated by physiotherapy procedures	Power-point presentation	Case presentation
4. Possibilities and limits of physiotherapy in dental medicine	Interactive talks	Student reports
5. Practical demonstrations with the devices of the Physiotherapy Discipline	Devices presentation	Applications of different procedures Applications of different procedures
6. Principles of ergonomics in dental medicine and applications of physiotherapy procedures to combat the negative effects of work in the dental medicine office	Powerpoint presentation, live demonstration	Exercise ergonomic working positions with four hands in spaces with specific equipment
7. Mechanotherapy and massage in disorders in the field of dental medicine	Practical demonstration, interactive teaching	Applications of different methods of mechanotherapy, clinically

		application
8. Balneology and its implications in oro-maxillofacial pathology	Powerpoint presentation,	Documentation from the specialized literature, related support
9. Hydrotherapy and thermotherapy; applications in dental medicine	Interactive talks, demonstrations	Training activities on applications of cataplasms and compresses in postoperative recovery
10. Peloid therapy and dental medicine applications of indigenous sludge.	Powerpoint presentation, interactive teaching	Documentation from the specialized support literature referred
11. Physiotherapy treatments applied in patients with periodontal diseases	Interactive talks, demonstrations	Case presentation
12. Physiotherapy treatments applied to patients with temporo- mandibular dysfunction	Interactive talks, demonstrations	Case presentation
13. Physiotherapy treatments applied in bone fractures at the level of the maxillo-facial area	Powerpoint presentation	Case presentation
14. Physiotherapeutic treatments applied in essential and secondary trigeminal neuralgia	Powerpoint presentation	Case presentation

Bibliografie

1. Pop Liviu. Curs de balneofizioterapie şi recuperare medicală. Cluj Napoca, 1994
2. Bocu Traian, Tache Simona. Elemente de profilaxie şi terapie prin mişcare.. Cluj Napoca; Editura Medicală Universitară „Iuliu Haţieganu", 2001
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10. Georgiana-Ozana Tache .Fizioterapia-prezentare şi aplicaţii în patologia medicinii dentare,Curs şi Lucrări Practice, Bucureşti 2006

9. Corroborating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field related to the program

- Permanent and constructive dialogue with representatives of the community of dentists - in order to identify the needs and expectations of the employers in the field and to adapt the analytical program to the needs of the current practical activity
- Permanent participation of the members of the chair in scientific manifestations, forms of

continuous medical education and exhibitions of equipment and materials dedicated to the practical activity of dental medicine - in order to maintain the theoretical and practical information introduced in the structure of the discipline at a high level of actuality. • Maintaining contacts with other teachers in the field, holders in other institutions of higher education, for coordinating the content taught with other similar programs within other institutions of higher education. • The concepts studied are in accordance with the regulations in force and are compatible with the activities carried out at national level in the segment of dental medicine.

10. Evaluation

Type of activity	10.1. Evaluation Criteria	10.2. Methods of evaluation	Weight in the final grade
10.4. Lecture	General evaluation criteria (coverage area and accuracy of accumulated knowledge, logical coherence, fluency of expression). Ability to understand fundamental problems and to customize	Written Exam	**60%**
10.5Practical work	Evaluation of theoretical knowledge and practical skills	Report	**30%**
10.6. Activity during the semestre	Involvement in practical and theoretical activities		**10%**
10.6. Minimum Standard of Performance			
• Acquiring knowledge about alternative methods of classical dental medicine - physiotherapeutic methods			

PUBLIC HEALTH IN DENTISTRY

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	Oral Rehabilitation 3
1.4. Domain of study	Health
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor of Dental Medicine
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			Oral Health					
2.2. Responsible for lecture			Associate Professor Ondine Lucaciu					
2.3. Responsible for practical activity			Assisting Professor Ioana Codruța Mirică Assisting Professor Adina Sârbu Assisting Professor Adina Topârceanu					
2.4. Year of study	6	**2.5. Semester**	2	**2.6. Form of evaluation**	Theoretical + practical exam	**2.7. Course type**	Content Mandatory	DS DI

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	6	**3.2. Course**	2	**3.3. Practical Activity**	4
3.4. Total hours in the curriculum	84	**3.5. Course**	28	**3.6. Practical activity**	56
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					25
Individual study using on-line platforms, field research					20
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					17
Tutoring					2
Examination/ semester					2
Other activities					
3.8. Total hours of individual study (a+b+c+d)					66
3.9. Total hours/semester					150
3.10. Number of credits					5

4. Prerequisites (if needed)

4.1. Curriculum	Knowledge of dental medicine, public health, epidemiology
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	Lecture hall with a projection system
5.2. For practical activities	Laboratories with specific equipment for practical activities

6. Acquired specific competences

Professional competences	• Capacity to adequately and in context use the specialty terminology • Deepening the notions of primary and secondary prophylaxis • Preserving oral health - hospitalization • Continuous improvement of life quality correlated with oral health – regarding the population's health and comfort state • Implementation of a healthy behavior among the population • Perfection of the capacity to render prophylactic and theoretical knowledge in medicine

Transversal competences	• Use of assimilated notions in new contexts • Application of theoretical concepts to practical activity • Establishment of interdisciplinary correlations in the studied fields

7. Course objectives (derived from the acquired specific competences)

7.1 General Objectives	Knowing the oral health problems worldwide and the role of the dentist in regarding the assessment of the oral health , of its determinants and the possibilities to influence the oral health status.
7.2 Specific Objectives	Learning the knowledge regarding the health concepts Developing concepts of oral-dental public health Promotion of oral health Monitoring and public assistance of dental disseases Prevention and control of dental diseases and promotion of dental health through the effort of the community Health condition of the population depending on the determinants of the health condition: social-economical, biological, environmental, life style, insurance of health services, quality and accesibility of health services.

8. Content

r. Lecture	Teaching methods	Observations
1. Principles of dental public health	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
2. History of dental public health	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
3. Inequalities in Dental Public Health	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
4. Efforts of DPH worldwide	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
5. The concept of risk factor.	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
6. Determinants of population's health	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
7. Primary health care	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
8. Aspects of oral health on groups of diseases: decays, periodontitis, malignant tumors, malformations and dento-maxillary abnormalities, traumas, infections	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
9. Aspects of oral health on groups of diseases: decays, periodontitis, malignant tumors, malformations and dento-maxillary abnormalities, traumas, infections	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation

10. Aspects of oral health on groups of diseases: malformations and dento-maxillary abnormalities,	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
11.Principles and methods of oral epidemiology	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
12. Principles and methods of oral epidemiology	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
13 . Ethics in public health.	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation
14 . Ethics in public health.	Lecture, Systematic and interactive presentation	Oral presentation , Power point presentation

Bibliography

1.Enăchescu D., Marcu M. G. – Sănătate publică şi management sanitar – Editura All, Bucureşti1994
2.Hanganu S., Dănilă I. – Stomatologie comunitară – Ed. TEHNICA-INFO, Chişinău 2002
3.Grivu O. şi colab. – Medicină dentară comunitară – Ed. Waldpress, Timişoara 2007
4.Mason J. – Concepts in Dental Public Health – Ed. Lippincott Williams & Wilkins, 2005
5.Inglehart M.R., Bagramian R.A. – Oral Health-Related Quality of Life – Quintessence Publishing Co, Inc, Chicago, 2002

Practical Activities	**Teaching Methods**	**Activity to be done by students**
1. Oral health assessment form	PowerPoint presentations, interactive teaching.	Essay presentation on the topic
2. Design of an oral health survey	PowerPoint presentations, interactive teaching.	Essay presentation on the topic.
3. Pathfinder surveys	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
4. Organizing the survey . Preparing a survey protocol	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
5. Organizing the survey. Obtaining approval from the authorities	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
6. Organizing the survey .Budgeting	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.

7. Organizing the survey Schedulin	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
8. Reliability and validity of data . Training and calibrating examiners	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
9. Implementing the survey . General preparation	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic
10 Assessment of oral health status . Standard forms	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
11. Assessment of oral health status Standard codes	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
12. Clinical examination. Dentition status Periodontal status: Community Periodontal Index. (CPI) modified. Loss of attachment. Enamel fluorosis. Dental erosion	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
13. Clinical examination. Traumatic dental injuries. Oral mucosal lesions. Denture status.	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
14. Preparation of survey reports	PowerPoint presentations, teaching and interactive discussions	Essay presentation on the topic.
Bibliography: Oral Health Surveys. Basic Methods .5th Edition		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- A permanent constructive dialogue with the representatives of the dentist community – in order to identify the needs and expectations of employers in the field and to adapt the curriculum to the requirements of current practice.
- The permanent participation of the department members in scientific meetings, continuing medical education forms and exhibitions of equipment and materials used in the practice of dental medicine – in order to keep up to date the theoretical and practical information related to the discipline at an updated high level.
- The maintenance of relationships with teaching staff from other higher education institutions in the field, in order to coordinate the content taught with other similar study programs from other higher education institutions.
- The studied content is in accordance with the regulations in force and is compatible with the activities carried out at national level in the field of preclinical dental medicine.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade
10.4. Lecture	General evaluation criteria (extent and correctness of the acquired knowledge, logical coherence, expressional fluency) The ability to understand fundamental problems and to particularize	Oral and written exam	**35%**
10.5. Practical Activity	Evaluation of theoretical knowledge and practical skills	Practical exam	**35%**
10.6. Activity during semester	Activity during the semester	- 4 oral health assessment form - 1 essay on oral health topics	**30%**

10.7. Minimum performance standard

Acquisition of the main notions of Oral Health:

- Current conception about health and oral health
- Aspects of oral health on groups of diseases
- Correlation between the need of healthcare and the possibilities of the medical system to provide healthcare
- Life quality and life quality correlated with oral health
- Work instruments for oral health evaluation
- Oral health in Romania and EU
- Determinants of oral health

DENTAL ANOMALIES

1. Information about the program

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine

1.3. Department	Conservative odontology
1.4. Domain of study	Dental Medicine
1.5. Level of course	License- (undergraduate students)
1.6. Academic degree	Dental Medicine in English
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about the discipline

2.1. Course title			**Orthodontics. Dental anomalies**					
2.2. Responsible for lecture			S.L. Dr. Mircea Ghergie					
2.3. Responsible for practical activity								
2.4. Year of study	6	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content	DS
							Mandatory	DO

3. Total estimated time (hours/semester for teaching activity)

3.1. Total hours/week	**1**	3.2. Course	**1**	3.3. Practical Activity	0
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**0**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					14
Individual study using on-line platforms, field research					10
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					6
Tutoring					2
Examination/ semester					2
Other activities					2
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites (if needed)

4.1. Curriculum	Notions of orthodontics
4.2. Competences	-

5. Requisites (if applicable)

5.1. For lectures	amphitheater with a projection system
5.2. For practical activities	

6. Acquired specific competences

Professional	• Capacity to properly use speciality terms

competences	• Knowing the morphology of various groups of teeth • Knowing the morphology of the dental arches • Acquireing notions of norlam oclusion • Acquireing general information about the reference positions of the maxilla and mandible : centric relation, posture, habitual bite • Acquiring practical experience through the use of specialist instruments for executing the necessary stages in establishing an orthodontic diagnosis • Acquiring necessary practical experience in utilising specialist instruments in the view of manipulating orthodontic appliances
Transversal competences	• Utilisation of notions from new context • Establishing a interdisciplinary correlation

7. Course objectives (derived from the acquired specific competences)

7.1. General Objectives	Knowledge of dento-maxillary anomalies and possibilities of treatment
7.2. Specific objectives	• Clinic and complementary examinations • Remembering the clinical table for dento-maxillary anomalies and etiological factors implicated in its production • Establishing a diagnostic and therapeutic plan

8. Content

Lecture	Teaching methods	Observations
1. Growth and development of the dento-maxillary apparatus	Lecture, systematic interactive exposure	Oral exposure power-point presentation
2. Evolution relation/order of normal occlusion	Lecture, systematic interactive exposure	Oral exposure power-point presentation
3. Clinical examination in orthodontics	Lecture, systematic interactive exposure	Oral exposure power-point presentation
4. Complementary exams: Study model, examine photostatic, anthropologic	Lecture, systematic interactive exposure	Oral exposure power-point presentation
5. Radiologic examinations: methods of analysis of profile teleradiographs	Lecture, systematic interactive exposure	Oral exposure power-point presentation
6. Orthodontic terminology classification and diagnostic of dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
7. Etiological and Pathogenesis of dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
8. Dento-maxillary anomalies in the transversal plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
9. Dento-maxillary anomalies in the sagittal plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
10. Dento-maxillary anomalies in the vertical plane	Lecture, systematic interactive exposure	Oral exposure power-point presentation
11. Dental anomalies	Lecture, systematic	Oral exposure power-

	interactive exposure	point presentation
12. Anomalies consisting of consecutive premature loss of temporary and permanent teeth	Lecture, systematic interactive exposure	Oral exposure power-point presentation
13. Prophylaxis for dento-maxillary anomalies	Lecture, systematic interactive exposure	Oral exposure power-point presentation
14. Indications for treatment in dento-maxillary anomalies. Principals of orthodontic treatments, types of mobile biomechanics devices	Lecture, systematic interactive exposure	Oral exposure power-point presentation

Bibliography

1. Cocarla E – Ortodontie , Ed. Medicala Univ. "Iuliu Hatieganu" , Cluj-Napoca, 1995.
2. Cocarla E – Stomatologie pediatrica , Ed. UMF „Iuliu Hatieganu", Cluj-Napoca, 2000.
3. Mesaros M – Notiuni practice de ortodontie , Ed. Medicala Univ. "Iuliu Hatieganu" , Cluj-Napoca,2003.
4. Tarmure V, Serbanesu A – Elemente de diagnostic i tratament in ortodontie, Ed. Charmides, Bistrita, 2010.
5. McDonald F, Ireland AJ – Diagnosis of the orthodontic patient , Oxford University Press, 1998.
6. Houston WJB, Tulley WJ – Atextbook of orthodontics , Wright, 1986.
7. Isaacson KG, Muir JD, Reed RT – Removable orthodontic appliances, Wright, 2002.
8. Proffit WR, Fields J,Sarver D - Contemporary orhodontics , Mosby, Elsevier,2007
9. Graber VV, Vanarsdall, Vig- Orthodontics.Current principles and techniqueS, Fifth edition, Mosby, Elsevier, 2012.

Practical Activities	Teaching Methods	Activity to be done by students
Bibliography:		

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- . Permanent and constructive dialog with representative dentists from the community in the view of identification of the need and demands of employers in the domain
- Permanent participation from disciplinary members of scientific forms of medical education continues and exposure to apparatus and materials dedicated to the practical activities in dental medicine and orthodontics
- Maintaining contact with the other cathedras in the domain, teaching in other institutions of superior studies for the coordination and continual teaching with other similar programs of superior studies

Studied notions that are in concordance with the vigorous regulations and are compatible with the activities at a national level in the dental medicine and orthodontic segment

11. Evaluation

Activity type	10.1Evaluation criteria	10.2. Evaluation	10.3 Percent from the final grade

10.4. Lecture	General criteria for evaluation (covered area of studies and accumulated knowledge, logical coherence and fluent expression of the material).	Oral exam	**100%**
10.5. Practical Activity			
10.6. Activity during semester			
10.7. Minimum performance standard			
- Recognition and diagnostic of dento-maxillary anomalies - Establishing therapeutic objectives - Prophylactic treatment and interception of dento-maxillary anomalies - Recognition and description of mobile orthodontic appliances			

TEMPOROMANDIBULAR DYSFUNCTION

1. **Information about the program**

1.1. Institution for graduate and postgraduate studies	University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca
1.2. Faculty	Dental Medicine
1.3. Department	4th
1.4. Domain of study	Healthcare
1.5. Level of course	License (undergraduate students)
1.6. Academic degree	Dental Medicine in Romania
1.7. Qualification	Doctor –Dental Medicine (Dentistry)
1.8. Form of education	Full-time program

2. Information about **the** discipline

2.1. Course title			**Temporomandibular Dysfunction**					
2.2. Responsible for lecture			Senior Lecturer Dr. Smaranda Buduru					
2.3. Responsible for practical activity			-					
2.4. Year of study	6	2.5. Semester	1	2.6. Form of evaluation	Theoretical + practical exam	2.7. Course type	Content Mandatory	DS DI

3. **Total estimated time (hours/semester for teaching activity)**

3.1. Total hours/week	1	3.2. Course	1	3.3. Practical Activity	0
3.4. Total hours in the curriculum	**14**	**3.5. Course**	**14**	**3.6. Practical activity**	**0**
3.7. Distribution of time needed/week					Hours
Study using text books, lecture notes, references					**14**
Supplemental study in the library, using on-line medical platforms, field research					**8**
Preparing seminars/Laboratory activities, homework, projects, portfolios, essays					**11**
Tutoring					**2**
Examination/ semester					1
Other activities					-
3.8. Total hours of individual study (a+b+c+d)				36	
3.9. Total hours/semester				50	
3.10. Number of credits				2	

4. Prerequisites

4.1. Curriculum	Occlusology
4.2. Competences	-

5. Requisites

5.1. For lectures	Amphitheatre/Lecture room with projection system
5.2. For practical activities	-
Specific acquired competences, Professional competences	• Capacity to adequately and contextually utilize speciality terminology. • *Knowledge of anatomy and function of the dento-maxillary apparatus (DAM).* • *Capacity to synthetize in an interdisciplinary fashion notions of dental occlusion.* • *Knowledge of aetiology and symptomatology of TMD.* • *Acquiring concepts of positive and differential diagnosis.* • *Acquiring principle information regarding treatment.* • *Notions of instrumental diagnosis.* • *Usage notions for interocclusal devices.*
Transversal competences	• Using acquired knowledge in new contexts. • Applying theoretical notions in a multidisciplinary practical activity. • Establishing interdisciplinary correlations in the studied domains.

7. Course objectives (derived from the acquired specific competences)

1. General Objectives	• *Recognising the characteristics of the patient with temporomandibular dysfunction: diagnosis and treatment.*

2. Specific objectives	• *Specific clinical examination of TMD.* • *Acquiring concepts of functional dental occlusion.* • *Instrumental examination of TMD.* • *Methods for positive and differential diagnosis in TMD.* • *Instrumental and occlusal analysis; conceiving the occlusal treatment plan.* • *Exercising capacities of synthesis and bibliographical research/documentation.*

1. Content

1. Lecture	**Teaching methods**	**Observations**
1. TMD definition, history, terminology, epidemiology.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
2. TMD etiology.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
3. TMD symptomatology connected to the DAM.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
4. TMD symptomatology referred from the DAM.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
5. Examining the patient with TMD.	*Lecture, systematic and interactive display of information, problematisation, conversation*	*Oral displays, PowerPoint presentations, videos*
6. Positive diagnosis in TMD.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
7. Differential diagnosis in TMD.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos

8. Occlusal rehabilitation treatment through subtraction.	Lecture, systematic and interactive display of information, problematisation, conversation	*Oral displays, PowerPoint presentations, videos*
9. Occlusal rehabilitation treatment through addition and position modification.	Lecture, systematic and interactive display of information, problematisation, conversation	*Oral displays, PowerPoint presentations, videos*
10. General medication and physical therapy.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
11. Interocclusal muscle-relaxant devices.	*Lecture, systematic and interactive display of information, problematisation, conversation*	*Oral displays, PowerPoint presentations, videos*
12. Interocclusal mandibular-repositioning devices.	Lecture, systematic and interactive display of information, problematisation, conversation	Oral displays, PowerPoint presentations, videos
13. Methodology of approaching a complex rehabilitation.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos
14. Case presentation.	*Lecture, systematic and interactive display of information, problematisation, conversation*	Oral displays, PowerPoint presentations, videos

Bibliography

1. Gola R, Ghossegros C., Orthlieb JD – Syndrome algo-dysfonctionel de l'appareil manducateur (SADAM) ou dysfonctions de l'appareil manducateur (DAM), Masson, Paris, 1995.
2. Jeanmonod A – Occlusodontologie, applications cliniques, Ed CdP, Paris, 1988.
3. Okeson JP – Management of Temporo-mandibular Disorders and Occlusion, 4th Ed., mosby, St Louis, 1998.
4. Popa Smaranda – Examinarea clinica a pacientului cu disfunctia ADM, Ed. Dacia, Cluj, 2003.
5. Dawson Pe, Functional Occlusion from TMJ to Smile Design, Ed. Mosby, 2007.

9. Connecting the course content with the demands of the epistemic community, professional associations, and representative employers in the field

- *Permanent and constructive dialogue with the representatives of the dentists' community – in order to identify the needs and expectations of dental field employers and to adapt the analytical syllabus to the necessities of current dental practice.*
- *Permanent participation of the members of the Department in scientific manifestations, Continuing Medical Education events and exhibitions of dental devices and materials dedicated to activity in dental medicine – in order to keep the theoretical and practical information that is being introduced in the lecture up-to-date.*
- *Keeping in contact with other teachers in the same field, that are employed in the higher education system, in order to calibrate taught content with other similar curricula in other institutions of higher education.*
- The studied notions are concordant with current legislation and are compatible with ongoing activities at a national level in the field of dental medicine.

10. Evaluation

Activity type	**10.1Evaluation criteria**	**10.2. Evaluation methods**	**Percent from the final grade**
10.4. Lecture	General evaluation criteria (covered field and correctness of acquired knowledge, logic coherence and fluency of expression). Capacity to comprehend and particularise fundamental issues.	Essay-type examination and oral presentation on a given topic.	*100%*
10.5. Practical activities			
10.6. Activity during the semester			
10.6. Minimum performance standard			
Acquiring main notions of TMD • Signs and symptoms in TMD • Detecting etiological factors • Occlusal pathology • Using the SAA in occlusal examinations • Differential diagnosis in TMD • Treatment principles in TMD			