NATIONAL AND KAPODISTRIAN
UNIVERSITY OF ATHENS
SCHOOL OF DENTISTRY

SELF-ASSESSMENT REPORT

ACADEMIC YEAR: 2007- 2008

NOVEMBER 2008

GENERAL INFORMATION

Name of School: National and Kapodistrian University of Athens – Dental School

Address: 2 Thivon Street, GR-115 27 Goudi, Athens, Greece

Website: www.dent.uoa.gr

Dean of School: Prof. Asterios Doukoudakis
e-mail: adoukoud@dent.uoa.gr

Associate Dean: Prof. Konstantinos Tsiklakis
e-mail: ktsiklak@dent.uoa.gr

Director of 1st Section - Community Dentistry:
Prof. Evangelia Papagianoulis

Director of 2nd Section - Dental Pathology and Therapeutics:
Prof. George Vougiouklakis

Director of 3rd Section - Prosthodontics:
Prof. Byron Droukas

Director of 4th Section - Oral Pathology and Oral Surgery:
Prof. Ekaterini Nikopoulou-Karagianni

Director of 5th Section - Basic Sciences and Oral Biology: NA

Head of Departments/Clinics

1. Department of Orthodontics: Prof. Stavros Kiliaridis
2. Department of Paediatric Dentistry: Prof. Evangelia Papagianoulis
3. Department of Preventive & Community Dentistry: Associate Professor Eleni Mamai-Chomata
4. Department of Operative Dentistry: Prof. George Vougiouklakis
5. Department of Endodontics: Associate Professor Panagiotis Panopoulos
6. Department of Periododontics: Professor Ioannis Vrotsos
7. Department of Prosthodontics: Prof. Asterios Doukoudakis
8. Oroficial Pain Management Clinic: Prof. Byron Droukas
9. Department of Oral Pathology: Professor Alexandra Sklavounou
10. Department of Oral & Maxillofacial Surgery: Professor Constantinos Alexandridis
11. Department of Oral Diagnosis & Radiology: Prof. Konstantinos Tsiklakis
12. Clinic of Hospital Dentistry: Associate Professor Ourania Galiti
13. Department of Dental Biomaterials: Professor George Eliades
14. Department of Basic Sciences: NA
15. Department of Oral Biology: NA

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1. INTRODUCTION

The National and Kapodistrian University of Athens (N.K.U.A), in its present structure, consists of five Schools (Theology; Law, Economics and Political Sciences; Health Sciences; Philosophy; Sciences) and independent faculties. The Faculty of Dentistry (Dental School) belongs to the School of Health Sciences.

The Greek Constitution stipulates that the University, as an Institution of Higher Education, shall be a legal entity of public law. It has full administrative autonomy, but is subject to state supervision by the Ministry of National Education and Religion, which also provides its funding.

The University's administrative authorities are the Senate (assembly of representatives of faculties, students etc.), the Rectorial Council and the Rector.

The Dental School of N.K.U.A is one of the two dental schools that presently exist in Greece. Students after completion of the five – year program, obtain a dental degree (D.D.S) that allows them to enter the profession as a dental practitioner.

The Dental School was founded in 1911 by a law (3823 article 20), which related to the overall organization of the University. With a further series of laws and regulations, that followed, it attained its present form. This includes 5 main Sections and 15 Departments and Clinics, each one of which have several subject areas which were recently (2007) re-determined.

The administrative structure of the school is presented in the following scheme.

DEAN

GENERAL ASSEMBLY ASSOCIATE DEAN EXECUTIVE COUNCIL

The **General Assembly** consists of the Dean, the Associate Dean, the Directors of the Sections, faculty members and student representatives, as well as administrative staff representatives.

The **Executive Council** consists of the Dean, the Associate Dean, the Directors of the Sections, two student representatives and one graduate student representative.

A significant step in the history of the School was the foundation of the graduate program in 1994. After a series of developments and legislative acts, the graduate program has evolved into its present form, which includes two levels of graduate (cycles) education. In the first level a graduate student can obtain a Master's degree (Diploma in Graduate Education) in 14 various specialties, 10 of which belong to the Clinical Sciences and 4 to the Basic Dental Sciences. The second level is for students who are pursuing a doctorate (Ph.D) degree.

Another significant step for the school was the year 1999 when, for the first time, the DentEd Committee of the European Union evaluated the School. The evaluation was

performed on the educational activities of the School and the outcome of this evaluation was extremely positive.

Finally, from 2003, a restructuring program for both undergraduate and graduate programs was initiated through an EPEAEK II program funded by the Ministry of Education and the E.U. (European Union).

The goal of the Dental School is to educate undergraduate students to obtain the necessary knowledge and competencies, which will help them practice the dental profession.

Another goal is the graduate education in various specialties, which provide knowledge in well-defined and progressive areas of learning, by improving scientific thinking, gaining new scientific information, providing high standards in patient care and developing the dental science.

Within the present educational framework, there are a large number of patients who are treated at the Dental School. Some of them belong to special needs groups and others have been identified with extensive and complicated problems, which require a multidisciplinary treatment approach.

2. PROCESS OF SELF – ASSESSMENT

The members of the Self – Assessment Committee (SAC) were elected by the General Assembly of the School during the February 20th, 2008 session.

These are:

1. George Vougiouklakis, Professor, President SAC
2. Konstantinos Tsiklakis, Professor
3. Afrodite Kakaboura, Professor
4. Efthymia Kitraki, Associate Professor
5. Dimitrios Halazonetis, Assistant Professor
6. Anastasia Kossioni, Assistant Professor
7. William (Vasilis) Papaioannou, Lecturer
8. Serafim Kallithrakas, Student
9. Ioannis Tranoudis, Student

The members of the SAC, in order to develop the present report, were in close collaboration with:

- All the Course – Coordinators in order to complete the special questionnaires referring to individual course contents, which are listed under their direction.
- All Department Chairpersons and Clinical Directors for the gathering of information relating to the treatment of patients for both undergraduate and graduate programs.
- The Dental Education Committee (two members of this Committee also belong to the SAC) for information on the structure of the Educational program and operational procedures of the Committee.
- Faculty members who represent the various department and Clinics and offer their help in collecting the necessary information.
- Administrative Staff who deal with students, patients and central supplies of the school.
- For the formulation of the present report multiple sources of information were collected, analyzed, cross-checked, discussed and then were evaluated by members of the SAC. The Specific Procedures which were used are the following:
    - For the analysis of the undergraduate courses, information was obtained from the Undergraduate Studies Program (Appendix 1. Undergraduate Study Guide) for the academic year 2006-2007 and from two questionnaires. The first questionnaire was completed by each course coordinator, who listed all the educational characteristics of the course, including positive and negative elements, and future plans for changes and improvements. The second questionnaire was addressed to the students to evaluate each course of the program. Additionally, there were several

procedural and informative discussions with Department Chairpersons and Clinic Directors, faculty members and students.

- For the analysis of the graduate program, information was obtained from the directors of the 14 specialties, the coordinator of the doctorate degree program and the administrator of the graduate program. Further information was derived from the Graduate Program Guide Appendix 2. Graduate Program Guide), the Internal Guides of each specialty and an assessment procedure of the program provided by the graduate students.
- The Administration Office for Undergraduate Education provided information on student examinations and grades.
- The scientific activities of faculty members were recorded voluntarily by each individual, and from relevant electronic databases (e.g. Scopus).
- As far as technical, electronic, visual, research, clinical and laboratory equipment, as well as space allocated for offices, clinics and laboratories, information was obtained from the technical and supportive staff members.

A draft self-assessment report has been given to Department Chairpersons, Clinic Directors, Section Directors, the Dental Education Committee, Director of the Graduate Program and professors of the School. Reactions on the report were collected, discussed and the essential changes were made. This review report was distributed to the members of the General Assembly who were asked to provide their opinion after discussion. The final report was accepted and placed on the web site of the School (www.dent.uoa.gr > School > Assessment). This will provide an opportunity for all faculty members to read the report and familiarize themselves with the results. In the meantime, the results and the analysis of each course were given to the course directors and there will be discussions between the SAC, the Dental Education Committee and the course directors in reference to courses which exhibit specific problems.

The procedures that were followed, for the formulation of the present report, allow the opportunity to express some conclusions concerning the positive and negative results of the self-assessment and some general proposals for improvement.

The Dental School has experience from the previous evaluation, which was performed by the European Union through the Dent-Ed program in 1999. This past evaluation left a positive feeling to the larger number of faculty members, students and working personnel. For this reason there was an initial difficulty in understanding the new methodology of evaluation, since they consider the new evaluation to be a repeat of the one executed in 1999.

In spite of the positive climate that exists within the School, the SAC faced several problems due to the lack of a central system for this project by the N.K.U.A.

The lack of the system forced the school to create and finance its own, including secretarial personnel, for the support of the newly created system of self-assessment and evaluation. Additionally, there was a lack of existing technical knowledge in

relation to evaluation procedures, since it was not necessary for the various schools of the University to have an existing system for a continuous self-assessment procedure. It should be mentioned that without the previous experience of 1999 and without the dedication and work of some faculty members who are familiar with evaluation procedures, and the information gained by the two EPEAEK restructuring projects, the formulation of the present report would have been seriously delayed. The questionnaires on the structure of the courses, although they worked as a method for collecting information, were not completed appropriately in some courses. This created the necessity to cross check the information from other sources, which were mainly the faculty members and the students.

Although the cooperation of SAC with everybody who participated in the preparation of this document was almost perfect, some difficulties were encountered with faculty members who did not complete the questionnaire referring to their own research activity. The fear that any information would be used to evaluate their progress together with expressed difficulties in completing the entire form resulted in a poor return of the given questionnaire. The SAC has several times expressed the fact that the individual questionnaires would not be used in any other situation and there is hope that more results will be collected in the future, so that information relating to the research activity will be more complete.

The responsibility of completing this project of self-assessment in a variety of areas was given to a small number of faculty members. These faculty members were overloaded with work and as a result their administrative, educational and research activities were negatively affected. On the other hand, if more faculty members had been included in the Committee, the completion of the report would have been more difficult since it is obvious that more personal views prevent the formation of a document based on a consensus of opinion.

We could mention several positive issues for the completed self-assessment, but we felt that the most important issue was the fact, that through the documented methodology, which we followed, we were able to collect and analyze all the issues relating to our school. The analysis helped us uncover positive and negative issues and unique characteristics of our educational program, which have an effect on the research activity, the faculty members, the personnel, and the delivery of patient care. Some issues were identified in the past but have never been documented.

Some of the issues, which we feel can help not only our School but also other Schools and Technical Institutions in their self-assessment process, are the following:

- Every University must provide information and education relating to the process of self - assessment and develop the feeling of necessity and value of this procedure in the minds of faculty members, students and personnel.
- The Administration of each University must organize systems for continuous recording of all infrastructures, administrative research and teaching activities in order to make the assessment easier for the individual schools.
- Additionally, every University must organize a self-assessment office, which will provide the “know – how”, the information and the support to each individual School in order to create harmonized procedures and results.

- The Self – assessment offices must have well educated individuals with experience on issues relating to assessments and evaluations. These individuals will be helpful to the faculty members and guide them through the steps of an appropriate assessment.
- The State must support Universities and individual Schools financially in order to enable them to organize assessment units that will work on a continuous basis making the assessment a repeating process for the entire institution.
- Finally, the assessment document requests some information, which is not deemed necessary, and it can be omitted or combined with other parts of this report.

3. PRESENTATION OF THE SCHOOL

The Dental School of the N.K.U.A is located in Athens (Thivon 2, Goudi) and all the installations is collected mainly in two buildings (old and new) that are connected with each other and only our school uses them.

The number of faculty members, administrative staff and student distribution (undergraduate, graduate and doctoral) for the last five years, and the list of faculty members are found in Tables I, II and III and IV.

The mission and goals of the School appears in the following paragraph.

"... to provide every student with the knowledge and the competencies to help him practice the dental profession and restore the oral and general health of the population. It is important for a graduate of our school to know that all his abilities must evolve from a sound biological background, preventive direction of treatment, social awareness and understanding of the need for continuing education and learning. The biological foundation is necessary for the practice of dentistry since without it, dentistry would remain an art and not a science. The preventive direction is a stepping-stone for the medical profession and the primary goal is not the treatment of the diseases but their prevention and the maintenance of any therapeutic result. Social awareness not only makes the dentist a professional but also makes him a person sensitive to the needs of the population. The will to continue learning refers to the mentality, which must develop in every student during his tenure at our school so that he constantly improves his abilities throughout his professional career. This is an important condition in a dynamic and progressive dental scientific environment".

The mission and the goals are in harmony with the standards of education that derive from International Associations (American Dental Education Association – A.D.E.A, Association of Dental Education in Europe – ADEE, International Federation of Dental Education Association – I.F.D.E.A, General Dental Council – GDC). Mainly, the undergraduate program is based on the proposed document entitled "Profile and Competencies of the European Dentist" as it was formulated and voted for by the General Assembly of ADEE in Athens, in 2005.

Additionally, the mission of the graduate program is to educate dentists in special and advanced areas of knowledge and research.

We believe that the mission and goals of both programs express the goals of contemporary dentistry worldwide. These goals have been attained to a certain extent but certain improvements are necessary and will be identified in this report.

The School is divided into 5 Sections:

- 1st - Community Dentistry,
- 2nd - Dental Pathology and Therapeutics,
- 3rd - Prosthodontics,
- 4th - Oral Pathology and Oral Surgery, and
- 5th - Basic Dental Sciences.

These sections include 15 departments and Clinics in various scientific areas. The last section formation (5th – Basic Sciences) was completed in 1999 and we presently feel that this is appropriate for the educational and research activities of our School.

The sections include the following departments:

Community Dentistry:

- Orthodontics
- Pediatric Dentistry
- Community Dentistry and Public Dental Health

Dental Pathology and Therapeutics:

- Operative Dentistry
- Endodontics
- Periodontics

Prosthodontics:

- Prosthodontics
- Orofacial Pain Clinic

Oral Pathology and Oral Surgery:

- Oral Pathology
- Oral and Maxillofacial Surgery Clinic
- Oral Diagnoses and Radiation Clinic
- Hospital Dentistry Clinic

Basic Dental Sciences:

- Biomaterials Laboratory
- Basic and Biomedical Sciences Laboratory
- Oral Pathology laboratory

It should be mentioned that within the School there is an Oral Implantology Unit, which is independent.

Departments and clinics, which were founded before 1987, do not have an internal regulation guide that has been approved by the government. Since 1987, all departments and Clinics, which have been founded, have a published internal regulation guide since it was a prerequisite for the establishment. In our school we have published a Regulation of Graduate Studies Program, which describes all the rules, and regulations that exist for the fourteen (14) graduate programs.

According to the existing legal status of all Universities, there are three long-term Committees. These are:

- The Dental Education Committee
- The Graduate Program Committee, and

- The Self – Assessment Committee

There are also several other committees, which operate within the School and are not identified by law. These are:

- Ethics and Research
- Library
- International Relations
- Student Activities
- Strategic Planning
- Infectious Disease.

4. UNDERGRADUATE PROGRAM

4.1. Degree of response of the Undergraduate Program to the mission, goals and social demands.

In this section we describe the procedures that were used to examine the degree of response to this evaluation and the necessary modifications, as well as the methods of measuring the progress of our graduates.

The Dental Education Committee is responsible for the undergraduate Education Program. The Committee controls all activities of the annual program and finds solutions to any potential problem. Additionally, the Committee can formulate proposals to the General Assembly of the School. These proposals are mainly related to the time and place the various courses appear in the program. The committee can address issues referring to the course content, if the course director so desires.

The only exception during the past decade was the foundation of the Total Patient Care Clinic in 1999. The decision was taken by the General Assembly based on a proposal by the Dental Education Committee and all the departments and clinics, and the course directors made the appropriate modifications to meet the goals of the new clinic.

Some course directors, who can use this data to modify their courses, use course evaluation by students, comments by the participating faculty, and percentage of success in exams. The results of any evaluation or course review are used by the course director and they are not sent to the Education Committee since it is not obligatory.

From all the above, it is obvious that there is lack of a centrally placed system or method to analyze the results of the undergraduate educational program and make the necessary corrections if needed. It is the responsibility of the course directors to modify the course content in order to meet the goals of the program.

This can be a positive factor since it provides a higher degree of flexibility for the individual courses, but it may a be negative factor because it is difficult to identify variations from the described goals and objectives and even more difficult to correct them.

Since 2003, through the EPEAEK II program for the examination and modification of the undergraduate education, we have had the opportunity of systematically recording the goals and objectives and the teaching methodology for all existing courses. This created the need to discuss modifications for the courses in an effort to meet contemporary topics and teaching procedures including student evaluation. These modifications were made step by step and some of them are still taking place now. Also, through the EPEAEK II program, some courses were evaluated leading to some conclusions which will be used in course development in the future.

It is necessary to strengthen the central course assessment, on an annual basis. This will result in proposals for the modification of courses.

The description of the Undergraduate Education Program appears in the Undergraduate Study Guide that is published annually and distributed to students and faculty. Also, the program, together with information from the various departments,

appears on the Web site of the School and some information appears in English. With the methods described we feel that the undergraduate Program is well publicized within the Academic Community.

The School has not developed a method for observing the professional development of its graduates. This should be a future goal, not because we should closely follow their professional career, which is mainly in private practices, but in order to record the degree of satisfaction from their education and their preparation to face the challenges of the profession.

A questionnaire for our graduates should be developed in order to collect information that can be useful for future course development.

4.2. Structure, collectivity and function of the Undergraduate Program

In this section, undergraduate courses are classified and described (basic and specialties/ mandatory-electives/ foundation/ scientific areas/ general knowledge/ competencies development/ methods of teaching, prerequisites, organization and structure).

The undergraduate courses are not classified as basic or specialty directed, like the courses in other schools and Universities, because the dental graduate must be thoroughly and equally trained in the wide dental spectrum so as to achieve the goals of the program. The specialties and directions are goals of the graduate studies, which appear in other part of this report.

The positive aspect of the system is the fact that the graduates of our school are educated in order to be able to offer all the necessary oral health services for the majority of the population with the exception of patients who belong to special needs groups and patients with complicated pathology who require advanced training for their treatment.

The negative aspect is that students with specific interests, in specific scientific areas, are unable to develop their knowledge in the undergraduate curriculum and must pursue their interests through graduate and continuing education courses.

The increase in the number of elective courses under a main topic covering a particular area may enrich the undergraduate program with some specialties and directions.

From the existing 95 undergraduate courses, 88 of them are mandatory and 7 are electives (Table V and VI). It is mandatory for every student to successfully complete at least 2 elective courses. The elective courses were initially placed in the undergraduate program in the academic year 2003-2004. Up to that time all courses were mandatory. Course directors for the elective courses are faculty members of the school and the teaching is allocated to the dental faculty and to other scientists, depending on the particular course content.

The Dental School is a scientific and professional school since the graduate immediately obtains a licence to practice general dentistry and is entitled to all the privileges to deliver oral health care. This directs the undergraduate program to provide the dental student with a wide knowledge and clinical experience. This is the primary reason for the large number of mandatory courses.

The presence of elective courses in the curriculum is considered to be positive mainly for the following reasons: The courses deal with specific areas, which are not covered in the mandatory program. There are contemporary courses in new areas of interest like: Introduction to Implants, Dental Informatics, Dental Lasers, Geriatrics and Hospital Dentistry, Dental Psychology, Dental Office Management and Forensic Dentistry.

Negative aspects of elective courses are the following:

1. They are an extra burden to faculty members who already have a wide range of graduate and undergraduate teaching assignments.
2. Some of the courses require teachers outside the dental school and their honorariums are not covered by the state or the University, but by the School of Dentistry.
3. Although some of the course contents are very interesting for the students, others are extremely difficult and or they mainly a repetition of other undergraduate courses.
4. They are mainly dental courses and not courses of general education.

Elective courses are essential for any undergraduate curriculum and they can be strengthened by the following actions:

a) Creating areas of interest so that all elective courses can be classified as a group rather than being random and independent choices.

b) Formulating criteria which all elective courses will meet and assess their quality at specific time intervals.

c) Providing courses that satisfy the interests of the majority of the students, which can be discussed and evaluated by the School and can finally become mandatory courses.

d) Modifying and contemporizing all the course contents.

e) Changing their time schedule within the curriculum.

f) Investigating the potential of identifying courses from other institutions with human and cultural content that can be included in the undergraduate program.

Differentiation between courses, which are: Foundation (F), Scientific Areas (SA), General Knowledge (GN) and Contemporary Development (CD) (Table VI).

This differentiation exists in all mandatory courses. Specifically, under general knowledge (2) and foundation (22), there are 24 courses. The foundation courses are further classified as basic science courses (4) and Biomedical Courses (16).

The remaining 71 courses are mainly courses in specific scientific areas and competencies, which primarily refer to technical competencies. This large number of courses is considered a positive issue for the undergraduate program since it covers the defined goals and objectives. Dentistry is an applied science but scientific knowledge by itself is not enough in order to create a successful dental practitioner. The scientific knowledge must be coupled with the development of the necessary competencies to formulate the profile of the contemporary dentist. On the other hand,

the development of competencies without a strong scientific background produces individuals who will not be able to perform the necessary services for the population. With the rapid development of Dental Sciences, due to the development of new technologies and materials, there is always a danger that dental education may turn towards technical issues rather than scientific knowledge. The Dental Education Committee is responsible for closely observing the curriculum and making corrections and modifications if necessary.

The mandatory courses follow a separate classification according to Dental Science. There are four (4) Basic Science Courses (BS), sixteen (16) Biomedical and Medical Courses (BMS) and sixty-eight (68) Dental Courses (D). Out of all the Dental courses, eight (8) are considered Basic and Theoretical (Introduction to Dentistry and Behavioral Sciences, Dental Morphology and Introduction to Occlusion, Dental Materials, Oral Embryology and histology, Pathology of Hard tissues, Public Dental Health, Clinical Application of Biomaterials and Introduction to Implantology) and sixty (60) clinical courses. The courses of the first two categories are primarily taught in the first two years followed by the Dental Courses in a diagonal type of Undergraduate Curriculum. Every category has its own characteristics and the courses help the common goals. The BMS courses (i.e., Medical Chemistry, Biology) are taught at the beginning of the curriculum because they belong in the area of basic sciences and provide specific knowledge necessary for the understanding of biomedical and dental courses which follow. The Medical courses (i.e., Anatomy, Biochemistry) are also taught in the first couple of years, so as to impart the knowledge which is necessary for dental students in order to understand the functions of the human body which are common in the stomatognathic system. Additionally, these courses help the students to realize the correlation between oral health and general human health. The Dental Courses (i.e., Periodontics, Oral Surgery, Prosthodontics) are taught from the beginning until the end of the curriculum and they deal with various areas of knowledge of Dental Science.

The independent method of teaching, without relating basic sciences to Biomedical and Medical Sciences, does not help the students to correlate them with Dental Sciences. The majority of these basic and medical courses are offered simultaneously to the medical students and the program has been modified accordingly. The undergraduate program must be altered from the existing reality and some methods will be described in other parts of this report.

The educational program includes theoretical, laboratory and clinical teaching. In Tables 1 and 2, the distribution of the total hours of teaching and the methodology, which is used, is presented, for all courses.

Table 1. *Total amount of hours the student is faced with and every educational method, in all of the courses of every semester (13 educational weeks) and the sum of semesters.*

	Lectures	**Seminar courses**	**Seminars in groups**	**Laboratory Exercise**	**Clinical Exercise**
1st semester	274	0	0	25	0
2nd semester	148	11	0	121	0
3rd semester	170	21	0	68	0
4th semester	190	24	22	30	0
5th semester	94	70	39	173	0
6th semester	103	49	25	149	28
7th semester	19	46	50	75	219
8th semester	26	25	88	25	254
9th semester	0	12	85	1	274
10th semester	26	62	52	0	274
TOTAL	**1050**	**320**	**361**	**667**	**1049**

Table 2. *Number of courses using each educational method in the whole range of educational methods (every course can use more than one educational technique).*

Educational technique	**Number of courses**	**% Percentage of courses**
Lectures	76	80,0
Demonstrations- Laboratory Exercises	48	50,5
Discussion in groups	54	56,8
Questions – answers	62	65,2
Presentation of students essays	14	14,7
Essay writing	15	15,8
Case presentations by students	10	10,5
Literature review	6	6,3
Analysis / clinical case presentation	35	36,9
Educational video / cd	46	48,4
Other	18	18,9

The tables clearly indicate the following:

1. The theoretical teaching includes lectures, seminars and seminars in small groups and covers an equal number of hours (1731 or 50.3%) with the practical teaching that includes laboratory and clinical courses (1716 or 49.7%). This demonstrates the effort of faculty members to provide the students with a strong scientific background equally coupled with practical training. A large percentage of theoretical teaching (80%) uses the classical method of lectures. Alternative methods of teaching (literature reviews, case presentations) are used in a small percentage of courses (6-15). In contrast, it is important to realize that faculty members try to increase the active participation of the students (i.e., discussion in small groups, questions and answers) in a large percentage of the course (65.2%). Also, it is a positive point that for the practical courses, the use of cases analysis and presentation are used in a high percentage of courses (36.9 %).

It is important to reduce the hours of theoretical teaching and allocate more time for practical training without reduction of the necessary scientific background for all students. This can be achieved using alternative methods for learning such as e- learning, development of study through clinical guides and distance learning. All these methods do not require the presence of the student in a classroom and also exhibit other positive results.

2. Teaching in small groups (seminars) is less (68 hours) when compared to lectures for all students within an academic year (1050 hours). It should be mentioned that within the last four years systematic efforts have been made by some courses to increase teaching through seminars. This was primarily started after 2003 and included the introduction of theoretical teaching during laboratory exercises.

In spite of the effort made during the last few years, the analogy must turn in favor of teaching in small groups since it provides more positive results. To achieve this we may have to reduce the course content or increase the number of didactic hours or use alternative methods of teaching (e.g. e-learning). We should also realize that teaching in small groups requires more involvement from the faculty since the same seminar is repeated four times within a week.

3. In practical training (laboratory and clinical training), we can observe that more hours are allocated to clinical training (1049 hours) than to laboratory training (667) in a ratio, which is approximately 3/2. It would be desirable to increase clinical training without reducing the laboratory training, which is fundamental in order for the students to develop the right competencies. **What is necessary is to increase the laboratory training for students who require an increased effort in order to develop this competency.**

4. Regarding allocation of teaching methods, we observe that lectures are the main method in the first semester; the laboratory exercises begin in the second semester (159 lecture hours, 121 laboratory hours) and in the third semester the ratio of lectures to laboratory hours are 3 to 1. In the fourth semester the ratio is increased to 4 to 1, while in the fifth and sixth semester it is almost equal. From the seventh semester, clinical training is initiated and occupies the same hours for all the remaining semesters (219- 274 hours),

being longer than theoretical teaching (97-140 hours), which is mainly in the form of seminars in small groups.

5. Thirty-two (32) courses use lectures as a method of teaching, twenty (20) seminar lectures, twenty-seven (27) seminars in groups, thirty (30) laboratory exercises and forty (40) clinical training. Fifty-nine (59) of the ninety-five (95) courses use multiple teaching methods.

Every course is under the direction of a department or a clinic depending on the scientific content, which is covered with the exception of elective courses. If a course includes scientific knowledge from various disciplines, the school decides which department will have the primary responsibility. For every course, the department chairperson appoints a director or a coordinator. The directors with the faculty who are teaching a course are responsible for formulating the course goals and objectives that should be in accordance with the School's goals and objectives. In doing so they have the freedom to design a course without following the format of other courses and the director is responsible for observing the course operation. In reality only the dental courses follow the school's objectives. Basic Science and biomedical courses primarily follow the goals and objectives of the medical undergraduate program and this creates several problems.

In dental courses the lack of communication among course directors may create several problems, such as repetition of material, voids, over coverage that provide inadequate knowledge in some areas within the existing time of studies. This phenomenon is more apparent during the three first years of the program when we are preparing students for clinical practice. The structure of these courses must be modified by creating longer courses, which will cover knowledge from various scientific areas. This will save time for faculty and students and will enhance the teaching. The biomedical and medical courses require a major revision of their content so they can relate better to the present undergraduate program.

The system of prerequisite courses has already been in place for the last 15 years and today it includes 14 courses, which belong to the group of Dental Clinical courses. These courses are classified as prerequisites because they provide knowledge and competencies, which are necessary for students to perform well in the clinic. It is believed that these courses have demonstrated positive results in our educational system as a motivating factor for the students in providing safe dental care.

The course director, rather than the central student secretarial system, is responsible for tracking whether the students have completed their prerequisite courses and so qualify to enter the clinic. This creates some delays in creating working groups for the clinic, and in organizing one's clinical objectives. It is necessary to increase the number of prerequisite courses to cover areas of basic and biomedical sciences (e.g. Anatomy, Pharmacology) because these courses provide necessary basic knowledge for dental courses that follow later in the curriculum (Oral Pathology, Periodontics).

The Administration or the registrar's office must monitor the progress of all students. This should be initiated by the main university through the use of relevant software and in cooperation with various schools. The main issue is the restructuring of the electronic grading system to address the current needs of all educational units of the university.

Seventeen courses (17), which are classified as biomedical or medical courses are taught by the medical School of the University simultaneously to medical students (8) and dental students (9). The Dental School, however, does not offer courses to other schools within the University or the Technical Institutions.

The teaching assignment of courses to the Medical faculty is necessary because the Dental School has no clinical or laboratory space. Nor does it have faculty members to cover the educational needs of these areas. The present condition of laboratory exercises in the biomedical and Medical courses is the following:

a) Five of the seventeen courses (Medical Physics, Histology and Embryology and Microbiology) use laboratory exercises.

b) Three (General Surgery, Internal Medicine, ENT) require participation in hospital clinics. This indicates that the number of courses requiring laboratory facilities, is small and it has been further reduced during the last few years. On the other hand, clinical exercises are used by all the clinical courses.

Up to the present time, the structure of courses offered by the medical school, has been the responsibility of individual course directors and has resulted in course contents, which adapt to the goals and objectives of the undergraduate medical curriculum. In half of the courses teaching is together with the medical students and sometimes the courses are taught in different semesters. This means that the biomedical knowledge, which is the foundation for many dental courses, is not adequately covered and creates problems in many courses of the dental undergraduate program.

For these reasons, one of the targets of the Dental Education Committee is to meet individually with all the biomedical course directors and discuss course contents and teaching methods in an effort to meet our specific goals and objectives.

The completed questionnaires by the course directors and the students clearly indicate that the most significant problems are:

a) The overextended didactic material, which is requested.

b) The lack of specific educational goals.

c) The use of lectures as the only method of teaching.

d) The large number of students in lecture rooms, especially for courses which are taken simultaneously by medical students.

e) The final written exam as the only method of student evaluation for all these courses.

Actions, which can be discussed and may change the existing conditions, are:

a) Eliminating some courses or minimizing the course content for some of them in the undergraduate program.

b) Changing the format of some courses and directing them towards issues important to contemporary dental science.

c) Revising teaching methods and student evaluations that can make courses more attractive.

Specific proposals for these courses can be the following:

a) Eliminate simultaneous teaching with medical students.

b) Include course co-directors from dental faculty members.

c) Include dental faculty members as teachers for these courses.

d) Invite faculty members from other schools like Pharmacology, Nursing and Chemistry to participate in the teaching efforts in order to improve the undergraduate program.

The undergraduate curriculum does not include courses for foreign languages. The vast majority of students who enter the school speak English and a large number of them also speak a second foreign language. During the undergraduate program students become familiar with the scientific terminology and International Literature, primarily in English.

The school must promote the use of articles from the international literature and the reading of foreign textbooks in conjunction with Greek textbooks and literature.

4.3 Evaluation system for undergraduate courses

In this section the evaluation methods are described, together with the criteria that are used in order to maintain fairness and assess the entire system.

The methods used, are oral and written exams and the evaluation of laboratory and clinical procedures. Courses can use any form of evaluation they prefer and this is the reason why many different methods are described in the undergraduate study guide. Additionally courses can use mid-term exams or a series of exams within a semester. In the large majority of courses the final written exam is the only method of evaluation. Oral exams are used by nine (9) courses. From these courses, seven (7) are dental courses in the last semester of the program and they provide an overall assessment of the student in their specific scientific area. The mid- term exam is used in small number of dental courses (less than ten).

In written exams many methods are used such as: essay, short answers, right and wrong, filling in blanks, correlations and multiple-choice questions. Evaluation by written reports or case presentation is used by a small number of courses.

Laboratory evaluation is used in 50% of the courses and some laboratory courses use multiple evaluations during the semester.

Evaluation of clinical procedure is not used in any course. In some of the questionnaires, seven (7) courses respond to some procedures of evaluation but these seem to be random and lack the value of an externally controlled evaluation.

The free choice of selecting evaluation methods for every course is a positive aspect since each course has specific characteristics and format. In spite of all the variations, some basic rules are necessary which will follow the method of teaching. This will permit the students to be evaluated equally in a number of courses and help them understand that evaluations are used as methods of teaching.

Using as a basis the existing conditions, these are some of the actions that may be helpful.

a) All courses must develop multiple evaluation methods

b) The mid- term examination can be useful for all courses but it must be mandatory for all laboratory courses.

c) The use of written reports in specific topics must be increased without creating an extra load for the students.

d) Oral exams may provide an overall student assessment but they must be organized and follow specific procedures, which will be known to the student, and will minimize the subjectivity of the examiners (for example: oral exams must be given by two examiners and each student should answer the same number of questions developed by the faculty members who are teaching in the course).

e) Clinical evaluation is weak and must be developed since 1/3 of the didactic hours are dedicated to clinical procedures. This evaluation can include individual procedures and courses but also comprehensive patient case since the students is primarily educated in this concept. This type of comprehensive evaluation was proposed by the current Curriculum Committee and was accepted by the General Assembly. It will be implemented from the year 2008-2009.

f) We must also develop student evaluation in the preclinical simulation laboratory before they enter clinics in order to ensure that they posses the right competencies needed for the treatment of patients.

In conclusion, we must develop methods of assessment of the students that promote their analytical and critical thinking in various topics. To achieve this it will also be necessary to modify the teaching methods by the faculty and to promote student participation and awareness.

The objectivity of evaluations depends entirely on the assessment methods. Clinical assessment has no effect on final grades. For oral assessment, there are several proposals to increase its objectivity and they have been outlined in other pages of this report. For written exams the student must have an opportunity to review his exam with the course director and discuss the rationale for the overall grade.

In summary, there is an absence of a specific procedure or procedures by our School or the University to establish criteria for objective assessment.

The application of evaluation criteria in the undergraduate program must be discussed separately for every method of evaluation. In written exams the use of multiple-choice questions, true or false, matching and filling in blanks are widely used and ensure objective evaluation.

For laboratory exercises 50% of the courses have established evaluation criteria, which are currently in use. When they evaluated laboratory courses, students stressed the fact that in some courses variations existed among examiners. This can be corrected after discussion with the specific course director. For the clinical procedures 50% of the courses have established criteria but they are used in very few courses. The development of criteria for all courses will not solve the problems of a wider system of clinical evaluation.

An organized, systematic and legislative basis for the evaluation of exam procedure does not exist. Since the academic year 2007-08, the assessment of all subjects has been organized according to the criteria of a specific department. Relevant questions will be incorporated in the revised edition of questionnaires that will be used in the winter semester of 2008-09.

4.4 International activities of the undergraduate program

In this section the existence of foreign faculty and students, international programs and ECTS system are described.

There are no foreign faculty members teaching in our school. The cost of bringing faculty members from abroad is extensive and can be covered by research grants or faculty exchanges through Universities. At present, these programs have been not developed in the School. Also, there may be language barriers, although the majority of the students do speak English. However, it is possible for visiting scientists who come to Athens for other reasons, to give some lectures to undergraduate students.

For the year 2006-2007, the foreign students who participated in the undergraduate program are listed in Table 3.

Table 3. *Total number of foreign students during the year 2006-07 (all semesters).*

Birth Country	Male	Female
Indefinable	1	0
Egypt	0	1
Ethiopia	0	1
Albania	6	12
Bulgaria	0	3
France	0	1
Jordan	4	1
Iraq	0	1
Iran	0	2
Israel	2	0
Cyprus	18	22

Libya	0	1
Moldavia	0	1
Ukraine	0	1
Palestine	1	1
Poland	0	2
Russia	0	2
Saudi Arabia	1	0
Syria	1	0
TOTAL	**34**	**52**
Percentage of Foreigners	**9%**	**11%**

The percentage of foreign students is rather high (10%) and this is due to the presence of Cypriot students (45% of the foreign students) since there is no Dental School in Cyprus. Albanian students have increased their presence to the school through the migration that has occurred in recent years. Students from other countries are rare.

The number of foreign students reflects the value of education that is being provided by the school. In the undergraduate program there are no courses, which are taught in English. All students, including foreign students, must have an adequate command of the Greek language in order to participate in the educational program and communicate with the patients. **The language issue is preventing foreign students from enrolling our undergraduate program and it is difficult to draw conclusions concerning the number of foreign students as reflects the quality of education**.

In reference to International Cooperation programs for Undergraduate students the School participates only in the Erasmus (Socrates) program. There is an agreement with the Dental School of Gottebörg Sweden, for 1 or 2 final year students of our School to participate in the educational activities of the 10th semester in Gottebörg.

The lack of harmonization of the two undergraduate programs and the fact that our students will miss a semester if they participate in the Socrates program (our students do not participate in clinical exercises) are the main reasons for the minimal existing agreement between the two schools. It should be mentioned that foreign undergraduate students (Erasmus- Socrates) have not visited our school for the last 5 years for the same reasons. **It is obvious that great difficulties exist in creating student exchange programs in applied sciences.**

Recently an agreement was signed for students and faculty exchanges with the University of Marseille (Universitė de la Mediterranėe Aix – Marseille II). The agreement refers to the years 2008-2010 and includes exchanges of undergraduate and graduate students for a period of 4 to 6 months and short educational visits of faculty members.

The ECTS is not currently in use in the Dental School although a list with the credit units per course is available. The University has not made efforts to harmonize with this system and as a result there is a delay in publishing the appropriate Diploma Supplement. The main reason for this delay is the lack of software in the various registration areas within the University. The Dental School has made the necessary arrangements within the existing computer software and this year the ECTS will be initiated and appropriate announcements will be made on the website of the School.

4.5 Student practical training

In this section the practical training of the students is described together with the advantages and disadvantages of operation and the benefits for the undergraduate students.

One of the differences of dental education is the clinical training of the student during their last years of their curriculum. Clinical training simulates conditions that the students will face in their professional practices. During the last ten years the student has been trained in the Total Patient Care model and has learned how to handle patients. However, the University Environment is not the same as the private practice environment. Students voluntarily can participate for a specific time period in practical training in a dental office.

The Dental School created the Practical training as part of the Curriculum with a General Assembly decision in 1998. The decision is in accordance with the law 2327/95 referring to the practical training of the students. Since 1998, the Dental School has been participating in the University's practical training program. In the beginning, the number of students who participated was 20 selected from a large number of applicants. The number of dentists was 20 and there were 4 as administrators who were faculty members. The number for the years was raised to 120 students and during the last year there were 83 students who participated in the program.

All these yearly programs were funded by the EPEAEK I & II programs for a specific amount of money and this was the reason why a number of students were included. It must be mentioned that if the funding disappears then the voluntary practical training program will end.

Announcements for the program are placed on bulletin boards throughout the School and on the website of the School. There is also a seminar during which information is given to the students. Approximately 40% of the students are selected to participate in the program. The school is responsible for creating a number of positions for the students, formulate goals and objectives, monitor the successful completion of the program and secure the money for the students. Attica Dental Association, which is the local professional association, is participating in the program and acts as a link between the School and the profession. There are no formal internal regulations for the program instead several rules are described in the program proposal. There is a close cooperation between the participating private practitioners and the faculty administrators. Practical reports relative to students' activity within the program provide information for the productive work relations, ethics and cooperation of students with the dentists.

There are specific requirements and criteria for the selection of a dentist for the program. These are:

a) Scientific knowledge
b) Professional experience
c) Equipment of the practice
d) The cooperative attitude towards the students and the administrators of the program.

Direct and continue contact exist with all the students through intermediate reports and self-assessment reports completed by the students.

At the end of the program dentists, students and faculty members complete questionnaires. These questionnaires are important in order to realize the degree of satisfaction of all involved parties and discuss proposals that can improve the program.

The goals of the practical training program are:

- Establishing the first working professional experience
- Increasing scientific knowledge through professional training
- Familiarizing students with the future working environment and demands of a private practice
- Familiarizing students with working relations in a real dental office.

The results from the questionnaires indicate that the program meets all designed goals and is extremely successful. The familiarization of the students with the working environment and working relations received an “excellent” mark by 78% of the participants of the program. The rest 22% judged the program as “very good”. It is considered as a positive issue for the program, the opportunity for a student to find a job after graduation but there is not yet available data to support this issue.

We strongly believe that the practical training program is very important but presently is totally depending on existing funding. The school must come with alternative funding from other sources in order to maintain and expand this very important program.

5. GRADUATE PROGRAM

The Dental School of the National and Kapodistrian University of Athens (DSNKUA) has a structured Graduate Studies Program (GSP) for dentists.

Since 2008-2009, a new program has been introduced, named "Dental Technology Materials", structured by N.K.U.A. in collaboration with the Department of Dental Technology of the Athens' Technological institute. The mission of the program is to provide graduate education and to offer fundamental knowledge in the field of Dental Materials for Dental Technicians who graduate from technological institutions.

5.1 Graduate Program response to the fulfilment of goals set by the DSNKUA and society needs.

In this section, a description of the control procedures on response, evaluation and revision of the GSP, means of publicity of the GSP and procedures of monitoring are made in order to assess the professional advancement of graduates.

It is the aim of the GSP to produce graduates, in all specialty areas of dentistry, able to contribute to the development of dental science, address contemporary developments and advance scientific process, as well as, provide high level specialized clinical care, contribute to the awareness of the public towards oral health issues and finally, address the special and complicated treatment needs of patients. (Appendix 2. Regulation of Graduate Studies Program). **The structure of the GSP is believed to be in accordance with and leading towards the goals mentioned above**.

The GSP is divided into two levels. The first level comprises of two groups of Graduate Programs of Specialization (GPS).

The first GPS group includes basic sciences and disciplines that belong to the scientific field of Dentistry. The primary goal of this GPS is to offer the knowledge foundation and to establish a solid scientific background, adequate to promote dental research in a specific field. The fields of the first GPS are:

1. Community Dentistry
2. Oral Biology
3. Dental Biomaterials
4. Oral Pathobiology

The second GPS is focused on the clinical aspect of dental specialties and its goal is the development of clinical skills, based on a solid scientific knowledge, with a preventive direction and continuous learning behaviour. The fields of the second PPS are:

1. Orthodontics
2. Paediatric Dentistry
3. Operative Dentistry
4. Periodontics

5. Endodontics
6. Prosthodontics
7. Oral Medicine and Pathology
8. Oral Diagnosis and Radiology
9. Orofacial Pain Management
10. Oral Pathobiology with emphasis in Oral Surgery

The GSP grants a Graduate Specialty Certificate (GSC) to the students who successfully complete a GPS in one of the above 14 fields. This degree is equivalent to a 3 years' Master of Science Degree.

Control procedures for assessing the response level of the GSP regarding the fulfilment of goals set by DSNKUA and the community needs have not yet been established and systematically employed. **Still, previous evaluation of the GSP, carried under the EPEAEK II program in 2007, revealed that it is essential such an evaluation to be implemented in the GSP as a standard procedure, and as such it has already been scheduled to be carried annually.**

The GSP, in order to follow the development of the scientific processes and the evolving needs of the society, has undergone several revisions and amendments since 1994, when it was officially founded under the B7/83 ministerial act, which was posted in the Journal of the Government (FEK, pg. 260, 12th April, 1994). These amendments were made since 1994: (the B7/476 FEK pg. 989, 12th September 1998), the 107060/B7 along with the 92449/B7 (FEK pg. 1506, 3rd December 2002), the 28105/B7 (FEK pg. 355, 18 March 2005), the 53990/B7 (EK pg. 772, 28th June 2006, and the 50249/B7 (FEK pg.766, 30th April 2008), with which the 10 clinical specialties were established, conforming to the international standards.

The second act added 10 clinical specialties to the existing 4 basic science specialties following international standards, which present more clinical specialties than basic science specialties. This act also addressed the request of many dentists to educate themselves in clinical disciplines. The 2005 revision completed this effort since the clinical areas of specialties were increased but also obtain more value since after 3 years of successful completion of the programs the graduates receive an equivalent of Master's of Science Degree in the various clinical disciplines. Today, the number of dentists who go abroad for advanced education has been significantly decreased and the ratio of specialties to population has increased.

According to the above, it becomes clear that there is a continuous adaptation of the GSP to meet current requirements. In the absence of established evaluation procedures, this continuous process is carried out based on decisions taken by the authorised administrative bodies, such as the Graduate Studies Committee and the General Assembly of the DSNKUA.

Publicity of the GSP is achieved through the web-site of the Dental School, in which there is information about the interim status and detailed description of each GPS (aim, goals, lectures, credits), in both Greek and English.

There is no established procedure for monitoring the professional advancement of the GSP graduates. Nevertheless, the graduates keep contact with the

academic life by continuing their graduate studies or participating in the education of undergraduate and graduate dental students. At the same time, they also participate in the education of their colleagues, contributing to continuous educational functions. Through this process, a positive opinion on their professional progress is being formed.

5.2 Structure, integrity and function of the GSP

In this section, there is a description of the GSP structure and the classification of the lectures (core curriculum courses/special courses, elective and/or mandatory courses, clinical seminars, literature reviews, clinics, laboratories and preclinical courses).

The structure of the GSP and the distribution of the responsibilities, as described in the Regulation of Graduate Studies Program comprise the basis of the integrity and the unified form of the GSP, despite the large number of speciality areas that it includes. Still, the unique and independent character of each speciality is guaranteed by appointing different Directors for each GPS.

Graduate courses of GPS (260 in total) are divided into the following categories:

1. **Core Curriculum Courses:** These courses revolve around Basic Dental and Biomedical Sciences. Attendance is mandatory for graduate students of the GSP. Graduate Students of the clinical GPS should attend some of these courses, eventually earning 10-16 credits (CH). There are in total 10 Core Curriculum Courses.
2. **Special Courses:** Attendance of special courses is mandatory for the students of the Basic Sciences GPS. Students of the clinical GPS may also elect these courses. Postgraduate Students of the clinical PPS should attend such courses to earn 6-11 CH. There are in total 22 special courses.
3. **Clinical Courses:** Graduate students of the three-year clinical GPS must attend all courses (clinical seminars, literature reviews, clinics, laboratories and preclinical), which are included within each clinical specialty. Such courses can account for 55-61 CH. Research courses belonging to the four fields of basic sciences of the first GSP, may also be regarded as clinical specialty courses, resulting to a total of 228 clinical courses.

The flexibility to select courses for students in a graduate program hardly exists because every graduate program has a predetermined number of courses. The flexibility exists only for the students in the Basic Sciences Programs. The acquisition of specific competencies from the graduates of these clinical programs is the basic reason that prevents them from selecting elective courses.

Out of the 260 GSP courses, 1 is a general knowledge course (Informatics), 9 are basic knowledge courses, 36 are scientific area courses, and the rest 214 are a combination of scientific area and training skills courses (Appendix 2. pages 14-42). This combined nature of the latter courses exhibits a major strength point of the GSP, since it proves the solid scientific grounds of all GPSs**.**

The educational methods followed in the GPSs differ. They involve theoretical teaching (lectures, seminars, literature review), laboratory training, clinical training and research.

Each GSP has its own ratio in theoretical/clinical/research education based on its nature, its goals and any other specific requirements it may pose. Still, there is a guideline followed by which GPSs of the same direction should keep common methods in the education for a predetermined minimum of hours per week.

The content of all courses differs and must be examined independently. For the clinical course, the content is the responsibility of the Director, who forms the course according to its needs. If a specific GPS course is included in another GPS, the course follows the structure of the parent GPS, in order to avoid overlapping of course subjects. These courses are kept up to date by continuously revising their contents.

The Special courses and the Core-Curriculum courses are structured by course Coordinators who may, or may not, be directly involved in a given GPS. Nevertheless, the main goal when structuring these courses is to satisfy the common needs and educational requirements of the GPSs in which they are included. According to the students who evaluated the GPSs, this is not the case in all Special and Core-Curriculum courses. It appears that there is overlapping in topics or even incomplete coverage of required subjects, which is due to the lack of centred coordination in the educational process of these particular courses (Special and Core-Curriculum), in contrast to the successfully coordinated Clinical Courses.

Based on the philosophy and the structure of the graduate programs, the students must successfully complete all the listed courses in any semester. If a student does not successfully pass a course he may be requested to take the exam again or even repeat the course.

5.3 Examination System of Graduate Courses

In this section, there is a description of the GS evaluation process, the fairness and the evaluation criteria of the examinations procedures, as well as the writing, completion, defence and evaluation processes of the graduate thesis.

A variety of evaluation processes are followed. Written examinations, mid-term and final exams, are the least frequent forms of evaluation, usually for a minority of the Core-Curriculum courses. In general, the most usual evaluating procedure is written essays on specific subjects, which are presented by the GSs. Especially regarding the Clinical Specialty Courses, the most common way of GS evaluation is assessment of the GS performance in Case Presentations and their everyday clinical work, as well as their management and communication skills with the patients. Each GS patient file with all the patient treatment that was carried out during the term is evaluated as well.

It is concluded that all the above means of evaluation of the GSs are suitable for the different GSP courses, while the freedom of choice given to each GPS Director leads to the selection of the most appropriate evaluation process for the specific course.

More than one examiner carries out all evaluation processes, whereas the GS in front of the whole student group, which may participate in the process by judging the presented work, carries out all case and essay presentations. Regarding written examinations, all GSs are given the opportunity to discuss their paper with the examiner. Should there be any disagreements between the GS and the examiners, the issue is forwarded to the higher level, i.e. the Graduate Program Committee.

Practically, neither fairness issues, nor any disputes concerning the evaluation of the GSs have arisen during the last five years.

For the majority of graduate courses the examination system is listed in the Internal Regulation Guides. The system may change annually if the participating faculty and Director feel that improvements must be made. Criteria for evaluation of applied questionnaires do not exist and this makes students' self-assessment very difficult. For clinical performance there are quantitative and qualitative requirements but there are courses that offer evaluation criteria such as a written report and an oral presentation.

The graduate thesis topic should be research based (laboratory study, clinical study, case studies, epidemiologic study, systematic literature review) relative to the field of the applicant. The Director of each GPS notifies in writing the GSP registrar's office at the end of the first year of studies regarding the advisor, a faculty member, who is assigned to oversee the thesis work of the GS. The student's mentor can be his advisor. The final thesis should have an attached verification of the advisor that he has read and approved the thesis as submitted.

Following that, the GS selects a three-member committee compiled by faculty members whose field is relative to the subject of the thesis to evaluate the thesis. Furthermore, it sets a thesis defence date that is announced on time to all departments and clinics of the Dental School. The GPS registrar's office supplies the 3-member committee with the thesis.

The three-member committee completes an evaluation form for the thesis of the GS. In case the suggested revisions are of such extent that prevents the approval of the thesis then the GS is notified in writing of the corrections and the student assumes the responsibility for making the changes within 6 months. His advisor will supervise the thesis correction phase and will sign the submission form for the finalized thesis to the GPS registrar's office.

Since the above-mentioned procedure has only been active since 2006-2007, there are no assessment details concerning its efficiency, as of yet. The major changes that took place were:

(a) All theses subjects should only be research based,

(b) The advisor selection must be made during the first year,

(c) Specific and limited deadline extensions for the graduate thesis submission,

(d) Public defence and judgment of the graduate thesis.

Each graduate thesis is evaluated using a specifically formed Evaluation Form, which is commonly used for this purpose, employing common evaluation criteria and requirements that should be met.

5.4 Application requirements and selection criteria for the GSP

In this section there is a description of the selection criteria and the admission procedures followed by admission percentage.

There is an assigned selection committee for each GPS, comprising at least three faculty members of the respective department.

Applicants must have:

1. Greek Dental School diploma or a foreign Dental School diploma, which needs to be accredited by appropriate authorities with a Grade Point Average of «Very Good», or in exceptional, cases "Good".
2. The grades on the undergraduate courses in the same discipline.
3. Proof of command of the English language either by submitting the respective certificate or by examination (GPS specific examination)
4. Certificates of participation in postgraduate courses and research activity, including presentations, seminars and conferences attended in Greece and abroad as well as publications in scientific journals.
5. Interview by the selection committee
6. Specific selection criteria or/and written examinations, described by the admission committee.

The GSP Secretary announces the accepted and rejected candidates on the internet as well as on the announcements board, while a written letter of acceptance is mailed to the accepted candidates.

Table 5. *Progress of the applications, available positions in the Dental School, accepted students (enrolled) and graduates of the Graduate Studies Program.*

		2006-2007	2005-2006	2004-2005	2003-2004	2002-2003
Applications (a+b)		122	103	112	168	161
	(a) Graduates of the Dental School	93	68	N.A.*	N.A.	N.A.
	(b) Graduates of other schools	29	35	N.A.	N.A.	N.A.
Available positions		28	32	25	34	31
Enrolled		36	28	38	42	40
% of accepted candidates						
Graduated		30	24	44	15	41

N.A. no available*

The selection criteria and the followed procedure are described in detail in the Regulation of Graduate Studies Program which is also published on the website (http://www.dent.uoa.gr/node.php?n=curriculum_postgraduate&lang=en). Each GPS may also publish on the website its own specific additional criteria/procedure that is followed, while all candidates may be informed by the respective department's secretariat.

5.5 Funding

The permanent sources of funding for the GSP are the tuition fees by the graduate students and the treatment fees paid by the patients. Additional, but not fixed, sources of funding may be funds by research projects from several sources under the management of the project coordinator, or programs by the Ministry of Education such as the currently running EPEAEK II.

Expenses of the DSNKUA for the PSP include:

(a) Compensation for a small number of teaching staff, since the majority are staff members of the DSNKUA that are not compensated but offer their services on a voluntary basis,

(b) Expendables, technical equipment for the day to day clinical work and staff employment

(c) Expenses related to the research protocols,

(d) General expenses (subscriptions to scientific journals etc)

Since management of the funding in DSNKUA is done as a whole for undergraduate and postgraduate education, expenses such as expendables, equipment etc. are managed efficiently. The same applies to the nursing staff Secretaries/Receptionists so that the same employees offer their services at both the undergraduate and the graduate curriculum.

The management procedure as described above, reassures the viability of the GSP as well as the very important development of the program during the last few years. Viability of the GSP may be assured for the future, due to the permanent sources of funding described above, which are flexible enough to be adapted to the internal needs of all departments.

5.6 GSP International Relations

There are no foreign faculty staff members participating in the GSP, other than a few invited speakers that may give a lecture to the students during their visit to the Dental School. This suggests a self-centred nature of the GSP, an issue that might easily be addressed by raising and devoting funds to visiting lecturers and teaching staff exchange programs, in which the DSNKUA has not been active so far.

The GSP does not attract foreign students, due to language restrictions imposed on everyday communication with patients as well as the education process, which does include any courses in English.

A GPS in Periodontal Implant Prosthesis, entirely in English, is under development and targeted to foreign students.

The following University cooperation agreements with international institutions exist:

(a) Agreement between the DSNKUA and the Universitė de la Mediterranėe Aix-Marseille II, (2008-2010),

(b) Agreement between the DSNKUA and the Marquette Dental School, WI, USA for the completion of the Marquette students' theses at the Biomaterials Laboratory of the DSNKUA. Similar agreements have been made with the

Bonne University and the Freiburg University in Germany, the Granada University in Spain and the GKT in the UK.

This small number of international agreements has been the main issue that explains the rather limiting presence of DSNKUA postgraduate students at foreign institutions. The strengthening of the Fifth Section (Basic Sciences & Oral Biology Section) may lead to an increase in such international agreements.

Several GPSs have received international distinctions:

Accreditation of the PPS in Paediatric Dentistry in 2003 by the European Academy of Paediatric Dentistry, having been ranked 4th out of the eight in total accredited European PPSs. This certification is valid throughout 2008 and is being currently under re-evaluation.

The European Association of Orthodontics has officially recognized the PPS in Orthodontics since 1991, as a certified specialty program in Orthodontics.

This GPS is one out of the two recognized GPS in Orthodontics in Greece, the graduates of which are eligible to take the written examinations for the specialty in Orthodontics, issued by the Ministry of Health.

6. DOCTORATE DEGREE PROGRAM (DDP) (PhD)

6.1 DDP Degree of response to the fulfilment of the aims set by the DSNKUA and the society needs

In this section, there is a description of the control procedures on response, evaluation and revision of the DDP, means of publicity of the DDP and the process of monitoring the professional advancement of the graduates.

There are no established procedures to measure the response of the graduates of DDP. Traditionally, the majority of PhD graduates (>90%) are employed at Dental Schools, the National Health System, or other public health services.

Doctoral Candidates (DC) evaluate the DDP by filling in specific Evaluation Forms with their suggestions being recorded and taken into consideration in possible future DDP revisions.

The DDP curriculum is described in detail in the Graduate Program Guide (Appendix. 2) which can also be found on the DSNKUA website.

There are no established procedures on the monitoring of the professional advancement of DDP graduates.

6.2 Structure of the DDP

In this section, there is a description of the available courses and the selection process.

Each Doctoral Candidate (DC) has an individually customized curriculum which is formed under the supervision of the GA approved Three-Member Doctoral Thesis Committee. The customized curriculum is designed for the scientific field of the basic science that the candidate has selected and must account for 90 credit hours.

The customized curriculum of the DC has a set of courses selected from the following 4 groups that will facilitate the training of the DC and his Doctoral Dissertation work (for a total of 50CH).

A. Basic Science of Community Dentistry

1. CD 520 Topics in Community Dentistry (4 CH)
2. CD 521 Topics in Behavioural Sciences (4 CH)
3. CD 522 Topics in Epidemiology (4 CH)
4. CD 523 Topics in Sociology (4 CH)
5. CD 524 Topics in Psychology (4 CH)
6. CD 525 Literature Review in Community Dentistry (3 CH)
7. CD 526 Literature Review in Sociology (3 CH)
8. CD 527 Literature Review in Epidemiology (3 CH)
9. CD 528 Literature Review in Psychology (3 CH)

10. CD 529 Doctoral Dissertation in Community Dentistry (40 CH)

B. Basic Science of Oral Biology

1. OB 540 Topics in Oral Biology (4CH)
2. OB 541 Topics in Biological Chemistry (4 CH)
3. OB 542 Topics in Immunology (4 CH)
4. OB 543 Topics in Microbiology (4 CH)
5. OB 544 Topics in Molecular Biology (4 CH)
6. OB 545 Literature Review in Oral Biology (3 CH)
7. OB 546 Literature Review in Biological Chemistry (3 CH)
8. OB 547 Literature Review in Immunology (3 CH)
9. OB 548 Literature Review in Microbiology (3 CH)
10. OB 549 Literature Review in Molecular Biology (3 CH)
11. OB 550 Doctoral Dissertation in Oral Biology (40 CH)

C. Basic Science of Dental Biomaterials

1. DB 560 Topics in Dental Biomaterials (4CH)
2. DB 561 Topics in Chemistry and Technology of Metals (4 CH)
3. DB 562 Topics in Polymers (4 CH)
4. DB 563 Topics in Ceramics (4 CH)
5. DB 564 Topics in Materials (4 CH)
6. DB 565 Topics in Toxicology (4 CH)
7. DB 566 Literature Review in Dental Biomaterials (3 CH)
8. DB 567 Literature Review in Chemistry and Technology of Metals (3 CH)
9. DB 568 Literature Review in Polymers (3 CH)
10. DB 569 Literature Review in Ceramics (3 CH)
11. DB 570 Literature Review in Materials (3 CH)
12. DB 571 Literature Review in Toxicology (3 CH)
13. DB 572 Doctoral Dissertation in Dental Biomaterials (40 CH)

D. Basic Science of Oral Pathobiology

1. OP 580 Topics in Oral Medicine and Pathology (4CH)
2. OP 581 Topics in Histopathology (4 CH)
3. OP 582 Topics in Pharmacology (4 CH)

4. OP 583 Topics in Physiology (4 CH)
5. OP 584 Topics in Radiobiology (4 CH)
6. OP 585 Literature Review in Histopathology (3 CH)
7. OP 586 Literature Review in Pharmacology (3 CH)
8. OP 587 Literature Review in Physiology (3 CH)
9. OP 588 Literature Review in Oral Medicine and Pathology (3 CH)
10. OP 589 Literature Review in Radiobiology (3 CH)
11. OP 590 Doctoral Dissertation in Oral Pathobiology (40 CH)

E. Furthermore, during his Doctoral Dissertation, every DC should gain deep knowledge in the fields of Teaching Methods (MK 501, 2 CH) and Advanced Biostatistics (MK 502, 5 CH).

DC works on the courses and writes a 20-30 page report for each course that he submits to his 3-member thesis committee. The committee evaluates the report and either approves it, approves it with revisions, or rejects it. If the report is rejected then the DC would have to report again on the same subject. If the report is approved by his committee then it is forwarded to the administrator's office of the postgraduate program, then approved by PC and DC earning the respective CH.

The remaining 40 CH concern the Doctoral dissertation in the respective basic sciences.

The customized curriculum of DC may include courses provided by other accredited postgraduate programs in other dental departments or other University departments if they have been approved by CPC after suggestion of the DCs TDC. The customized curriculum of DC can be modified after submission of his TDC.

Alternatively and in the scope of applying knowledge acquired in the course of Teaching Methods (501), The DC has the opportunity to become a teaching assistant earning 12 CH. Teaching Assistantship will require at least two hours work every week for two semesters and can relate to laboratory, clinical or other educational activities under the supervision of the director of the respective laboratory or clinic. The CH can be accumulated to the customized curriculum of the student. The director of the laboratory or the clinic where the DC is a teaching assistant, should provide to the Coordinator of the Doctoral Program a verification before the CH are added to the candidates record.

Research Methodology is a required course for the DDP and is already included in the GSP. If, for any reason, the DC has not taken it, this course is included in the customized curriculum. Beyond this, specific knowledge must be gained relative to the topic of their dissertation through literature reviews. In this way, the candidate will be familiar with research techniques and applied research methods in order to evaluate the methodology of his own research project.

6.3 DDP examination procedures

In this section there is a description of the TDC, the Seven-Member Committee, the DC progress monitoring procedure, and the quality criteria for the dissertation.

In the three-member research or seven members Thesis Committee, faculty members of the same scientific area are selected. The faculty members may belong to the School of Dentistry or other Academic Institutions or the clinic. If the research is conducted outside the school at another research centre, then the chairperson of the department must be a member of the three-member committee. In this way, the chairperson will have continued contact with and supervision of the research protocol. In a large number of dissertations, which are already completed faculty from the Medical Schools, the Schools of Chemistry and Polytechnic Schools of our country have participated in the three-member research committee. Also some faculty members from Europe and the U.S.A. have served on research committees and in these cases the candidate has formulated his report in English.

During the Doctoral Dissertation:

The advisor should submit to the coordinator of Doctoral Studies annual progress reports on the progress of the candidate stating the coursework completed or under completion, in regards to the timeframe initially submitted, as well as the progress of the research project.

In case there is a delay in the coursework at the end of the 2 first years, the DC is notified by written notice. Another written notice is forwarded to the DC in case of delays at the end of the 3rd and 4th year.

In case DC exceeds the maximum allowed 4 ½ years without completing his DD, then after recommendation of the coordinator of doctoral studies to the CPC he is expelled, a decision that must be validated by the GA.

Evaluation methods of the DC on the selected courses are the same as those followed in the first stage of graduate programs (multiple choice, written essays etc). The passing grade for a course is considered to be a 7 or higher (on a scale 0-10). In case of absence or failure due to a lower grade (5 or 6), the DC has to retake the examination, without being asked to be readmitted to the course. In case of a grade lower than 5, readmission to the course is required during the following term. If the written report is rejected, then the DC would have to write a new report again on the same subject. If the report is approved by his committee then it is forwarded to the administrator's office of the postgraduate program, then approved by PC and DC earning the respective CH.

After completion of the writing of the dissertation, the DC submits a copy to the administrator's office of the Postdoctoral studies accompanied by a written notice of the TDC verifying the completion and requesting the assembly of the seven-member committee that will finally evaluate the dissertation. DC earns the 40 CH at that point. The seven-member committee includes the three members of the TDC. The seven-member committee should include 3 members of the status of professor.

DC presents the oral defence of the Dissertation to the members of the seven-member committee and it is open to the public.

For the fairness of the evaluation procedure, it is required that not all members of the TDC and the seven-member committee come from the same Department. Additionally, whenever applicable, external scientists are a part of the committee.

It has to be noted that the candidate takes part in cooperation with the TDC in the selection of the topic, the Laboratory, School and University, and the necessary time and finally the structure of the research protocol.

The Doctoral Candidates (DC) evaluate the DDP by filling in specific Evaluation Forms with their suggestions being recorded and forwarded to the DDP Coordinator.

The dissertation quality criteria are summarized below:

1. Original research topic on a leading edge subject of the basic sciences.
2. Multifactorial approach. Assessment of working hypotheses concerns more than a single unique research protocol, so that a multidirectional approach to the subject is possible.
3. The type of research may be in vivo or in vitro and can be concentrated on the evaluation of materials, techniques or therapy provided to a specific group of patients.
4. The DC should first publish at least one research paper originating from his doctoral dissertation in renowned Greek or International journals. Publishing in Greek journals will award him 4 CH while publishing in International journals 8 CH. DC will earn the CH once the journal accepts the paper for publication.
5. Motivation for the DC to present parts of their ongoing research projects at International Congresses (cost of travel and accommodation are covered) after peer reviewing.

6.4 Admission requirements for DDP

In this section, there is a description of the admission requirements, the selection criteria, the announcement of the selection procedure and the results of selection.

Applicants should be:

a) Dental School graduates of DSNKUA with a certificate of clinical specialization in one of the clinical specialties included in PSP.

b) Those who have attained a PSC (see a) after attending a structured accredited postgraduate program by another Greek University or by an accredited international institution.

c) Dental School or School of Medicine graduates that undergo or have already completed the Oral and Maxillofacial Surgery Specialty.

Applications are accepted every year from the 1st of September until the 30th of April and they are evaluated twice annually with the deadlines being the 15th of January and the 15th of June. The candidate, in his application, states in which one of the four Dental Basic Sciences he would like to work for his dissertation.

The selection criteria are the following:

- The Predoctoral Grade Point Average (GPA)
- The PSC GPA
- Curriculum Vitae

- The achievements and the activities of the PS during his studies for earning his PSC (i.e. the necessary semesters to complete his studies, any failed courses or exams, initiatives, grades) that are evaluated separately
- Personal Interview
- Three letters of recommendation

In general the applicant must prove by means of his previous educational endeavours that he can advance his postgraduate studies to the highest level in order to earn a doctor of philosophy degree.

All the above-mentioned criteria and the selection process are published along with the announcement for applications on the DSNKUA website by the Registrars' Office for the Postgraduate Studies as well as in the Journal of the Hellenic Dental Association.

A committee that is appointed by the PC and that is composed of PC members and necessarily the Coordinator of the doctoral degree program confers every February and July and recommends the qualified applicants to the GA that finally decides who will be admitted to the doctoral program.

- When applicants of the second group are admitted (case b, see above), the PC decides if they will have to attend additional courses from the first stage of postgraduate studies before they start working toward their doctoral dissertation. The evaluation depends on the curriculum of the program that the new doctoral student has completed as well as the basic sciences field that he has selected for his doctoral degree.
- When graduates of the Dental School or School of Medicine that undergo or have already completed the Oral and Maxillofacial Surgery Specialty are admitted (case c, see above), the PC must incorporate in his coursework courses that belong to the basic core and those of the special courses of the PPS of the Oral Biology. These courses should account for 20 credit hours. The doctoral candidate will take these courses, as he will be working towards his doctoral dissertation.

Following the above-mentioned process for these two specific cases assures the efficiency of the procedure for DC that have attained PSCs from other institutions than DSNKUA.

Table 6. *Progress of the applications, available positions in the Dental School, accepted students (enrolled) and graduates of the Doctoral Studies Program.*

		2006-2007	**2005-2006**	**2004-2005**	**2003-2004**	**2002-2003**
Applications (a+b)		14	22	13	30	7
	(a) Graduates of the Dental School	7	13	13	18	5
	(b) Graduates of other schools	7	9	-	12	2
Available positions*		-	-	-	-	-

Enrolled	12	21	11	23	5
Graduated	6	2	4	28	-
Mean duration of studies of the graduates**					

** Specific number of positions is not announced, only a call for interested individuals is made.*
*** A mean duration cannot be calculated, especially according to year, due to the fact that this time period presents a large range and consequently a large standard deviation.*

6.5 International dimension of DDP

In this section, there is a description of participation of foreign faculty members in either the TSC or the seven-member committees, participation of foreign DC, any international agreements with institutions or other foreign bodies and any international distinctions.

There is a small percentage (~10%) of foreign faculty members who sit on the advisor committees.

Regarding foreign DC, they are mainly scholars from either the Greek Scholarship Institution, or from the Ministries of Foreign Affairs of the countries that the scholar originates from. Three foreign DC have graduated the DDP program so far. Although the dissertation in this case is written in english, the DC is required to translate into Greek, a rather expensive, time consuming and elaborate process.

University cooperation agreements with international institutions have been made with the following:

University of Manchester, UK: Cooperation agreement for the dissertation preparation in both the UK and Greece.

University of Freiburg, Germany, and University of Bonn, Germany: Participation of DSNKUA staff members in doctoral dissertation committees as well as technical support in the experiments conducted.

DC motivations (by covering travel and accommodation expenses) for international activities are the following:

- Submission of articles to international Journals with impact factor
- Participation at international congresses after peer-review
- Short term education in advanced techniques at foreign institutions

International distinctions consist of research projects presented on international congresses that have been awarded. The most recent one is the project titled "Characterization of oral films formed in the presence of a CPP-ACP agent: an in-situ study" by C. Rachiotis having been awarded the best Poster Presentation at the Annual Congress of the European Section of the Academy of Operative Dentistry (AODES) in Geneva, October 2007.

7. CUMULATIVE TEACHING RECORD

7.1 Faculty Efficiency

In this section, we describe the faculty assessment by the students and its utilization, as well as the educational responsibilities and activities of the faculty.

The faculty assessment by the students began during the academic year 2001-2002, with the complete assessment of the Total Patient Care Clinic newly operating at the time during the 5th year of the undergraduate program.

The assessment continued with interruptions between 2003 and 2007, and was applied mainly on Dental Courses during the reformulation of PPS (EPEAEK II).

Specifically, based on the 2008 census of the offered courses, 17 courses of undergraduate program were systematically assessed by the students with the course directors' initiative. The assessment took place at the end of each semester or at the end of each didactic section and included: the course content (17), the teaching methods (17), the course material (15), the teaching faculty (15) and the assessment methods (8). Specific questions on faculty assessment were included in 15 courses. The assessment methodology included: a) in all cases (15) anonymous written questionnaires in specific courses and b) in 3 cases open discussion with the students.

In the methodology of the faculty assessment by the students we should also include the open discussion between a random representative student sample and the Education Consultant during the EPEAEK II (between 2003 and 2006). The results of the assessment were typically presented to the Department/Clinic Directors and Course Directors who decided on their utilization. In some cases the results of the assessment were presented in national and international scientific meetings on Dental Education (e.g. annual scientific meetings of ADEE).

In May 2008, at the end of the semester, the Self – Assessment Committee used anonymous questionnaires for the assessment of the educational process in its total by all the students. The students received the questionnaires during the laboratory or clinic time and returned them either to the faculty or secretaries.

The questions on the teaching faculty were in regards to the theoretical, laboratory and clinical teaching and specifically on the communicability, kindness, consistency, approachability, encouragement and systematic natural presence. The results of the assessment per course for the academic year 2007-2008 are presented in Appendix 3. Undergraduate Course Assessment.

The results were presented to the Department/Clinic Directors and Course Directors. It is expected that the systematic continuation of this process, which will be enriched with other assessment methods and education indices, will allow for the safe measurement of the offered teaching.

The results of the assessment are utilized for the improvement of the teaching process at two levels:

At the level of the Curriculum Committee (mainly regarding the time of enrolment) and the level of the Course Directors.

The Course Directors specifically are making efforts for the improvement of the teaching process. Based on the opinion of all the Course Directors (2008), these efforts include changes in course content (14 courses), changes in the teaching methodology (8 courses), enrichment of the course material (3 courses), improvement of the student assessment methodology (2 courses), and changes in the composition of the teaching team (1 course).

It is estimated that the average time spent on teaching by the faculty is 10-12 hours weekly on clinical, laboratory or theoretical teaching. However, not all faculty members follow this average, since the time spent on teaching depends on the educational needs of each Department/Clinic and the educational responsibilities undertaken by each faculty. Thus, deviations exist.

Sixty to seventy faculty members, representing approximately 50-60% of the total, participate in some form of educational activity in the graduate program (lecture, seminar, literature review, clinics). This percentage would be considerably higher if it was not for the specialized adjunct faculty, who are involved in the graduate education on a volunteer basis.

7.2 Quality and Efficiency of the Educational Process

In this section, we describe the percentage of the students' participation and success rates in the examinations of the PPS courses, the mean degree grade and the mean duration of the studies (Tables 7 and 8).

Table 7. *Grade distribution and mean final grade for the graduates of the Undergraduate Studies Program.*

Graduation year	Range of grades graduates (%)				Mean grade (Total graduates)
	5.0-5.9	6.0-6.9	7.0-8.4	8.5-10.0	
2001-2002	12 (8%)	86 (59%)	45 (31%)	2 (1%)	*6.75 (145)*
2002-2003	21 (16%)	78 (60%)	31 (24%)	0	*6.61 (130)*
2003-2004	19 (11%)	112 (63%)	48 (27%)	0	*6.65 (179)*
2004-2005	13 (7%)	136 (75%)	32 (18%)	0	*6.64 (181)*
2005-2006	17 (12%)	90 (63%)	35 (24%)	1 (1%)	*6.66 (143)*
Total	82 (10%)	502 (64%)	191 (25%)	3 (0%)	*6.66 (778)*

Table 8. *Progress for the number of graduates of the Undergraduate Studies Program and the duartion of studies.**

Year of enrollment	Duration of studies (years) of graduate students (%)								
	K	K+1	K+2	K+3	K+4	K+5	K+6		Total
1995-1996	44	55	17	6	1	1	0		100
1996-1997	45	80	13	3	3	2	0		100
1997-1998	47	65	24	9	6	2	0		100

1998-1999	39	68	17	3	1	0	0		100
1999-2000	22	84	23	6	0	0	0		100
2000-2001	59	89	6	0	0	0	0		100
2001-2002	54	84	0	0	0	0	0		100
2002-2003	40	1	0	0	0	0	0		100

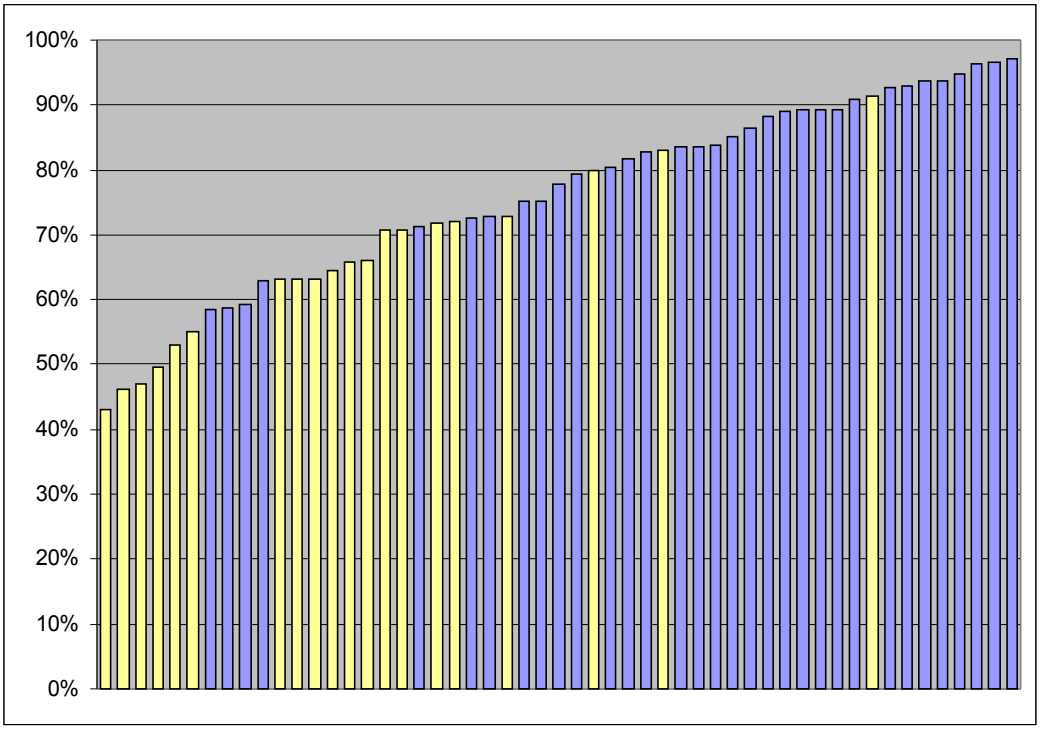
***** Since the graduates of 2006-07 first entered the Dental School in 2002, and if the academic years of the original table were retained then they would have been the only row which could have been completed.

The students' success rates in the courses were calculated for all exam periods of the academic years 2002-2003 to 2006-2007. The cumulative 5-year percentages are presented here. The results for each year independently are available form OMEA. Analysis of the results for each year did not reveal significant differences compared to the cumulative results. The data on the years 2002-2006 are presented in Table 9.

Table 9. *Course classification based on success rates during the exam periods of the years 2002-2006 (5 academic years).*

Code	Course	Presented	Succeeded (%)
51058	Physiology I	1541	43%
51064	Physiology II	1574	46%
51246	Medical Chemistry II	1051	47%
51078	Pharmacology II	1543	50%
51059	Biochemistry I	1604	53%
51073	Pharmacology I	1367	55%
51080	Preventive dentistry	1336	59%
51156	Dental Materials	1212	59%
51054	Introduction to Dentistry	1137	59%
51046	Medical Chemistry (replaced)	216	63%
51213	Periodontics II	1188	63%
51065	Biochemistry II	1446	63%
51146	Medical Chemistry I	848	63%
51047	Medical Physics	998	63%
51079	Special Pathology	1389	65%
51060	Descriptive Anatomy I	980	66%
51057	General Histology & Embryology	1052	66%
51202	Biostatistics	947	71%
51206	Pathologic Anatomy	1013	71%
51186	Community Dentistry	1152	71%
51066	Descriptive Anatomy II	710	72%

51190	General Microbiology & Immunology	942	72%
51067	Pathology of the Dental Hard Tissues	963	73%
51069	Orthodontics I	989	73%
51201	General Biology-Genetics	921	73%
51077	Removable Prosthodontics I	942	75%
51203	Oral Diagnostics & Radiology I	935	75%
51177	Paedodontics I	929	78%
51158	Oral Histology and Embryology	885	79%
51204	Epidemiology	1038	80%
51051	Dental Morphology	863	80%
51221	Clinical Performance of Dental Biomaterials	721	82%
51209	Oral and Maxillofacial Surgery II	894	83%
51180	Ear-Nose-Neck Pathology	961	83%
51211	Periodontics I	881	84%
51182	Endodontics I	883	84%
51207	Oral Diagnostics & Radiology II	844	84%
51094	Oral Pathology II	930	85%
51216	Orthodontics II	913	86%
51210	Operative Dentistry I	835	88%
51173	Oral Pathology I	846	89%
51205	Oral surgery I	816	89%
51160	Dental Anesthesiology	858	89%
51215	Endodontics II	831	89%
51187	Physiology of the Stomatognathic System	800	91%
51194	General Surgery	916	91%
51093	Oral and Maxillofacial Surgery I	827	93%
51220	Introduction to Implantology	801	93%
51208	Oral Surgery II	874	94%
51085	Fixed Prosthodontics I	883	94%
51219	Removable Prosthodontics II	782	95%
51217	Pedodontics II	803	96%
51095	Fixed Prosthodontics II	771	97%
51218	Operative Dentistry II	769	97%



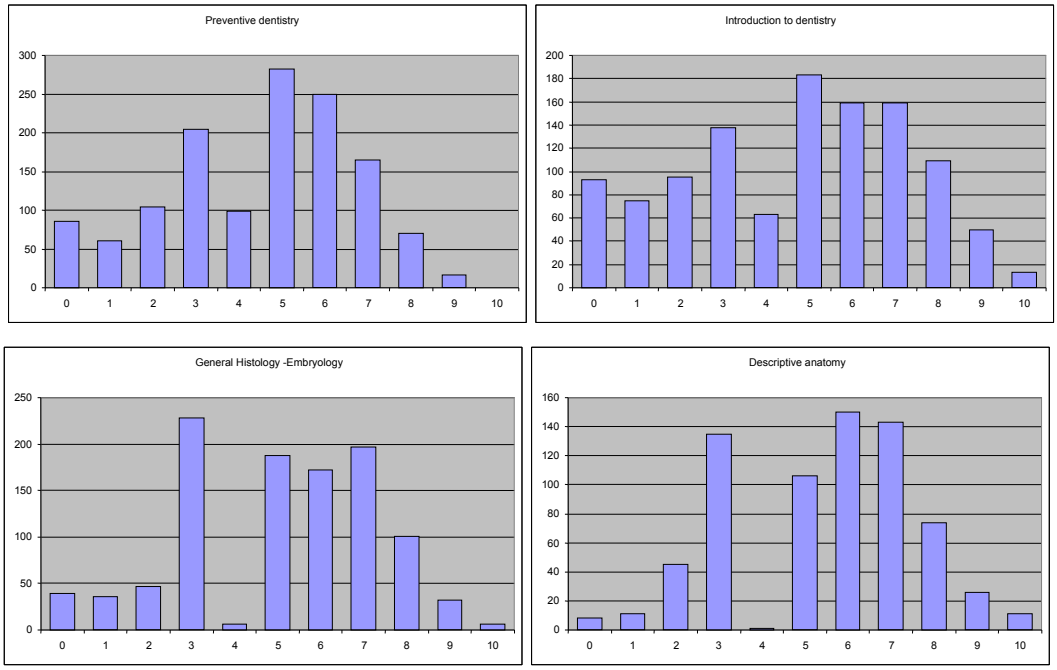
Graph 1. *Success rate for the 53 courses of the years 2002-2006. (D) courses are presented in blue and (B) and (M) courses are presented in yellow.*

During the last 5 years, Medical Chemistry I was substituted by Medical Chemistry. The data on both courses were combined and are presented as one in the graph.

Out of the 53 courses, in 24 (45%) the success rate is lower than 75%. Out of these 24 courses, 7 are (D) and 17 are (B) and (M). Only in 3 (M) courses (out of 20) is the success rate higher than 75%. The 7 (D) courses with the success rate lower than 75% are:

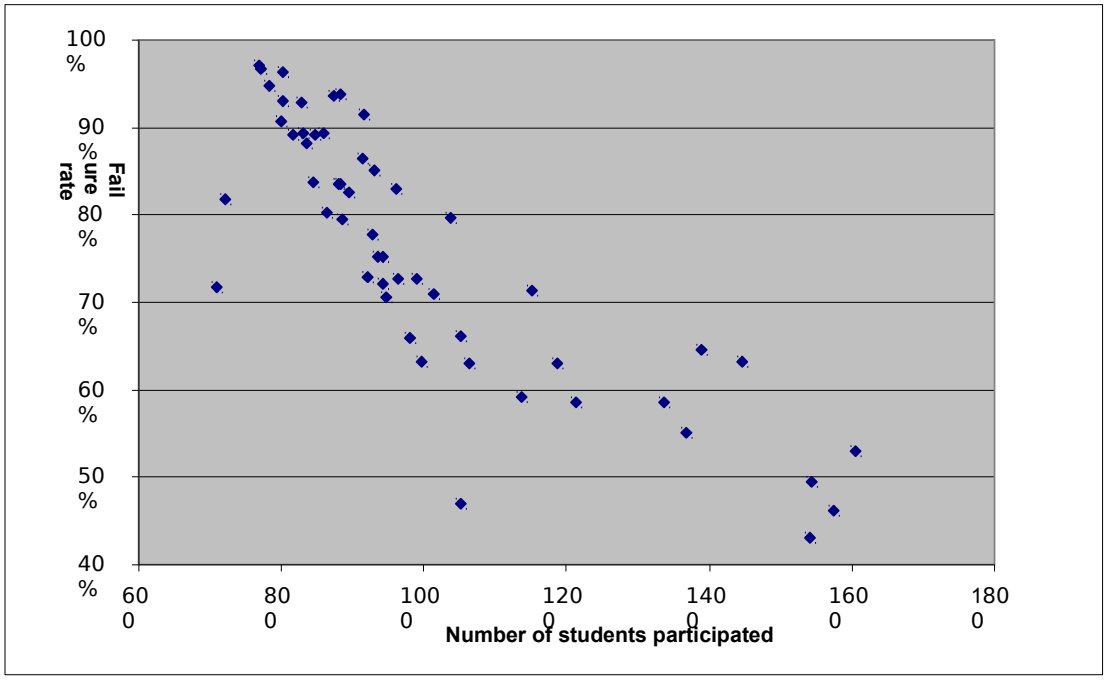
- Preventive Dentistry
- Dental Biomaterials
- Introduction to Dentistry
- Periodontics II
- Public Dental Health
- Hard Dental Tissues Pathology and
- Orthodontics I.

Most of the above courses present a relatively normal grade distribution (when ignoring the considerably low or almost non-existent value for grade 4, which is present in almost all courses), with the exception of Introduction to Dentistry, which shows a tail to the left (Graph 2).



Graph 2. *Characteristic distributions of grades in PPS courses.*

The following graph shows that the lower the success rates the higher the participation, since, as anticipated, more students are re-taking the examination. For the 5-year period, and for the courses with high success rate, participation is approximately 800, a number that correlates with total number of students (approximately 160 students per year). In courses with low success rate, participation is approximately 320 per year. Maximum participation per exam period is approximately 140 students.



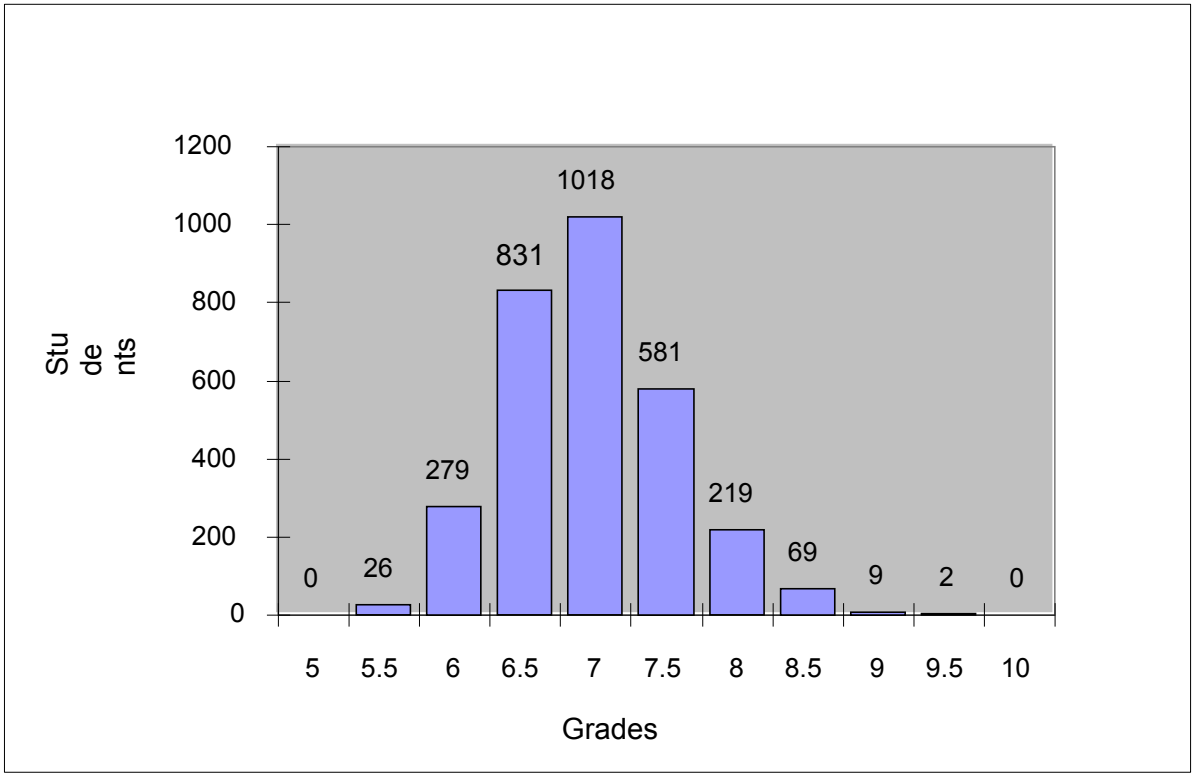
Graph 3. *Failure rate in relation to the number of participants.*

The statistics for the final degree grades include data from 3034 students who graduated between 1988 (academic year 1987-1988) and 2007 (academic year 2006-2007, including the September 2007 exam period) are presented in Table 10 (Twenty years in total).

Table 10. *Data on success grades for the period 1988-2007.*

Period 1988-2007	
Total number of students	3034
Students with grade "Excellent"	11
Mean term of Diploma Grade	6.71
Standard Deviation	0.58
Mean Value	6.66

The distribution of grades for this period is presented in Graph 4. (Each column represents the total number of students with a grade less than/equal to the respective grade).

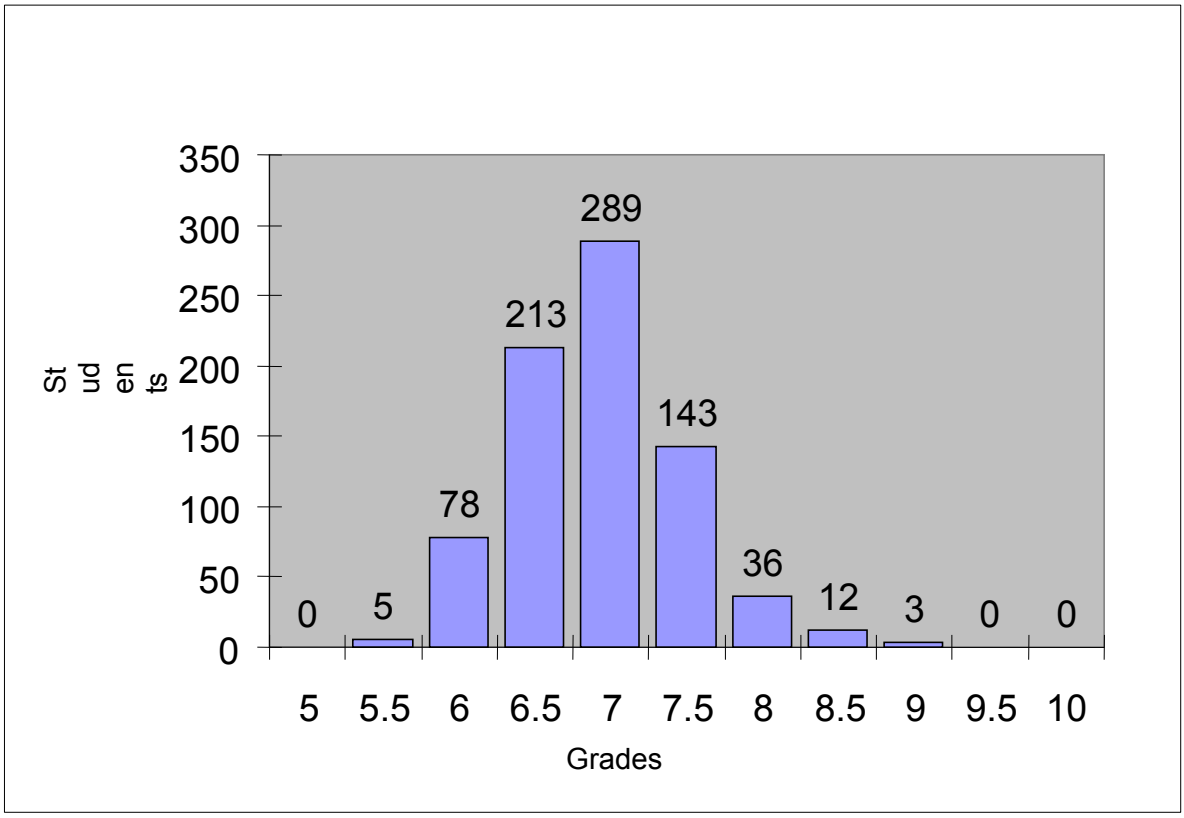


Graph 4. *Distribution of grades for the period 1988-2007.*

The same data for students who have graduated during the last 5 years is presented in Table 11, while the distribution of grades for this period is accordingly presented in Graph 5. (Each column represents the total number of students with a grade less than/equal to the respective grade).

Table 11. *Data on success grades for the period 2003-2007.*

Period 2003-2007	
Total number of students	779
Students with grade "Excellent"	3
Mean term of diploma grade	6.66
Standard deviation	0.54
Mean value	6.64



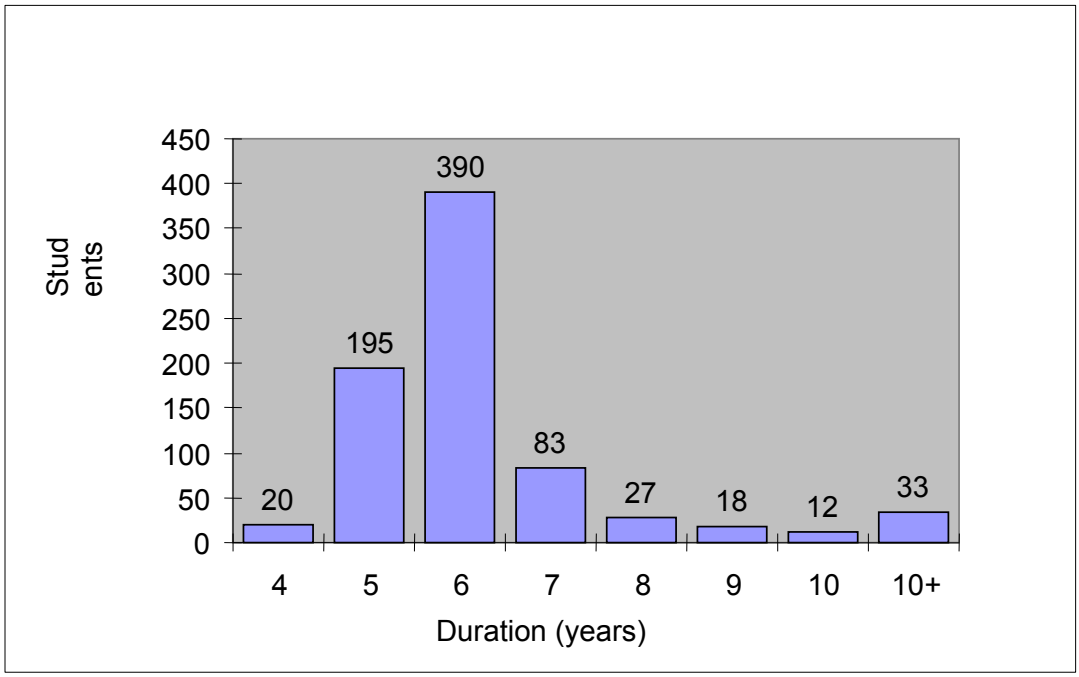
Graph 5. *Distribution of grades for the period 2003-2007.*

The grade distribution for the period 2003-2007 appears normal but narrow. The number of students with the grade "excellent" is very low (only 0.4%) and the distribution of grades shows a tail to the left, which may imply that the requirements are increased and the students are unable to respond. There are no differences in this situation between the last 5-year and 20-year periods.

The analysis of the grades for all courses (see relevant section) reveals that the medical courses have a very low mean grade. The improvement in the grades of the medical courses, and the initial semesters' courses in general, could significantly improve the mean degree grade. The etiology for these low grades is under research, and in conjunction with the results of the course assessment by the students as well as the points made by OMEA, there is already a plan for the reformation-modification of the teaching process for these courses, in cooperation with the Curriculum Committee.

The data for calculating the mean duration of studies are based on students who graduated during the exam periods of the academic years between 2002-2003 and 2006-2007. The duration was calculated using the Student Number (that includes the year of matriculation) and the last academic year that the student participated in examinations (Graph 6). Thus, it was not possible to calculate the duration of studies in months or semesters. Nor was it possible to show if the graduation took place in June or September.

Some students show duration of studies lower than 5 years, due to special circumstances (e.g. waive of semesters or credit was given to courses taken in other schools).



Graph 6. *Duration of studies (2002 – 2007).*

These data reveal that the mean duration of studies is 6.3 years. From the total number of graduates in the last 5 years, 27% graduated in 5 years (regular duration of studies), 50% in 6 years and 22% in 7 years or more.

It should be noted that the longer duration of studies in the graph represents the time to graduation (successful completion of examinations) and does not imply that the student has not fulfilled the clinical or laboratory requirements.

7.3 Organization and Application of the Teaching Process

In this section, we describe the process of communicating the aims of the PPS courses to the students, the process of measuring and reaching those aims and the teaching faculty members are noted.

The course content is communicated to the students via the Undergraduate Studies Guide that includes details on each course, via the school website, which includes all courses and publishes possible modifications, as well as via the announcement board of the Departments/Clinics.

Specific details on the learning goals are presented in the Studies Guide, each course's website, which has a link in the dental school website, as well as the course manuals (when available).

The learning goals' achievement is determined by:

a) The results of the students' assessment (success/failure rates) during the intermediate and final assessments.

   Disadvantage: the theoretical sufficiency is assessed only, not the clinical skills (there is no generalized system for the students' clinical assessment and thus for determining the achievement of clinical educational goals)

b) The questionnaires for the course assessment from the students (Question: Have you learned how to manage and treat each patient efficiently?). It is applied specifically in clinical practice and each course.

The course schedule is followed very closely if there is no interruption in the educational process of the University. Even in the case, of interruption, for any reason, efforts are made to reschedule.

Based on the detailed schedule of B, M and basic theoretical D courses, faculty of the two highest levels participate in the teaching process, at least the theoretical, with Associate Professors participating significantly more than Professors.

The phenomenon of faculty members teaching courses that are not directly related to their specialty is only observed in some electives, such as Dental Practice Organization and Management, Dental Informatics, Introduction to Informatics, Applied Psychology in Dentistry. However, there are no more than six faculty members in such positions.

7.4 Educational Material

In this section, we describe the educational material of any kind that are utilized for courses, their distribution and the methods for updating them.

In Table 12, the different types of educational material and their distribution in the total number of courses are presented.

Table 12. *Number and percentage of the total number of courses using each type of educational material (each course could use more than one educational technique).*

Educational material	**Number of courses**	**% Percentage of courses**
Textbooks: a. One single textbook	51	53,7
b. Material from multiple textbooks	28	29,5
Notes (in written and electronic form)	43	45,3
Laboratory Guide	24 (30)*	80,0
Clinical guide	9 (40)*	22,5
Selected articles from the Greek and international bibliography	16	16,8
Educational material in CD-Rom , DVD form	32	33,7
Educational video	19	20,0
Educational material in electronic form in the website of the School or/and in the educational platform e-taxis (e.c. notes, slides etc.)	48	50,5
Sources with educational material in internet beyond EKPA	9	9,5

Other	8	8,4

*** Number of courses with laboratory and clinical practice (% is calculated according to this number)**

The analysis of the table reveals that:

1) Although the highest percentage of courses utilizes a single textbook as educational material, a variety of other material types are available in the majority of courses, so that 81 out of 95 PPS courses offer multiple forms of educational material.

   This is considered a positive point because the student is exposed to multiple sources of information.

2) Out of these forms, the notes in hard-copy or electronic form are what are utilized most frequently, while it is notable that these notes or other forms of material (e. g. slides) are available in electronic form on the School web-site or/and the educational platform e-class, in 50% of the courses.

3) The educational CD-Rom/DVD and video are utilized in 1/3 and 1/5 of PPS courses respectively. Since dentistry often utilizes image as a teaching means, a lot of educational electronic material are employed.

4) Regarding the use of laboratory manuals - this is an important point since a lot of PPS courses include laboratory practice (30) – it is considered positive that 24 of those utilize a manual. The goal should be to have a laboratory manual for all the courses, since it is a useful tool for the student's guidance. Out of the 40 courses that include clinical practice, only 9 utilize a clinical manual, a percentage significantly low in a PPS in which clinical practice plays an important role.

If the course director and the teaching faculty team want to make any modification to the educational material, they propose it to the Department and it is approved by the G.A. in the case of textbooks or notes that need to be published, according to the previous and present law on university educational material. The teaching faculty, who directly notify the students, without the need of any approval, modifies any other form of educational material. The teaching faculty team is considered to be the most appropriate to judge if there is any need to update any educational material and in what respect, thus the process described here is followed.

On the other hand, if during any assessment the students note that the educational material is outdated, it is up to the judgment of the course director to take it into consideration since there is no procedural obligation.

The material distribution is as follows: In the case of approved material, the distribution is according to the current law. During this process, in the past, numerous problems arose that resulted in delayed distribution to the students; these problems were mainly due to bureaucratic procedures. It remains to be seen if the current law will solve any of the observed problems.

Regarding the rest of the educational material, several forms of distribution are followed. They are either distributed by the respective Department/Clinic directly to the students, or uploaded to the website, in the case of material in electronic form.

Almost the entire material taught is covered in the various forms of educational material distributed to the students.

7.5 Means and Infrastructure Available

In this section, we describe the classrooms, the laboratories, the clinics and the libraries, their use and availability, their adequacy and suitability, as well as the educational equipment.

Classrooms:

- Number and occupancy

2 amphitheatres

1. New 1st Floor Amphitheatre (NAAO) - occupancy 280
2. Efth. Papantoniou Amphitheatre (AEP) – occupancy 220

6 classrooms

1. 1st, 2nd, 3rd and 5th floor of the Old Building (ADAO, ADBO, ADCO, ADEO) - occupancy 40 each
2. 2nd and 4th floor of the New Building - occupancy 40 each

- The use is presented as percentage use of each classroom between 8 a.m. and 5 p.m. daily, 5 times per week (total 45 hours)

amphitheatres

1. NAAO = 56% during the fall and 47% during the spring semester
2. AEP = 42% during the fall and 31% during the spring semester

classrooms

1. ADAO = 53% during the fall and 49% during the spring semester
2. ADBO = 18% during the fall and 42% during the spring semester
3. ADCO = 36% during the fall and 49% during the spring semester
4. ADEO = 18% during the fall and 18% during the spring semester
5. Post-graduate Classrooms (New Building)

2nd floor Classroom of the New Building = 64% during the fall and 42% during the spring semester

4th floor Classroom of the New Building = 33% during the fall and 51% during the spring semester

It is apparent that the two (2) amphitheatres and six (6) classrooms are sufficient for the educational needs of the theoretical teaching of PPS. In addition, several of the courses taken by both the dental and medical students (total of 8) are given in classrooms of the Medical School of the NKUA.

The amphitheatres as well as the classrooms are considered to be suitable for the educational needs. In addition, AEP and ADEO have been recently renovated. In order to further improve the infrastructure, it is also necessary to renovate NAAO, which is outdated.

The amphitheatres and classrooms are sufficiently equipped with technological means (14 video-projectors, 14 PCs with monitors in total) for the educational needs that have been installed during the last 5 years. Although this equipment is sufficient nowadays, it is possible that it will soon need to be upgraded or replaced.

Educational Laboratories:

- Number and occupancy

4 laboratories

1. Laboratory A of Dental School Basement – Laboratory of Clinical Simulation (AEYO) – occupancy 40
2. Laboratory B of Dental School Basement (BEYO) – occupancy 80
3. Laboratory C of Dental School Basement (BEYO) – occupancy 80
4. Laboratory of Oral Histology (Microscope) (EIS) (1st floor New Building) – occupancy 40

Inter-departmental Informatics Dental School Laboratory (DEPOS) – occupancy 15 with 23 PCs, 1 scanner and 1 laser printer

- The use is presented as percentage use of each laboratory between 8 a.m. and 5 p.m. daily, 5 times per week (total 45 hours)

laboratories

1. AEYO = 76% during the fall and 71% during the spring semester
2. BEYO = 27% during the fall and 38% during the spring semester
3. CEYO = 53% during the fall and 60% during the spring semester
4. EIS= 20% during the fall and 44% during the spring semester

DEPOS = 9% during the fall and 9% during the spring semester

(For the remaining time it is used for the needs of the Dental School Library)

The increase, over the last 4 years, due to the reformation of PPS, of the laboratory practice in several courses, as well as the future goal of more courses to obtain laboratory practice, especially in simulation, creates the need for a new laboratory of clinical simulation, similar to the AEYO, of occupancy of at least 20.

Furthermore, out of the 4 laboratories mentioned above, CEYO is significantly outdated, thus renovation is necessary.

Finally, DEPOS is considered unsuitable, as a location and space, since it serves a double purpose that of a classroom for informatics courses a well as a library.

In AEYO, 40 laboratory units of clinical simulation were installed approximately 10 years ago, therefore nowadays there is an increased need for service and parts that is not sufficiently covered, creating the risk of larger scale damage. The reason is

financial as well as the relative inadequacy of the technical service of the dental school, due to lack of staff.

BEYO has been recently renovated and equipped and its function is satisfactory.

The laboratory equipment in CEYO needs to be replaced, since it is over twenty five (25) years old.

DEPOS needs to be extended as well as more adequately equipped with PCs (at least 50).

All of the space mentioned above is available for use for scientific meetings, whenever the schedule allows it.

Clinics:

- Old Building Clinics, used for undergraduate studies

a. 2nd and 3rd floor clinic, equipped with 40 and 38 dental units respectively,
b. Diagnosis and Radiology Clinic (ground floor), equipped with 5 dental units and 3 orthopantomographs (2 digital), 4 periapical (for conventional and digital radiographs) and a Cone Beam (CB) CT,
c. Oral and Maxillofacial Surgery Clinic (ground floor), equipped with 6 dental units,
d. Oral and Maxillofacial Surgery Clinic (1st floor), equipped with 5 surgical dental units,
e. Oral Pathology Clinic (1st floor), equipped with 4 dental units,
f. Oral Maxillofacial Pain Clinic (2nd floor), equipped with 5 dental units,
g. Paediatric Dentistry Clinic (4th floor), equipped with 10 dental units, and
h. Orthodontics Clinic (4th floor), equipped with 7 dental units

- Additionally, the examination units of:
    i. Oral and Maxillofacial Surgery (1 dental unit)
    ii. Periodontics Recall (2 dental units)
    iii. Endodontics Emergency Clinic (1 dental unit)
    iv. Orthodontics (1 dental unit)
- New Building Clinics, used for graduate studies,

a. Endodontics - Periodontics - Restorative Dentistry Clinic (2nd floor), equipped with 14 dental units,
b. Orthodontics Clinic (3rd floor), equipped with 6 dental units,
c. Pediatric Dentistry Clinic (3rd floor), equipped with 4 dental units,
d. Prosthodontics Clinic (4th floor), equipped with 15 dental units,
e. Implant Clinic, equipped with 3 dental units,

Additionally, the dental laboratory of Prosthodontics is located on the 4th floor, with 12 fully equipped lab units.

Two Oral and Maxillofacial Surgery Clinics are located in “Evangelismos” and “A. P. Kyriakou” children’s hospital, with 20 and 10 beds respectively, which belong to the Clinic of Oral and Maxillofacial Surgery of the Dental School.

All the clinical space mentioned above is considered relatively adequate for the undergraduate and graduate studies, given that the number of accepted undergraduate students will be further decreased.

However, since the plan is to increase the time of clinical practice of the students during their studies, it is deemed necessary to create one more clinic space, equipped with 20 dental units. In the same clinic it will be possible to treat patients with special needs (e.g. oncological, with clefts, children with special needs, patients with maxillofacial deficiencies) who are currently treated in the Dental School in the respective Units/Clinics.

Regarding the quality of the existing clinical space, nowadays, and after continuous, partial renovations that have already taken place, it is considered satisfactory. It should be noted however, that the continuous use (8 a.m. to 5 p.m.) daily, results in continuous damage that requires a considerable cost, which should be considered a standard expense and should be added to the educational expenses.

In addition, according to the hygiene regulations and after atmospheric air measurements, it was shown that it is necessary to install ventilation systems in every clinic. This project has been recently completed for the two main clinics. Ventilation systems should be installed in all of the clinics.

The clinics mentioned above have the necessary supporting equipment (e.g. radiographic equipment, instrument washers, disinfection - sterilization units, curing lights etc.) as well as dental instruments for the completion of the whole range of dental work in the patients treated.

The equipment and instruments (especially the latter) are partially replaced annually, since primarily, considerable damage occurs as a result of their continuous use, and secondarily, continuous update is necessary to retain a high quality of dental treatment. Consequently, a standard annual expense should be added to the educational expenses.

Libraries:

- Number, occupancy and services

1 library, occupancy 90

The library is equipped with 4 PCs for literature searches (in addition to the 15 of DEPOS, which is located in the library), and one printer. The students and faculty have electronic access to all the scientific journals of the publishers that the NKUA has an agreement with (via the Central Library – HellasLink service). Two photo-copy machines that operate with a charge card for students and faculty are also available.

The library collection includes books, journals, theses and dissertations, which are electronically classified:

a. Book collection, including approximately 2.500 volumes that cover the following subjects: Dentistry (with all of the subspecialties), General Medicine, Anatomy, Microbiology, Biochemistry, Biostatistics, Basic Sciences.

b. Scientific journals collection with 194 titles, out of which 99 are current.

c. Theses and dissertations collection, of dental content, with approximately 600 titles.

Regarding the scientific textbooks, it is considered that the presence of more than one copy of the same title, for those that are more popular or for a list that the teaching faculty would provide, would be of great value for the students' multiple literature review.

The library, with respect to location and space, is considered satisfactory, although a minor extension would provide the conditions for increasing the number of books and journals. It is also considered absolutely necessary to increase the number of PCs.

The Library operates throughout the whole year, Monday through Friday: 9 a.m. to 7 p.m. (50 hours per week), with the exception of August.

The extension of the operating hours, at least 2 hours daily and operation on Saturday, are considered necessary. The existing staff is not sufficient to cover these increased needs. The Dental School has already hired 2 staff members by contract (in addition to the two standard staff members) that are covered by the School's revenue (treatment fees, post-graduate tuition) in order to cover the operating hours mentioned above.

7.6 Usage of Informatics and Media Technology (IT)

On the Dental School web-site, every course is presented based on Aim – Goals – Teaching methods – Assessment methods and successful completion of the course as well as educational material, in some cases in Greek and English.

The equipment of all the classrooms, amphitheatres and laboratories for the students of the Dental School, with personal computers and video-projectors has made the use of electronic material possible for the theoretical teaching.

During the last 5 years, as part of the reformation of the PPS, there has been an important move in almost all courses to use IT for teaching and presenting educational material. Thus nowadays, almost the entire material for seminars, lectures and laboratory exercise is in digital form. Especially during laboratory practice, IT is used for training and educational video and CD/DVD projection, in almost all dental courses.

The general observation is made because although IT is used for all courses during live seminars, those that make the same material available to the students in an organized, electronic form (in electronic copies or the web-site) are very few. Several are the reasons, such as copyright, possible theft of clinical cases (that are widely used in dental education) that inhibit the faculty and result in outdated education.

IT is not used for student assessment in any PPS course. Some self-assessment exercises in the website, for very few courses, are the only exception. This process

should be reinforced in the future, along with the necessary equipment, in order to disengage the faculty and automate several processes.

It is apparent from Table 13, that the communication between students and faculty on questions via the website is used for very few courses and not even for the entire faculty participating in these courses. An attempt to reinforce this process is not absolutely necessary because the structure of education in Dentistry, where most courses include laboratory and clinical practice as well as seminars, brings students and faculty in daily contact, allowing for day-to-day communication.

The use of the web-site for the PPS courses is apparently for course's announcements. 50% is not considered satisfactory and the goal is that announcements will be uploaded on the website for all of the courses.

Without the ability to make an exact estimate – since part of the equipment came directly from the central supplies of NKUA – the School must have spent approximately 250.000 euros for IT over the last 5 years.

Table 13. *Number and percentage of the sum of courses that utilize Internet for various educational processes.*

Use of the Internet	**Amount of courses**	**% Percentage of courses**
Notices concerning the course	47	49,5
Publicity of course guide books	25	26,3
Supply of educational material	36	37,9
Use of internet during the course	13	13,7
Students-Educators communication for questions	13	13,7
Forwarding and Submission of students' essays	2	2,17
Examinations' results announcements	5	5,3
Distribution of courses' assessment questionnaires	0	0
Students assessment's results announcement	8	8,4
Other	2	2,1

7.7 Faculty - students relationship

The faculty – students ratio differentiates based on the teaching method. For lectures, each class is approximately 130 students. Nine PPS courses, which are taken by both dental and medical students, where the audiences exceed 400 students, resulting in difficult conditions are the exception. For seminars, the audiences are approximately 35 students, which is a low number; however it is far from providing the opportunity of teaching in small groups. In the laboratory practice, especially that of dental courses, the faculty – students ratio ranges between 1:15 and 1:8. In the clinical practice, the mean ratio is 1:4. The actual ratio depends on the assistance needed for the students as well as the faculty available. It should be noted that these ratios are achieved not only with the participation of faculty but also with that of the

graduate students, adjunct faculty and volunteers (instructors in lab and clinical practise).

The faculty do not have set, official hours for communication with the students. This does not happen in Dentistry, perhaps because the educational conditions do not make it necessary. The almost daily contact between faculty and students allows for direct and easy communication. This system could probably be applied for courses that are scheduled from the Medical school, in which cases difficulties in communication have been noted.

7.8 Degree of correlation between teaching and research

The student introduction to research and scientific rationale is not part of the general philosophy of the current PPS. This is the reason why actions that promote this process are rare and not systematic in some PPS courses and especially during the last 4 years, within the frame of PPS course' reformation. More specifically, these actions focus on literature review and publication/presentation of a small paper.

This is considered a negative point for PPS, and such actions could be adopted, not necessarily as an additional requirement, but as part of the educational process (e.g. evidence-based analysis of clinical cases, waiving papers for courses etc).

The students' participation in research protocols is allowed, but not reinforced by any process or motivation. The absence of these as part of the students' requirements, the absence of promotion, of any kind, of their participation in research protocols and at the same time the increased clinical requirements are noted as the most important reasons for the lack of the students' participation in research protocols. Additionally, numerous practical reasons could be mentioned (e.g. lack of infrastructure and funding to support 130-140 students per year) as well as lack of staff.

7.9 Collaborations with Research Centres – Faculty and Students Mobilization - Other

The School does not have an established process for faculty mobilization in universities and academic centres abroad. Currently several collaborations are in place, that have however been established by faculty initiatives.

Apart from the agreement between the Dental School of NKUA and the same school of the Universitė de la Meditarranėe Aix-Marseille II, that has been previously mentioned, there is also a second agreement between the Dental School and the same school of Iasio, Romaine (POPA, for post-graduate students exchange and short faculty visits, between 2003 and 2008).

Regarding the promotion and information of the academic community for mobilization programs that NKUA takes over, the memos that the Dental School receives from the central services are made public to the departments and then to the Laboratories/Clinics, in order to inform the faculty. They are also announced on the website and in the amphitheatre by the faculty to the students.

Before 2007, there were no faculty members that had moved to other Schools for the previous five years. There was also only one (1) faculty of the Medical School that moved to the Dental School, as an Associate Professor, in 2005.

Regarding the freshman class, the School organizes a welcome reception every year during the first two weeks of October, where the academic community of the Dental School and representatives of the University and professional groups welcome the students and hand out the Studies Manual. The School does not take any other action to support the freshman class.

8. RESEARCH PERFORMANCE

8.1 Research Promotion in Faculty

The research policy is defined not centrally by the institution but primarily by each Department/Clinic of the Faculty, which explains the details regarding the quantitative and qualitative of research work for promotion. The demanding occupation of the teaching staff with their laboratory and clinical teaching allows little time for research since dentistry is mostly an applied science.

The administration, acknowledging all these particularities, has concentrated its efforts the last few years on employing specialized staff coming from basic sciences and not just dentists, as well as equipping the laboratories of the 5th section in Basic Sciences. Therefore, it is believed that the School creates a more favorable environment for conducting research work of a higher quality from young scientists finishing their specialty degrees. Furthermore, the construction of a third building, whose permit has already been issued and which will house mainly those laboratories, will support this effort.

The research activity of the Faculty is measured with indices regarding mostly publications in international scientific journals in relation with an impact factor.

These publications can be found in the web-site (http://www.dent.uoa.gr/node.php?n=publications&lang=en), where the summaries of all Faculty Members' articles published in international scientific journals appear. Moreover, the electronic databases (Scopus, PubMed) have been added onto the personal sites of each and every faculty member in order to promote the published work of each member separately. This system covers only the international scientific articles and cannot retrieve data for other fields of scientific activity of faculty members. Simultaneously, on this same page, every faculty member can publish and update his scientific activity. This system works on an individual and optional basis, since there is not a procedure of central collection for this data. When the Faculty did attempt to achieve it, it encountered great difficulties and the correspondence of the members was poor.

The incentives provided to faculty members for conducting research are more related to the organization of the faculty's scientific infrastructures of the last eight years, such that a favorable and effective environment is offered for research and not for anything else. In addition, another important incentive is the fact that Faculty scientific activity is required for their promotion to higher academic ranks. Other forms of incentives are not offered.

Faculty is informed on research grant possibilities by relevant documents from the administration office. All information is passed to the departments, which are responsible for informing their members. Likewise, the University of Athens sends the relevant information to all faculty members by email.

Faculty's research results are disseminated at a local, national and social level by the appearance of the faculty members' publications in international journals, and on the web-site. This is done centrally and there is no need to send the publications to the site administrator. Therefore, thanks to the wide accessibility that is provided by the web site, it is promoted in the best possible way. In addition, the faculty members

can publish their scientific activity in their CV hosted on the faculty's web-site. Also, many of the research results are presented at Greek and international conferences and thus, are known to the dental world, both in the professional and scientific field. Occasional distinctions of the research works are widely recognized by their publication in the dental press.

8.2 Research Programs conducted by the Faculty

According to the official data from the Special Account for Research Grants of the University of Athens, over the last five years there have been 208 research proposals by faculty members, which have been funded by the internal program named "Kapodistria" in the University of Athens. These low budget projects are usually announced every two years and distributed in a great number of research protocols submitted by faculty members belonging to the University of Athens.

Since 2003, the higher budgeted research projects that were conducted and are continuing even now have been funded by private sectors, both Greek and European, are presented in Appendix 4. Funded Research Projects.

For a faculty member that has no activity in basic research or in the area of research protocols and grants, the number of the protocols on the table might seem large. Nevertheless, it should be taken into account that the Laboratory of Biomaterials, the oldest of the 5th section conducts nearly 70% of all those projects. This information proves once more the necessity of improvement in staff and infrastructures, so that this faculty becomes the basis for research development.

According to the publications of faculty members in the international scientific journals (Appendix 5. Publications of Faculty Members) from the Scopus database, during the 2003-2007 period it seems that nearly 40% of the faculty members have had no publications. Of course, this percentage does not correspond to that of the faculty members that have a research interest, because there are also publications in the Greek scientific journals. Nevertheless, we think that it approaches reality to a great extent. This percentage, though, along with the one presenting scientific research, which is not very intense, does not constitute a positive indication for research activity. The intense clinical work produced, where the faculty member actively participates, may constitute one of the causes of the phenomenon.

From the publications, it seems that there is a close collaboration between faculty members and members and post-graduates from other faculties and universities from both Greece and abroad. This phenomenon has indeed been more apparent during the last few years, due to the acceptance in the faculty of members that were in universities abroad with whom they still collaborate. Efforts should be made so as post-graduate students as well as future doctors of our faculty are well integrated into these groups.

8.3 Available Research Infrastructures

Number of Research Laboratories

- 7 Laboratories
    1. Biomaterials*
    2. Biology (Basic Biological and Medical Sciences) *

3. Electromyography (Fixed Prosthodontics) *
4. Cell Culture (Periodontics) *
5. Microbiology (Periodontics) *
6. Pathology & Anatomy (Stomatology)*
7. Preventive (Preventive Dentistry)*

*Department responsible for the operation.

All seven (7) research laboratories are located, in different locations, dispersed in the two buildings of Dentistry. Some of the laboratories have enough space (e.g. Preventive) whereas others have a totally inappropriate and insufficient space (e.g. Biomaterials, Biology). Actually, housed in an inappropriate place are also the laboratories that belong to the Basic Sciences Faculty, which is responsible for the main research activity. There is a plan to move all the laboratories to adjacent places, in the same building, in order to use common infrastructures and share the scientific equipment more easily.

The basic scientific equipment, such as scientific instruments, which the above-mentioned laboratories have, is shown in Appendix 6. Laboratory Equipment.

This equipment allows the implementation of important, both in quality and quantity, research work in all fields, except in the medical and biological sciences which until recently had a lack of personnel. Its equipage, which has recently started, has created the initial conditions for the organization of scientific equipment. This will constitute the future fundamental target, whose funding will be attempted firstly, through research projects and secondly, through self-funding from dentistry (small amounts).

The lavish use of research infrastructures takes place in the laboratory of Biomaterials, which is the first of the 5th section that was equipped and organized. That explains why it has the overwhelming number of research protocols from the Faculty.

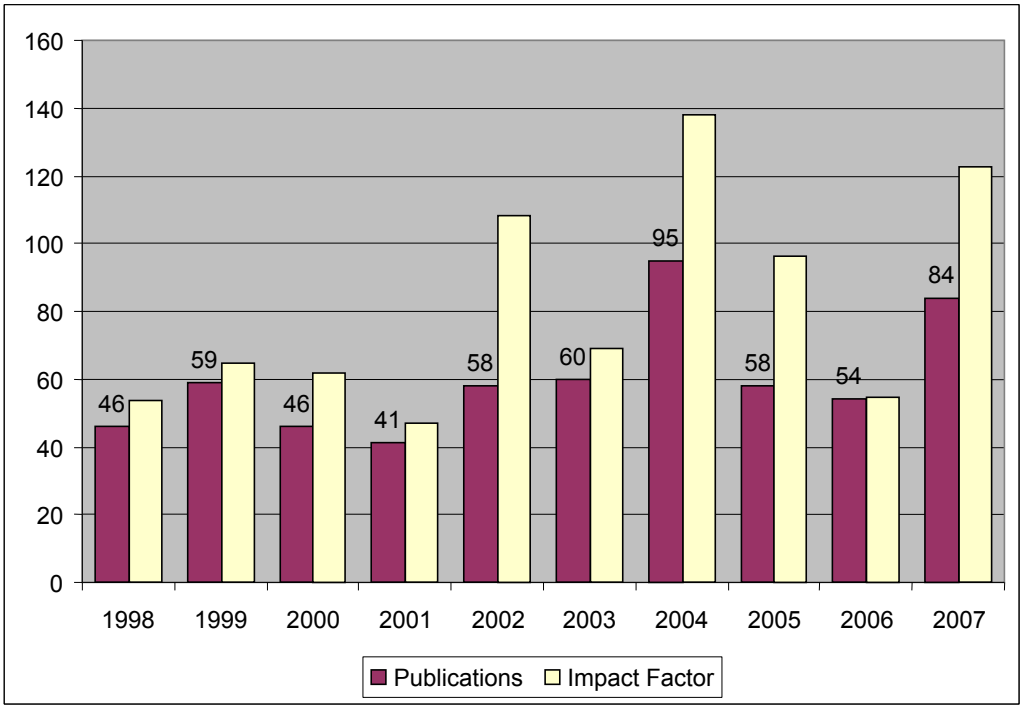
Most of the existing research equipment in the research laboratories is relatively new, regarding the large instruments (2-8 years old). Other less expensive machinery and instruments are relatively old (10-20 years old) but are still in use.

The supply, maintenance and renewal of the research infrastructures is provided by: the annual regular budget that the school is awarded, part of the faculty's earnings from the clinics, from state investments – which do not constitute a regular and stable source –research projects that the Ministry of National Education and Religious Affairs launches and a very small percentage by earnings from providing research services to third parties (e.g. Biomaterial Laboratory). Finally, there are also some research grants that were used to buy research equipment (e.g. Koulouridis grant).

8.4 Scientific Publications of Faculty Members

The number of the Faculty Members' publications and the cumulative impact factor are shown in Graph 7. This includes only the works appearing in Scopus, after being retrieved according to their Author ID entered in the faculty members' database. Some works might not appear due to lack of retrieval on the database, since all

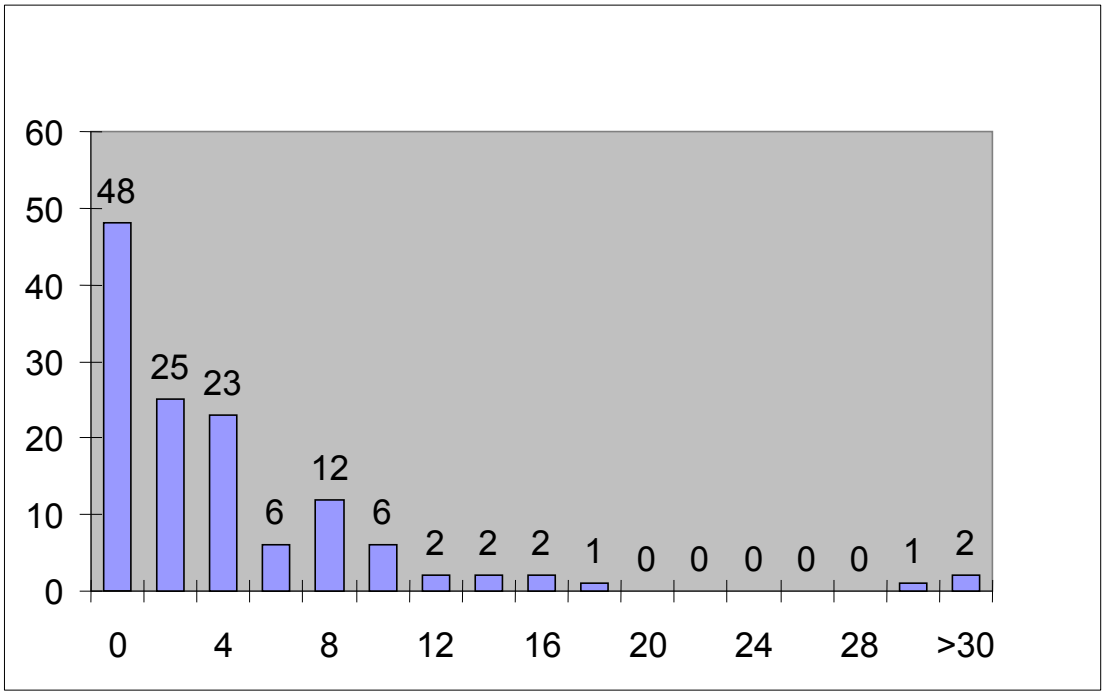
faculty members did not provide data. The impact factors of the journals are taken from the Journal Citation Report 2006 of the ISI.



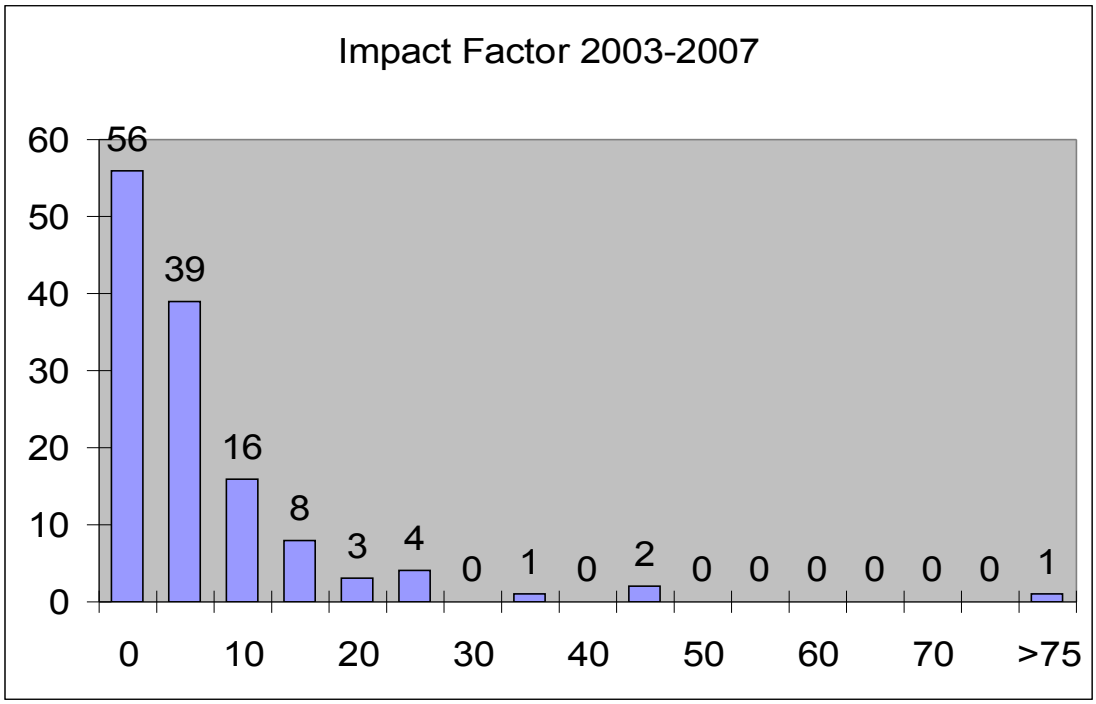
Graph 7. *Number of publications and total impact factor for the decade 1998-2007.*

A relatively stable performance is shown throughout the decade with some augmentative tendency in particular during 2004 and 2007, when there is an important rise in the number of works and the total impact factor. The total impact factor is greater than the number of works, at a ratio of 1,3:1, thus showing that most articles are published in journals with IF greater than 1.

Focusing on the data of the last five years (2003-2007) we observe a relatively great fluctuation from one year to another. This fluctuation can be explained by the fact that the publications' production by the faculty members presents an unequal distribution. Most of the publications are made by a small number of faculty members and therefore, the random rise or fall in a faculty member's production, which belongs in this category, has a strong impact on the total number. The distribution of both the publications and the impact factor is shown in Graphs 8 and 9.



Graph 8. *Number of Faculty Members in relation to the number of their publications during the period 2003-2007.*



Graph 9. *Number of Faculty Members in relation to the impact factor of their publications during the period 2003-2007.*

The statistical data are collected according to the career of each faculty member and the publications presented are made a year before the member's entrance to the Faculty.

From the graphs it seems that 37% (48 out of 130) of faculty members have not published any work which was included in the Scopus Database during these five years, whereas 74% has less than a work per year and 12% of faculty members have 2 or more publications per year (10 within the decade).

The research work of the faculty lacks mainly the IF and not the work number, but only for some years. Therefore, an effort to enhance the research quality should be made. Certainly, the publication in Greek journals, which do not have an IF, is an important fact that reduces the numerical data, but these journals have not appeared in Scopus during the last few years.

Other data, apart from the refereed publications in international journals, that also characterize the scientific activity of the faculty members, such as books, non-refereed publications in scientific journals, refereed minutes of scientific conferences, announcements in scientific conferences, etc, are not entirely available to the faculty members and this explains their lack of any established opinion.

8.5 Recognition rate of the research conducted on the Faculty

From 2003 until 2007, in the electronic Scopus database we found 1478 reports, including the auto-reports (it is difficult to separate these) on members' refereed articles published in international scientific journals.

In general, it seems that the published research work is internationally recognized but it is not possible to measure this number, as there are no particular standards and numbers for this index.

Other members' activities that might not establish certain recognition for their work (e.g. participation of academic members in scientific conference committees and in editing committees of scientific journals) are not collected in a way that can modify the general picture of the faculty in this field.

9. RELATIONS WITH SOCIAL, CULTURAL AND PRODUCTIVE GROUPS

By its nature, education in Dentistry does not offer many possibilities of collaboration with productive groups. Nevertheless, in the broader meaning of collaboration with other bodies which are not educative, Dentistry has in recent years cooperated with the following:

a. Hellenic Dental Association within the framework of organizing all of the Pan-Hellenic Dental Conferences,

b. Attica Dental Association within the framework of organizing scientific events, aiming at the education of dentists,

c. Various scientific companies within the framework of organizing scientific events in the form of conferences, scientific days or even courses of ongoing education.

In the above-mentioned collaborations, the majority of faculty members, as well as, a great number of post-graduates students have been involved.

There is also some collaboration with private dentists, who send biopsies for examination and evaluation to the Histopathological Laboratory of the Stomatology Clinic, as well as, collaborations of the Medical Jurisprudence with the Forensic Dentistry Unit.

Without establishing particular development mechanisms for collaborations with productive groups, efforts are made, by departments, to develop such collaborations.

Apart from the faculty members of Biomaterials Laboratory, who seek to establish such collaborations, unfortunately, there is not equivalent interest shown from the other faculty members, mostly due to the huge burden of their educational work.

The productive groups, mainly within the framework of commercial companies whose interest is the dental materials, seek to establish collaborations with the Biomaterial Laboratory, due to its international recognition.

The results of the collaborations with the productive groups are usually presented in the form of announcements at conferences or publications in Greek or international scientific journals.

This faculty does not organize events so as to inform the productive groups about its activities in general, but announces those activities with the participation of its members at various scientific conferences.

The contribution of the faculty to the local, regional and national development is fundamental.

Within the general social perspective, this contribution is focused not only on providing dental care to a great number of patients, at a low cost, but also, on providing specialized high quality dental care to special patient groups.

Moreover, the faculty members participate in professional unions, such as the Hellenic Dental Association, the Attica Dental Association, as well as, at times in

committees and bodies of either the Ministry of Education or the Ministry of Health and Welfare.

In addition, at times, faculty members collaborate with representatives from other bodies, in order to form suggestions and proposals concerning Dentistry in general.

Participation of faculty members in administrative boards of both European and International Scientific companies as well as European and international conferences, organized by the faculty or its departments, should also be mentioned.

10. STRATEGY FOR ACADEMIC DEVELOPMENT

For many years, administration and faculty members, in cooperation with the Directors of the Departments/Clinics had been registering the needs for the improvement of technical and equipment infrastructure for the educative and scientific activities. This practice, up till today, has been satisfactory despite the workload of a small group of mainly faculty members and support staff.

Each administration takes particular care to keep continuity on the faculty targets, for the technical and equipment infrastructure, as well as, for the matters related to both faculty members and support staff.

The main target of the administration is the maintenance of the already existing infrastructures and the coverage of operational expenses regarding the laboratorial and clinical education of the students, which is very high.

Its next target is the improvement of the educative and scientific infrastructures according to the provided funds.

The operation of the Faculty's Logistics and Funds and the secretarial staff depends primarily on clinical earnings. This has created the need for the proper management and continuous monitoring of all the financial resources of the Faculty.

The Faculty of Dentistry in the University of Athens, with the organization and computerization of its services through which all clinical fees are collected (Fund, Departments) and the supplies (Logistics) are provided, has the potential of monitoring the provided funds along with their assimilation. Therefore, the financial planning for supplies, not only of the necessary expendable supplies but also for devices or instruments, regarding the improvement of infrastructure, is happening to a great extent.

11.ADMINISTRATIVE SERVICES AND FOUNDATIONS

11.1 Effectiveness of Administrative and Technical services

This chapter describes the manpower, organization and effectiveness of the Secretariat of the Dental School, the collaboration of the administrative services of the Dental School with the central Organization of the University, the way that the departments/clinics of the Dental School are organized and staffed, as well as their overall effectiveness to complete various tasks. The personnel and organization of the Technical and Communications Services of the Dental School is also briefly discussed.

In general, it must be emphasized that the personnel of the Secretariat of the Dental School is satisfactory, as far as the number of administrative and other employees is concerned. The same cannot be said, however, about the quality and the abilities of all of them.

This personnel, especially concerning the number of employees, has significantly been assisted over the last 10 years by the ability of the Dental School (patient fees) to employ personnel on labor contracts of a limited period. Sometimes, these contracts may be changed by the government, which takes the responsibility of paying the employees.

As far as the service for the students is concerned, the services offered are considered to be satisfactory, especially during the last few years, due to a better computer system and the development of a computer system by the N.K.U.A. and the ability, for example, of the students to perform the registration of the courses via internet.

The issue that must be pointed out as negative is the fact that the software that deals with the students (though relatively recent) does not cope with the contemporary needs of the Dental School. Especially since the modernization of the under-graduate study program, not all items that concern a great part of the training of the students can be offered as pure text, such as laboratorial and clinical practice. In addition, this software does not have the ability to include items that concern the European Credit Transfer System.

As far as the organization and the working hours of the Library of the Dental School is concerned, once again due to the income that is provided by patient fees, it has been possible to employ one additional personnel member and library hours have been extended from 8:00-19:00.

The electronic information of the students, with announcements that concern their educational program, is carried on the web-site of the Dental School.

Every department/clinic of the Dental School has its Chairperson Director, who is elected according to the procedures of the law, the academic staff of various levels (with specialization similar to the department) and its secretariat, staffed with secretary(ies), according to the number of the Educational Staff of the laboratory and the range of activities. The two laboratories of the 5th Section are the only ones without a secretary, due to the limited number of Educational Staff (4 people) and their lack of activities in the undergraduate education. Additional supporting staff,

employed by some laboratories, is the nursing staff, which copes with the activities of the clinical practice of the students in departments and clinics.

Each department covers cognitive matter(s) that reflect a certain scientific era and covers –both the undergraduate and the graduate studies -and research on those matters either independently or in collaboration with other departments. In the undergraduate studies, it bears the responsibility of teaching the courses of the Program, while in the graduate studies, it has the responsibility of operating one of the 14 specialization programs.

The Technological and Communications Services of the Dental School, which was created in 2003 through the EPEAK II Reformation of the Undergraduate Studies Program –from which it was initially financed- is staffed by 2 (two) personnel staff (computer technical advisors), who are partially assisted by 1 (one) person, an electrician. This service bears the responsibility of the function of the technical equipment of the teaching classrooms, laboratories and clinics, all of the computers of the Dental School, the Computers Laboratory, the update of the website, as well as the responsibility of communicating with the Network Center of the N.K.U.A.

This service was the one that has actually helped the Dental School during the last five years, to obtain that level of access to the Computers and Communications System. This service is considered satisfactory but can be improved – mostly as far as the usage range by the students and its immediate incorporation in their educational process is concerned. It is important for the Dental School to maintain the structure and organization of this service.

11.2 Student Services

For the time being, the institution of the Consultant-Professor has not yet been applied, something that we hope to do in the immediate future. However, due to the nature of the studies in the Dental School, the students are in constant communication with many staff members, which in addition to mere educational collaboration, act consultatively as well.

As far as the working students' support and offer of scholarships, the general principals that apply for the N.K.U.A. are also applied in our institution.

Support of the weakest students and those who do not finish their studies in time, is carried out mostly through extension of their clinical training. They are given priority to enter clinics in order to obtain the necessary competencies needed for their clinical practice. The goal of the Dental School for the immediate future is the earliest admission of the student into clinics, so that they can come in closer contact with clinical training, and realize how important it is to increase their knowledge during the clinical year. With the goals mentioned above, we believe that the incorporation of the students in the clinical environment will be smoother.

Scholarships from funds of the Dental School are not foreseen for any category of students. However, the awards –financed by commercial sponsors- are an exception and are given to the 1st student, according to his/her performance in National Examinations, as well as the graduate with the best diploma grade annually.

The institutionalization of some additional scholarships (that the Dental School is capable of offering) could enhance the competition among students and increase their effort.

As far as the participation of the students in the life of the Dental School is concerned, we must point out that, due to the nature of dental studies, students are present daily for many hours at the facilities of the Dental School and as a result they are bound to participate in its activities. In addition, events such as the Scientific Convention, the Welcoming Event of the freshmen, the awards given to the students with the highest score on entering and the highest graduate grade, as well as awards for the best research papers that are presented at the Students' Convention, create the circumstances of fair competition among them.

In addition, events of an ''anniversary character'', such as conventions concerning the AIDS disease, smoking and blood-donation, create an atmosphere that brings Faculty Members and students closer, while sensitizing them socially and at the same time, preparing them better, not only for their scientific, but also for their social role as well.

Finally, due to the continuing educational seminars that are organized at the Dental School by the various departments and clinics and which are attended by dentists from all over Greece, there is usually the chance for the students to participate at a lower cost or gratis.

11.3 General Infrastructures used by the Dental School

As mentioned in many parts of the self-assessment document, the level of the technical equipment of the various facilities, is thought to be generally satisfactory but in need of constant improvement and enhancement in order to maintain its quality.

The Dental School has a great lack of rooms to be used as offices for the faculty members. Both buildings have a total of 75 offices and there are 118 faculty members. A relative lack of rooms, but not to the same extent as that of the faculty, exists for the supporting staff, too. This results in situation where 2-4 persons share one room, which in turn creates difficulties in their work. With the construction of the third building, there will be some new office rooms, which again will not be able to meet the needs of every academic staff member but it will make the situation better.

The Secretariat is situated in the new building, taking space from both the first and the ground floor, since there is no possibility of being placed in a common room, serving the administrative needs of the Dental School, the faculty and the students. Those separate rooms (first and ground floor), where the secretariat is situated, create functional problems, but under the circumstances, there is no possibility of placing them in the same area.

Except from the 1 (one) meeting room of the Dental School (5^{th} floor, old building), with a capacity of 50 persons, which has recently been renovated, and a smaller meeting room for the Administrative Board, with a capacity of 12-15 persons, there are no other available rooms.

This situation shows a great lack of meeting rooms, a problem that will be partially solved with the construction of the third building, in which there will be session halls of small and medium capacity.

In the new building of the Dental School, there is a place for the students and a cafeteria. Even though, from time to time, certain issues arise, its existence is necessary in the Dental School, which due to its nature demands the presence of the students inside the building for many hours.

The Dental School, apart from the entrance ramp for disabled people on the ground floor, lifts serving the floors and 1 (one) special toilet, has no further facilities for Persons with Special Needs.

The creation of special disembarkation spots in the parking lot and the increase in the number of the access passages inside buildings could be easily accomplished.

As far as the access to infrastructures and equipment of the N.K.U.A. is concerned, when there is need for any kind of space for educative usage, it is requested through immediate communication with the institution that has the responsibility for the equipment. If it concerns scientific usage (for example a scientific laboratory or scientific instruments), then communication is immediate and personal with a member of the Educational Staff who is interested in whoever bears the responsibility for that specific place or instrument. From what has been mentioned, it can be concluded that there is neither a central administration controlling educational or scientific places nor any rules for managing them.

Central infrastructures of the University (for instance, Event Halls, teleconference halls) can be requested and easily granted through formal procedures by the services of the N.K.U.A.

11.4 Exploitation Level of New Technologies by the various Services of the Dental School

The secretariat, which handles students' issues as well as administrative issues of the Educational Staff, and the secretariat of the graduate studies are equipped with computers and the corresponding software (electronic courses declarations, computerization of the courses' grades).

All services of the secretariat, as well as the cashier's office are also computerized.

All secretariats of the Laboratories/Clinics, Educational Staff's offices and those of graduate students are equipped with computers with Internet access. In the various places where the offices of personnel of the Dental School are located (secretariats of the laboratories, clinics, departments, offices of the Educational Staff members, graduate students, technical services, cashier's office, commissariat etc.) there are 159 computers, 59 laser printers and 23 inject printers.

In addition to the electronic patient's file managing software onto which all the secretariats of the clinics are logged, the information on new patients, and the date that the patients are treated in the Dental School, are computerized.

The website of the Dental School gives the opportunity to each member of the Educational Staff to upload courses (as well as at the educational platform of the N.K.U.A e-class), his/her curriculum vitae and papers published. The referral

websites have a standardized format for everyone. Since this policy is being applied, not only is each Staff member free to have his/her own webpage, but also he can also upload it on the website of the Dental School, and even connect it to him/her.

In this way, it is believed that everyone is given a fair opportunity to publish, in an environment that follows specific rules.

The website of the Dental School is updated as often as necessary (for instance, the announcements of the secretariats), even daily, since there is constant technical support of the website.

11.5 Degree of Objectivity and Effectiveness in the Usage of Infrastructure and Equipment

The infrastructure and the equipment are separated into research, educational (classrooms, laboratories, clinics) and commonly used.

As far as the first ones are concerned, each place is managed by one of the Departments/Clinics of the Dental School. The access to each is free and is granted by the person in charge of it. This way does not seem to create any kind of problems and in fact it gives the advantage of better control.

All rooms belong to the Dental School and are offered according to the needs of the courses of the Undergraduate Studies Program; hence indirectly being managed by the Curriculum Committee. Their usage is shown in the annual studies guide. Every room, which is unoccupied according to the program, can be of service to any member of the Educational Staff that requests it, after communication with the secretariat of the Curriculum Committee. Until today, no problems with this way of managing that particular issue have been observed. This does not apply though to the rooms where clinics are located, which are under the exclusive usage and management of some of the Departments/Clinics. It is estimated that some of those clinics, will, as well, be added to the central managing system for better and more efficient usage.

As far as the commonly used rooms are concerned, the offices belong to the Departments/Clinics and are handled by them, but the Chairpersons manage all the rest of the rooms.

11.6 Degree of Objectivity and Effectiveness in Financial Handling

The income of the Dental School have three standard sources (Table 14): a) the annual regular government fund, which as shown in, has been stable during the last five years, b) the treatment fees paid by the patients according to the dental work they receive, which has shown, in the table display a minor annual fluctuation and c) the tuition fees of the graduate students, which are almost stable, since the number of students accepted per year at the Graduate Studies Program is approximately the same.

In accordance with what has already been mentioned, it is obvious that the annual income of the Dental School is pre-determined. At the same time, the annual expenses for the current educational needs, which cannot be altered, are also known. Obvious expenses are: dental materials, payment of personnel under specific

contracts, spare parts for the dental units and handpieces, computer expenses (computers, peripherals, software), scientific instruments, stationery (printing paper, small furniture, instruments' and the maintenance apparatus etc.).

As a result, formulating an annual budget is, in fact, meaningless. What happens, though, is the formation of a statement of the accounts per financial year, without having the concept of an execution control. This whole process is carried out by the personnel of the department whose Chairperson has the responsibility for it.

In addition, at the Dental School a system of a central management of the income is applied. At the same time though, the Departments/Clinics maintain their financial independency as they receive part of the treatment costs paid to their account. In this way, the Dental School can cover its whole common educational and functional expenses and the Departments/Clinics cover expenses that exclusively concern their interest for education or research. These accounts are under the responsibility of the Director of the Departments/Clinics at that time.

As far as the construction of new infrastructures and equipment is concerned, the needs of the Dental School are thoroughly reported, and an attempt is being made for them to be financed by government services or any type of financing programs. For such minor expenses, according to the annual income of the previous year, there is the possibility for them to be covered by the treatment fees paid and the tuition fees of the graduate students of the Dental School.

The Special Account does the management control of all financial expenses of the Dental School for Research Fund (E.L.K.E.) of the N.K.U.A.

Table 14. *Income state of the Dental School.*

Year	Government fund (education)	Government fund (research)	Treatment fees (paid by patients)	Tuition fees (graduate student)	Total amount
2003	411.072,00	28.012,00	546.529,50	Incalculable	985.613,50
2004	411.072,00	28.012,00	702.289,90	Incalculable	1.141.373,90
2005	411.072,00	28.012,00	795.564,59	105.012,00	1.339.660,59
2006	411.072,00	28.012,00	774.779,40	112.890,00	1.326.753,40
2007	411.072,00	28.012,00	636.096,40	83.270,00	1.158.450,40

12. CLINICAL SERVICES - CONTRIBUTION TO THE ORAL HEALTH OF PATIENTS

12.1 Introduction

Clinical training-practice of undergraduate and postgraduate students is an important part of their study. It covers about 40% of the time in the undergraduate program and 12-18 hours weekly in the postgraduate program. Clinical training lends a special character to the educational and administrative system of the Dental School of Athens.

During clinical training, dental students offer dental treatment to patients under the supervision- and correlation if needed- of the academic staff, consisting only of dentists.

Clinical training is accomplished in rooms and conditions similar to dental offices –clinics- that can accommodate from four (4) to seventy eight (78) dental units. The clinics have adequate technical and scientific equipment and are supported by administrative and nursing staff.

In the Dental School of N.K.U.A. about 20.000 patients have been examined from 2003 to 2007. Approximately, 70% of these patients have been treated for some or all of their dental problems.

The Dental School of the University of Athens is a public organization that offers significant clinical services along with the dental education of students.

For these clinical services a system of central and peripheral structures has been organized and functions according to international standards. The presentation of this system is done in order to recognize the present conditions, the negative points and the difficulties that arise. Further proposals for improvement are added after presentation and discussion.

12.2 Present condition

- **Clinics and Special Departments**

All Greek citizens, permanent inhabitants or visitors can be examined and treated in the Dental School of Athens, independent of the kind of their social or private insurance.

Undergraduate Clinics are open from September 20 to June 15 and Postgraduate Clinics to the end of July. Minor changes can be made to the time program of the Clinics but do not affect the majority of patients. There are thirteen (13) Clinics in the Dental School, each one specializing in different types of treatment. Dental treatment is also provided in three (3) Special Departments.

1) Oral Diagnosis and Radiology Clinic

In this clinic the initial examination (intraoral and extraoral) is accomplished for adult patients by undergraduate students. During the first appointment the medical and dental record of the patients is registered, a panoramic x-ray is done (followed by further radiological examinations if needed). At the end of the first session, an initial

treatment plan is made and patients are informed about their dental problems and treatment needed.

In spite of this examination, patients are not obliged to follow treatment in the Dental School. The selection of patients that will be treated in the clinics is made taking into consideration the educational needs of the students. Special patient groups are also accepted in the Clinics as long as specific criteria are met.

In the Clinic for Oral Diagnosis and Radiology, the first registration of the patient's problems is recorded in the electronic file that is created through a special program developed for this purpose. The program has been operating for two years and all clinics have access to this file.

The role of this Clinic is to forward the patient's files to other clinics, depending on the dental needs.

The Diagnostic Clinic is equipped with five (5) dental units and a radiological center equipped by all types of dental radiographies. During the last three years, a systematic effort has been made concerning new dental equipment. All radiographic systems have been changed to digital forms. The opening hours are 08.00-12.00 and 13.00-16.00, Monday to Friday. In this Clinic, secretarial support is provided by four (4) persons. The clinical work of this Clinic for the years 2003-2007, is presented in Table 15.

Table 15. *Clinical work of Diagnostic Clinic for the years 2003-2007.*

Academic Year	Number of patients
2003	3779
2004	5318
2005	4626
2006	4031
2007	3522

2) Total Patient Care Clinic

In this Clinic the patients' problems are treated by a 4th of 5th year dental student within a comprehensive treatment plan. In the Total Patient Care Clinic the majority of dental procedure is carried out. This includes crowns, fixed partial dentures, partial dentures, complete dentures, endodontic therapy, fillings, extended restorations and also periodontal treatment. The most experienced students, who are practicing general dentistry, deal with the severest cases. Specific procedures beyond the undergraduate student's skills are referred to the graduate clinics or are performed by the staff as clinical demonstrations.

The Total Patient Care Clinic started in the academic year 1999-2000 and replaced the education based on individual discipline dental procedures (e.g. Fixed Prosthodontics, Periodontics etc.) that were performed until that time. The Total Patient Care Clinic started initially in the 5th year of undergraduate education and from 2006-2007 was extended to the 4th year.

The Total Patient Care Clinic has two floors equipped with 78 units, a separate sterilization room and full sets of instruments and devices, which are provided to the students in two rooms by eight (8) persons of the nursing stuff.

The working hours of the clinic are 08.00-12.30 and 13.00-17.00, Monday to Friday. Secretarial support is provided by four (4) persons, who have the responsibility of registration and keeping the patient's files (in written and in digital form). The majority of the patients visited the Dental School are treated in this Clinic and the clinical procedures performed are shown in Table 16.

Table 16 . *Number of patients treated and clinical procedures carried out in the Total Patient Care Clinic (2003-2007).*

Academic Year	Number of patients totally treated	Number of patients partially treated	Number of Clinical Procedures				
			Operative Dentistry	Endodontics	Periodontics	Fixed Prosthodontics	Removable Prosthodontics
2003-2004	773	261	3067	778	439	2506	521
2004-2005	750	249	3212	1179	495	2536	556
2005-2006	648	253	2552	1007	539	2313	482
2006-2007	1025	649	5390	1105	880	3605	741
TOTAL#	3196	1412	14121	4069	2796	10960	2300

The number of students performing these acts was 655.

3) Oral and Maxillofacial Surgery Clinic (Ground Floor, Old Building)

In this Clinic, dental students are trained in tooth extractions in patients that are being treated in the Total Patient Care Clinic or in patients that do not wish for any other treatment. This Clinic is equipped with six (6) dental units, a separate sterilization room and instruments which are given to the students by two (2) persons of nursing staff. Opening hours are 09.00-12.00 and 13.00-16.00, Monday to Friday. The work of this Clinic is presented in Table 17.

Table 17. *Number of patients treated and surgeries performed under the supervision of the Oral and Maxillofacial Surgery Clinic (2004-2007).*

Academic Year	**Teeth Extractions**	**Minor Surgeries**		**Minor Surgeries (special patients)**		**Number of Surgeries (A.Kyriakou Children's Hospital)**	**Number of Surgeries (Outpatients treatment Evaggelismos Hospital)**		**Number of Surgeries (Evaggelismos Hospital)**
2004-2005	7200	1329*	1007**	17*	Unavailable **	113	2847*	847**	157
2005-2006	4351	1087	822	11	28	145	3670	897	131

2006-2007	3071	582	652	10	88	152	5220	1290	132
TOTAL	**14622**	**2998**	**2481**	**38**	**116**	**410**	**11377**	**3034**	**420**

4) Oral and Maxillofacial Surgery Clinic (1st Floor, Old Building)

In this Clinic minor surgical procedures are performed by the teaching staff (including remaining root extractions, cyst removal etc.) and are observed by the undergraduate students. The patients that are treated are referred by the Total Patient Care Clinic or by private practitioners.

This Clinic is equipped with five (5) operating rooms, a separate sterilization room and is supported by two (2) nursing persons and a secretary. The working hours of this Clinic are 08.00-12.00, Monday to Friday. The work of this Clinic is presented in Table 17.

Two additional Clinics for Oral and Maxillofacial Surgery are organized within the General Hospital ‘‘Evangelismos’’ (20 beds) and the Children’s Hospital ‘‘A.P.Kyriakou’’ (10 beds). These Clinics are part of the Dept. for Oral and Maxillofacial Surgery of the Dental School. The work of this Clinic is presented in Table 17.

5) Oral Pathology Clinic

In this Clinic patients are examined for problems associated with oral pathology and once the diagnosis has been made, they receive the appropriate treatment. If needed, a biopsy is taken and a histologic examination is performed at the laboratory of the Clinic. The treatment procedures are performed by the teaching staff and observed by undergraduate students. The patients are referred from the Oral Diagnosis Clinic by general practitioners and by hospitals. The postgraduate students and the staff also offer clinical work at the general hospital ‘‘Evangelismos’’.

This Clinic is equipped with four (4) dental units and works Monday to Friday 08.00-12.00. The work if this Clinic is shown in Table 18.

Table 18 . *Number of patients examined, diagnosed and treated by the Oral Pathology Clinic and at the Evangelismos Hospital and the number of biopsies performed (2003-2007).*

Academic Year	Number of patients	Number of biopsies	Number of patients (Evangelismos Hospital)
2003	975	852	197
2004	1191	974	229
2005	1030	1011	281

2006	1122	898	328
2007	995	880	380
TOTAL	**5313**	**4615**	**1415**

6) Paediatric Dentistry Clinic

In this Clinic the whole spectrum of dental treatment is offered to children and adults. 4th and 5th year students, work in couples as doctor-assistant. In this Clinic, the initial examination, diagnosis and treatment is carried out on children and some are referred to the postgraduate Clinic.

This Clinic is equipped with ten (10) dental units and additional equipment, a separate sterilization room and two (2) persons of nursing staff. The working hours are 09.00-12.00 and 13.00-16.00, Monday to Friday. The work of this Clinic is presented in Table 19.

Table 19 . *Number of patients examined and treated and clinical procedures carried out in the undergraduate Paediatric Dentistry Clinic (2003-2007).*

Academic Year	**Number of patients examined**	**Number of patients treated**	**Number of dental operations**
2003-2004	103	572	3935
2004-2005	146	580	3945
2005-2006	198	580	3945
2006-2007	163	580	3685
ΣΥΝΟΛΑ	**610**	**2312**	**15510**

7) Orthodontics Clinic

In this Clinic, clinical examinations, diagnosis and cephalometrical analysis in patients with orthodontic problems dental are performed by 4th and 5th –year students. Some of these patients are treated, mainly those who require preventive orthodontics. Some of the rest of the patients are referred to the graduate Clinic of Orthodontics.

The Orthodontics Clinic is equipped with seven (7) dental units, separate sterilization room, secretary with two (2) persons and a laboratory for the fabrication of casts.

Working hours are 09.00-12.00 and 13.00-16.00, Monday to Friday. The work of this Clinic is presented at Table 20.

Table 20. *Number of patients treated in the undergraduate Orthodontics Clinic.*

8) Orofacial Pain Clinic

In this newly founded Clinic (2006) patients with orofacial pain problems are treated. The subject of the Clinic is focused on the diagnosis and treatment of acute or chronic pain of the stomatognathic system and the myosceletal region of the face and adjustment of anatomical areas. The Clinic is in cooperation with the specific pain medical centers and provides care for Oral Diagnosis or other pain medical centers.

It is equipped with five (5) dental units and the working hours are 13.00-17.00, Monday to Friday. The work of this Clinic is as indicated by the number of treated patients: 205 patients have been examined and 115 were treated.

9) Hospital Dentistry Clinic which includes the Clinic for Cancer Patients

This special Clinic was recently founded. The Clinic for Cancer patients, which had been established 3 years ago, incorporated into the new clinic.

This Clinic provides dental treatment and preventive care in patients that are hospitalized or are under clinical care in hospitals (radiotherapy, preparation for transplantation, maxillofacial surgery, disability, AIDS etc.). Clinical treatment is offered in the Clinic of Oral Pathology. Staff members treat hospitalized patients in the hospitals after invitation (on demand). Concerning cancer patients, 192 patients were examined and 496 treatment operations were performed. The majority of the patients suffered from mouth cancer, pharynx cancer, blood diseases and malignant tumors with metastases. A smaller number of patients suffered from other diseases or HIV.

10) Operative Dentistry, Endodontics and Periodontics Graduate Clinic

These three independent Clinics are working in cooperation in the same facilities. In these Clinics, patients with severe problems are treated, concerning Operative Dentistry, Endodontics and Periodontics.Graduate students provide the treatment.

The Clinic has fourteen (14) dental units, additional equipment sterilization room and is supported by two (2) nursing staff. The working hours of the Clinic are 08.00-16.00, Monday to Friday.

Academic Year	**2003**	**2004**	**2005**	**2006**	**2007**
Number of patients	34	61	48	39	40

In the Operative Dentistry Clinic 3423 dental restorations were performed from 2003 to 2007.

At the same time period, in the Endodontics Clinic, 1808 endodontic therapies and 59 surgical procedures were completed .

In the Periodontics Clinic, 1400 patients with severe periodontal disease were treated and 1500 surgical procedures were accomplished.

11) Prosthodontic Graduate Clinic

In this Clinic, patients with severe prosthetic problems are treated by graduate students with fixed or removable restorations supported by teeth and/or implants.

Within this Clinic, the special Clinic for Maxillofacial Prosthetics was founded for patients with extended bone loss (due to trauma or surgical procedures).

In the Prosthodontic Graduate Clinic, 4000-5000 dental operations are performed per year and they are classified as 80% Fixed and 20% Removable Prosthodontics. From the patients, approximately 60% are treated with dental implants.

This Clinic is equipped with fifteen (15) dental units and devices, separate sterilization room and is served by two (2) nursing staff. Working hours are 08.00-16.00, Monday to Friday.

12) Paediadric Dentistry Graduate Clinic

In this Clinic, graduate students are treating children of pre-school age up to puberty, which have extensive dental destruction, periodontal problems and tooth loss. Preventive or/and interceptive orthodontic therapy is offered to some children, in collaboration with the staff of the Orthodontic Graduate Clinic. In addition, children with communication problems, a negative attitude towards dental treatment and communication difficulties are treated in the Clinic.

This Clinic also deals with children with special needs (chronic medical problems, physical and mental disabilities, craniofacial malformations such as cleft palates etc.) who have been referred by hospitals and individual dentists. The practitioners who deal with these children require specific qualifications and knowledge and should be taught how to behave towards them. Cases of children with dental traumas are the most common to be referred to and treated by this Clinic. Also, preventive and interceptive orthodontic therapy takes place in collaboration with and under the supervision of staff members of Orthodontics.

Children with special needs are treated at the dental office located in the ‘‘Sikiaridio’’ Institution, once a week. In addition, graduate students under the supervision of Staff members of the Clinic, offer full dental treatment to children under general anaesthesia and procedures take place at the Children’s Hospital ‘‘Agia Sofia’’, in the daily care unit.

In the Clinic for Paediatric Dentistry, during 2003-2007, 1549 patients were treated and 7128 dental operations were performed.

The equipment of the clinic consists of four (4) dental units, essential excess dental equipment, separate sterilization room and a secretariat of three (3) persons, which jointly serves both the Paediatric Dentistry and the Orthodontics Clinics. Working hours are 08.00-16.00, Monday to Friday.

13) Orthodontic Graduate Clinic

In this Clinic, graduate students treat children, adolescents and adults that present orthodontic problems as well as children suffering from clefts and various syndromes.

The Clinic of Orthodontics is in collaboration with the clinics of Oral and Maxillofacial Surgery, Periodontics, Prosthodontics and Operative Dentistry for the treatment of complicated and combination cases.

In the Orthodontic Clinic, 300 patients per year are treated. The equipment of the clinic consists of six (6) dental units and a sterilization room and secretariat shared with the Paediatric Dentistry Clinic. Working hours are 08.00-14.00, Monday to Friday.

Osseointegrated Dental Implants Unit

In this Unit, osseointegrated implants are placed in patients treated mainly in the Graduate Clinics and in accordance with the prosthetic plan existing. The graduate students of Periodontics and Oral and Maxillofacial Surgery and the faculty of these Clinics are carrying out the placement of the implants. The Clinic of Oral Diagnosis and Radiology also participates through the use of the dental CT-scanner, which is under the operation of the School of Dentistry.

In this Unit, from 2004 until June 2008, 420 patients have been treated and 830 osseointegrated implants have been placed.

The clinic is equipped with three (3) dental surgical units and there is a sterilization room.

Forensic Dentistry Unit

Even though this Unit, which began operating in 2007, has not offered immediate clinical work, it cooperates with the Greek Forensic Services for identification of unidentified corpses, the evaluation of children's age after the decision of the district attorney, as well as to record the situation of the stomatognathic system in abused persons.

Secretariat for Graduate patient records

This individual secretariat was founded in October of 2006, in an attempt to create a uniform management system for all of the patients' records. This secretariat serves the postgraduate Clinic of Endodontics, Operative Dentistry, Periodontics, Prosthodontics and the Implant Unit. The Paediatric Dentistry and Orthodontic Clinics are served by a separate secretariat.

- **Infection Control Units**

Providing dental care to such a large number of patients must be performed with absolute safety for them, as well as for the attendants and nursing staff. Safety consists of infection control during various procedures and the prevention of the dissemination of infection. This is the reason why, in the Dental School, a Disease Committee constantly functions. It consists of members of the academic staff, who acquire a certain avocation in the specific field. The responsibilities of the committee are: a) suggestions for applying certain sterilization/disinfection protocols and tool-apparatus fluctuation, in accordance with the instructions and guidance of international organizations, b) control of proper use of these protocols, c) suggestions for supplying the proper sterilization/disinfection devices and materials, d) briefing and education of the nursing staff concerning: *Asepsis and Antisepsis, Hand washing, Hand protection/gloves, Facial and Eye protection, Proper dental attire, Surface covering, Dental instruments' clearance and disinfection, Single-use tools, Sterilization of dental rotation instruments and hand pieces, Use and care of acuminous tools and needles, Packaging and disposal of contagious waste, Management of tissue materials from biopsies, Precautions prior to and after working, Management of accidents and exposure to infectious material,* e) briefing of the students on the publication of related leaflets and instructions which are uploaded on the Dental School's web-site, f) vaccination of the educative and nursing staff as well as the students against hepatitis B.

Proving the effort made for up-to-date information for clinics on those issues, here are some of the most recent actions that have been performed: a) providing washing devices and ultrasonic cleaning devices of the latest technology, for effective removal of various oddments on tools, instead of hand-washing, b) gradual replacement of dry-air sterilization units with new generation autoclaves, class B with double-vacuum, c) replacement of glouteraldeyde-type disinfectants, which are hazardous, with enzymic solutions, ammonium agents and oxygen release agents, d) providing dental units with decontamination and avoidance of re-inspiration potentials.

Since the Dental School treats a large number of patients carrying contagious diseases, such as hepatitis, tuberculosis, AIDS etc, care has been taken so that certain protocols are applied to them, both by the attendants as well as the nursing staff (attire of the attendant, control of the working field, at least two or three sterilization processes of the tools used etc.)

- **Treatment Cost**

The cost of high quality treatment provided by the various clinics of the School is not covered by the annual funding received by the Ministry of Education. This is why, since 1954, there has been established, with the publication of the Official Journal of the Government (211/7.9.1954), the payment of a certain amount of fees by the patients, depending on the dental procedure performed. This cost is fixed by the General Assembly and approved by the Council of the National and Kapodistrian University of Athens. This cost is paid at the cashier's office and after the retention of a 15% by the University, the remaining amount is operated by the Dental School, for the coverage of the above expenses. Patients, according to the public insurance company they obtain, can be partially or fully refunded.

- **Support Services**

To ensure the coordinated, smooth-functioning and efficient operation of the Clinics and Units described above, the central support services have been established, inside the Dental School. The functions of the support services are:

Supplies. It bears the responsibility of supplying the undergraduate and postgraduate clinics with dental material. In other words, it runs the procedures concerning the supply of tools and materials necessary to operate the clinics. It also makes sure that the relevant expendable supplies are received, stored and distributed to the Clinics. The central support system employees 5 persons.

Technical Support. Overall, the 178 dental units operating daily for almost 8 hours as well as the rest of the dental equipment are bound to present technical problems and demand constant maintenance. This is why a special technical service has been formed, served by three (3) persons.

Cashier's Office. It deals with the collection of the fees paid by the patients who have received dental care by both undergraduate and postgraduate Clinics. It is served by two (2) persons.

NEGATIVE POINTS AND DIFFICULTIES OF THE CLINICS/UNITS OPERATIONAL SYSTEM - SUGGESTIONS

Although throughout the last decade, with the establishment of the Total Patient Care Clinic and the development of the postgraduate Clinic specialization programs, there has been noted a significant progress in the range of dental treatments provided, as well as the number of patients being treated, the whole system not only demands constant supervision – which is mostly the responsibility of the Directors of the departments each Clinic belongs to- but also improvements, so that the clinical work provided will remain at the same level or even improve where possible.

Scientific problems are the follow:

- The number of patients examined in correlation to the number of patients actually being treated is significantly larger. At the same time, patients that will not be treated after all are not being notified within a certain timeframe. In addition, the waiting period for patients that are accepted for treatment is difficult to establish. Even though patients are informed on their first examination about all of the above matters, a different approach of the first examination and forwarding of the files to the clinics as well as communicating information to them, would contribute to the improvement of their service quality.
- Due to the way clinics function, the time needed for the patients to be treated is longer than usual and any sudden closure of the school equals closure of the clinics too, with no way of dealing with the problem. Those two must be separated and a common plan between the department and the students must be formed, that will ensure the unobstructed functioning of the clinics under any circumstances.

- There is no centrally organized recall and re-examination system of the patients treated. A recall is only carried out on a certain percentage of patients being periodontically treated, and even this is not systematic and only takes place in some graduate Clinics. The organization of the recall system, if not for all, but at least for a part of the patients being treated by the Total Patient Care Clinic, must be immediately considered a priority of any future plan.
- A large number of patients seeking treatment have extensive dental problems and as result treatment focuses on the restoration of the damage dentition rather than prevention. It is indeed, within the immediate plans of every department, to deal with the prevention of any dental problems of the patients on a clinical level.
- Another shortage noted on the overall therapeutic work offered is the lack of organization for the systematic encounter of emergency cases. Emergency cases are considered to be only those where there is a sharp toothache, or where an endodontic therapy is necessary, while there are many other cases, which should be considered emergencies as well. The organization of an emergency treatment system must be considered.
- The provision of dental care is carried out by undergraduate and postgraduate students, but with the supervision and, on several occasions, the personal work of faculty, who bear the responsibility of dealing with the patient. However, for their contribution they are neither covered by the government nor by the insurance company, thus being exposed to legal issues that might occur. This matter must be legally resolved either by the University or the relevant Ministry, to which we belong.
- From this whole description, it is clear that the academic staff does not only provide educational work –which is the case with other colleagues of every other university (besides medical ones), for which they get paid- but also a significant additional clinical one, for which there is not any form of additional compensation.
- Also, the faculty of the Dental School is not decided by taking into consideration the excess clinical work required, thus it is inadequate. The function of the clinics so far described, is effective because senior graduate students also participate in clinical education, as well as candidates for PhD and adjunct faculty with master's degrees, offering volunteer work.
- The financing of the Dental School by the Ministry of Education and Religious Affairs does not incorporate the cost of treating the patients and as a result the School secures the resources by itself. However, since the number of patients being treated and the range of treatments are so large, there ought to be an additional financing, which could be provided by the Ministry of Health and Welfare.
- In correlation to the matter above, up until now the special needs of the Dental School regarding nursing, secretarial and administrative staff has not been recognized. However, they have already been recognized for every other university. This results in personnel being by the division itself under a labor agreement, hence paying them with its own resources. In addition, since the

cost of hiring already specialized staff is high, it is common to employ unspecialized staff that is then trained on the site.

13. CONCLUSIONS

13.1. Positive issues

The main positive issues of the Dental School are the following:

- In reference to the Undergraduate program

- The educational model, which the school has followed over the last 40 years, is similar to the ones used by the Schools in the United States. In the States the School of Dentistry is separate from the medical School and as a result the growth of the School is faster. This does not happen with a large number of European Dental Schools.
- The continuous changes that are made in the curriculum (goals, teaching methods, self-assessment and educational material) provide the students with a truly contemporary education, which addresses the modern standards of care.
- The continuous participation of the School in European and International Educational activities. The School organized the annual meeting of the Association for Dental Education in Europe (ADEE) in the year 2005 with the participation of faculty from 40 countries around the world.
- The high level of students who enter the School through the National Entrance Exam System.

- In reference to the Graduate program

- The two groups of programs in the first level referring to basic and clinical sciences provide the candidates with the opportunity to select a program based on their own needs and capabilities. This division of programs meets the present international standards and graduates from these programs can become a nucleus from which future academicians and faculty members will evolve covering all areas of dental education.
- The limited number of graduate students entering the programs provides the School with the opportunity to select the best candidates using objective criteria.
- The structure of the clinical programs with the basic specialty and clinical courses results in the preparation of graduates with a strong scientific background coupled with excellent clinical skills.
- The three-year specialty programs with the variety of theoretical and clinical courses are considered excellent and very progressive for the European area.
- The thesis for the clinical specialties with its research direction provides the graduate with a research methodology and a true research oriented background.

-In reference to Faculty

- The progressive replacement of faculty members who reach retirement.

- The high levels of knowledge of newly elected faculty members who, apart from the PhD degree, also have significant specialty degrees from National and International Programs.
- The desire of the majority of faculty members to provide high levels of educational activities without time or monetary restrictions.

- In reference to Equipment

- The continuous replacement of clinical equipment with modern ergonomical units.
- The replacement and acquisition of instruments for sterilizing and dispensing is helping the school to apply international principles and protocols preventing the spread of viral infections.
- The newly scheduled building will cover the needs in dental education, patient treatment, research and continuing education.
- The restructuring of the 5th floor of the old building created a better working environment and an area with modern offices and other facilities.

- In reference to Research

- The foundation of the 5th Section in Basic Sciences and Oral Biology and the progressive staffing of the section with faculty members who have experience and a strong scientific and research background. The school is also looking forward to developing adequate laboratory and office spaces for this area in order to provide a better overall working environment.
- The high level of sophisticated equipment and the experience of faculty members of the Biomaterials Lab.
- The interest and motivation of young faculty members, in spite of the lack of funding, to participate in research activities.

- Miscellaneous

- The high level of sophisticated clinical treatment, which is provided for specific groups of patients who are not treated by other governmental or private clinics.
- An increase supporting personnel, through funding from programs like the EPEAEK, has provided better services for faculty students and patients.

13.2 Negative issues

The main negative issues of the Dental School are the following:

- In reference to the Undergraduate program

- The lack of a systemic evidence based measuring system for the goals of the program and the various courses, which are offered to the students.
- The inability to formulate basic sciences and biomedical science courses to address the needs of dental education because their teaching depends entirely on the Medical School.
- The small-scale overlaps, blanks and time placement of some courses. Also the difficulty of the correlation of basic knowledge with clinical practice for a

number of students. The need to increase the clinical hours of teaching in order to develop more successfully the necessary competencies needed for the graduates.

- The absence of clinical evaluation criteria and clinical evaluation as a procedure in all clinical courses and the use of intermediate exams in all undergraduate courses.
- The funding of the Clinical Practice Programs depends entirely on Government funding.

-In reference to the Graduate Program

- The lack of a systemic evaluation system which will help measure the degree of success in meeting the program's goals. This will be partially corrected with the announcement of the results of the EPEAEK II program.
- The large number of courses, which are included in the program. Additionally, some of these courses do not totally cover the goals of the specialties.
- The lack of international cooperation with foreign programs because the school has not developed such important alliances.
- The inability to provide scholarships for graduate students especially for the ones who are actively participating in undergraduate education.
- On some occasions, the involvement of students in the undergraduate curriculum has been extended, resulting in a reduction of the time, which should be allocated for their graduate program.

- In reference to Faculty

- Lack of faculty capable of teaching Basic Science courses.
- The large number of faculty members needed to teach clinical sciences. In the present faculty members are not adequate and the school has to recruit dentists with advance training who volunteer their work and provide support for all the clinical activities.
- The limited involvement in research for reasons that were explained in other parts of this report.

- In reference to equipment and working areas

- The nature of dental education requires the appropriate function of the work space, dental equipment and a sound foundation of electrical and mechanical knowledge. At present, the School has difficulties in maintaining all the equipment mainly because there is a lack of appropriate personnel.
- The time required when a problem surfaces until it is corrected is extremely long. This is primarily because the school has no mechanics, electricians, etc. and faculty members rather than the main University sometimes address the problems.
- The old building has been in operation for over 40 years and it is obvious that it does not cover the needs of a contemporary Dental School.

- In reference to Research

- Inadequate number of capable faculty members and time to carry out serious research protocols.
- Inadequate research funding from the government.
- The small amount of funded research in the School for reasons that have been explained in other parts of this report.
- In general, the lack of a centrally established policy for research activities. The research performed depends primarily on individual efforts of the faculty members rather than on collective institutional activity.

- In reference to Support Personnel

- Inadequate number of supporting personnel.
- The lack of experienced personnel to cover the working needs of the school.
- The lack of regulations referring to privileges and requirements of the personnel and also the lack of a code of contact towards faculty patients and students.

- Miscellaneous

- Inadequate development of secretarial areas, which will be able to record activities and follow procedures and progress (for example, of the students).
- Although there has been an improvement in the system of patient transfers within the various departments/clinics, mainly through the established computer program, better services must be provided in order to reduce the waiting period before or during the treatment.
- Lack of serious organization of the patient recall system and emergency patient treatment.

13.3 Opportunities for enrichment

Because of the high level of quality that the dental students exhibit, there is always an opportunity for enrichment of both the undergraduate and graduate programs. During the last few years, our students have demonstrated a high sense of responsibility towards the main target of the studies, which is the health and well being of our patients.

We strongly believe that the responsibility of the students covers to some degree, the negative points of our education system and act as motivation for the faculty.

Also the high level of knowledge and experience of faculty members, coupled with their responsibility towards students and patients, is another positive point in improving the level of education.

At the same time, the advanced scientific background of faculty members provides the school with the opportunity to organize a significant continuing educational program, since the role of the contemporary University is to address all the issues of higher and advanced education, including professional training.

Dangers, which may create future problems, are due to the flexible application of legal procedures, something that is not only a danger for the public but also for the entire society. The lack of approved internal procedures from NKUA, in

the immediate past, has resulted in a negative environment. An Internal Regulation that will describe responsibilities and requirements of everybody involved in higher education is now needed. This Guide will eliminate or reduce negative issues for the benefit of dental education and well-being of patients who seek treatment in our school.

14. PLANS FOR IMPROVEMENT

Plans for the enrichment and growth of School procedures for the improvement of negative issues appearing in the function of the school, have been described throughout this report. For the continuous growth of the School, several actions are necessary. Some of the actions can be completed by the school and others require the help of the Government and the main University.

The short-term and mid-term actions, which have been designed by the school, are described in section 3.1 and those requested by the government and main university in the section 13.2.

Finally, in section 13.3 general actions required are described which are necessary for the better function of Greek Universities.

14.1 Short and Mid-term actions from the School

- The Curriculum Committee, after the general course evaluation, has initiated a restructuring procedure for all Basic and Biomedical Science courses. This action requires the collaboration of the relevant departments of the Medical School.
- The Curriculum Committee, in cooperation with course directors, must develop a plan for courses with common scientific areas. This plan will help the restructuring of laboratory courses, will save time and provide better education for the students
- Increase the time for clinical training and teaching in small groups for the undergraduate program.
- Development of evaluation criteria for the assessment of student clinical performance.
- Organize a patient recall system and a patient-tracking system within the various departments and clinics of the School.
- Enforce the clinical education of students towards the prevention of dental diseases.
- Development of a continuous evaluation process for both undergraduate and graduate programs. This evaluation will help the school to assess the measure of success as regards the established goals and objectives.
- Introduce the ECTS system and award the appropriate diploma.
- Design and adjust basic and specialty courses of the graduate program to meet the requirements established by the clinical disciplines.
- Finalize and operate a graduate program in English in the Perio-Implant-Prosthesis. The program will attract foreign students who will pay tuition at the School.

14.2 Actions from the main University and Government

- New faculty positions to support the basic and Biomedical Sciences, but also the clinical sciences taught at the school (4 Assistant Professors, 3 Lecturers).
- Annual funds for hiring dentists with significant experience and advance education but not necessarily a PhD. These faculty members will be responsible for teaching laboratory and clinical courses (15 faculty members annually).
- New positions for nurses (10) and technical staff (7).
- Annual funding from the Ministry of Health covering some of the expenses of the treatment we offer to the population.
- Funding for the third building required and for the replacement of clinical and research equipment.

14.3 General Action from the Administration and the State

The University must help independent schools to improve their research and educational activities. The University should not oppose the Schools improving their function and profile towards the society. The most important step to be taken by the University is to create an Internal Guide, which will determine the responsibilities and authorities of all the people that belong to the University Community. Also, the University must develop new actions and services and develop the existing services in order to advise independent schools in their administrative work.

The Government must develop a true dialogue with the faculty and students. This dialogue should be free and should not take into account political positions or professional union rights.

The Law Acts for Education have advantages and disadvantages. It is obvious that the time has come for the Government and the Universities to formulate a wider picture of higher education.

The University offers various educational diplomas. These can be classified as diplomas that also provide a professional title and diplomas that need further studies in order to obtain a professional title. For example, in order to obtain a diploma in Dentistry, which is also a professional title, five years of study are required. In other scientific areas, the first diploma may be obtained earlier. The government must analyze and examine the possibility of applying a different legal background for the two groups of academic institution.

Finally, the variation of the large Schools within a University creates an administrative problem to the Schools. A grouping of Schools with similar scientific interests is necessary. This group of schools will have a weak link with the main University and this will help them to function better and grow faster in the future. Larger schools with more faculty and students should not exert their power over smaller schools and sections.

In the existing law there is a paragraph, which states that the government takes 15% of all income generated in their faculty's dental private practice. This income is given to the University in order to cover educational activities. This is a unique phenomenon worldwide and it is in direct contrast with the free enterprising system.

The government must examine carefully the salary of faculty members. It is impossible, at the present time, for a faculty member to deal with all his responsibilities with the existing salary conditions and as a result he is forced to seek second means of employment in order to meet the financial pressures of society.

15. TABLES

(Tables I-VI)

Table I. Advancement of the Dental Shool's staff.

		2006-2007	2005-2006	2004-2005	2003-2004	2002-2003
Professors	Total	9	11	11	13	14
	Promotion*	1	0	1	1	2
	New Appointment*	0	0	0	0	0
	Retirement*	0	2	1	4	4
	Resignation*	0	1	0	0	0
Associate Professors	Total	43	44	46	42	38
	Promotion*	1	2	5	2	4
	New Appointment*	0	0	1	1	0
	Retirement*	1	3	0	1	0
	Resignation*	0	1	2	0	0
Assistant Professors	Total	41	44	44	48	53
	Promotion*	1	4	2	2	0
	New Appointment*	0	1	0	0	1
	Retirement*	0	1	0	1	0
	Resignation*	0	0	0	0	0
Lecturers	Total	27	21	23	20	18
	New Appointment*	5	0	6	1	5
	Retirement*	0	0	0	0	0
	Resignation*	0	0	0	0	0
Clinical Instructors	Total	5	5	5	5	5
Post-doc positions**	Total	2		4	4	2
Departmental technical staff	Total	40**				
Administrative staff	Total	(23)				

* Refers to the previous year. ** Refers to all categeries of staff (**Technical, Social services, Administrative-Accounting, Librarians, Departmental secretaries),**

[1] This category includes and extra 23 individuals which are employed by the Dental School but have recently been placed in the group with contracts of indeterminate length and have not been appointed by the administrative board of the University of Athens to a specific position.

Table II. Advancement of enrolled students of the Dental School for every academic year.

	2006-2007	2005-2006	2004-2005	2003-2004	2002-2003
Undergraduate (new inscriptions according to year)	131	136	134	155	159
Undergraduate (total inscribed and final year)	974	1040	1046	1223	1214
Graduate	36	28	38	42	40
Doctoral	118*				
* Due to computer software limitations it is possible to record only the total up to 2006-2007 and not the previous years individually.					

Table III. Advancement of the Dental School's incoming undergraduate students.

	2006-2007	2005-2006	2004-2005	2003-2004	2002-2003
Entrance exams	91	96	90	95	99
Transfers*	1	11	10	23	21
Advanced placement exams	10	10	12	16	14
Other categories	29	19	22	21	25
Total	131	136	134	155	159

* In row for the "Transfers" the whole number of transferred students is presented (inflow-outflow).

Table IV. Faculty members (Professor, Associate professor, Assistant Professor, Lecturer).

Department of Orthodontics, Section of Community Dentistry
Professor: Kiliaridis Stavros
Associate Professor: Makou Margarita,Katsavrias Ilias, Charalampakis Nickos
Assistant Professor: Bitsanis Ilias, Papagrigorakis Manolis, Halazonetis Demetrios J
Department of Paediatric Dentistry, Section of Community Dentistry
Professor: Papagiannouli - Laskaridi Liza
Associate Professor: Oulis Konstantinos
Assistant Professor: Kouvelas Nikolaos, Kavvadia Katerina
Lecturer: Vadiakas Georgios, Gizani Sotiria, Emmanouil Dimitris
Department of Preventive & Community Dentistry, Section of Community Dentistry
Associate Professor: Mamai - Chomata Eleni, Koletsi - Kounari Charitini
Assistant Professor: Polychronopoulou Argyro
Lecturer: Papaioannou William
Department of Endodontics, Section of Dental Pathology & Therapeutics
Associate Professor: Panopoulos Panagiotis, Georgopoulou Maria, Siskos Georgios, Khabbaz Marouan
Assistant Professor: Kerezoudis Nikolaos, Kozyrakis Kostas, Kontakiotis Evangelos, Niamonitos Constabtinos

Department of Operative Dentistry, Section of Dental Pathology & Therapeutics
Professor: Vougiouklakis George, Kakaboura Afroditi
Associate Professor: Douvitsas Gerasimos, Lagouvardos Panagiotis, Mountouris Georgios, Tzoutzas Ioannis
Assistant Professor: Argiri - Achi Georgia, Doukoudakis Spyros, Paximada Charikleia, Papazoglou Eustratios, Sourai Paraskevi
Lecturer: Loukidis Michail
Department of Periodontics, Section of Dental Pathology & Therapeutics
Professor: Vrotsos Ioannis
Associate Professor: Koboli - Kontovazainiti Manto, Madianos Phoebus, Panis Vassilios, Papageorgiou - Nakou Melachroini, Markopoulou - Papadopoulou Kleopatra, Tsami - Pandi Alexandra
Assistant Professor: Vrachopoulos Theofilos, Pepelassi - Kostopoulou Eudoxie, Formouzis Ioannis
Lecturer: Dereka Xanthippi, Karousis Ioannis **Department of Prosthodontics, Section of Prosthodontics**
Professor: Doukoudakis Asterios
Associate Professor: Damianakou Chrysanthi, Zissis Alkiviadis, Karagiannis Athanasios, Karkazis Iraklis, Polyzois Grigoris, Lampropoulou - Tzortzopoulou Evgenia, Tripodakis Aris Petros
Assistant Professor: Kamposiora Phophi, Kourtis Stefanos, Kossioni Anastasia, Baltzaki Georgia, Nikellis Ioannis, Nikolopoulou Fotoula, Papavasiliou George, Paraskevopoulou Olga, Silvestros Spyros, Stathopoulos Apostolos, Sotiriou Michalis, Tsironis Georgios, Tsovilli Ekaterini.
Lecturer: Gousias Iraklis, Mpairami Vakina, Pelekanos Stavros, Polychronakis Nikolaos, Sykaras Nikitas, Christidou Eirini, Chronopoulos Vasilios

Oroficial Pain Management Clinic, Section of Prosthodontics
Professor: Droukas Byron
Associate Professor: Tzakis Michail **Department of Oral Pathology, Section of Oral Pathology & Oral Surgery**
Professor: Sklavounou Alexandra
Associate Professor: Oikonomopoulou Panagiota
Assistant Professor: Nikitakis Nikolaos , Chrysomali Evanthia
Lecturer: Stefaniotis Theodoros , Tosios Konstantinos **Department of Oral Diagnosis & Radiology , Section of Oral Pathology & Oral Surgery**
Professor: Tsiklakis Konstantinos, Nikolopoulou - Karagianni Ekaterini
Associate Professor: Stefanou Evrypidis
Assistant Professor: Gritzalis Panagiotis, Donta - Mpakogianni Aikaterini, Papadakis Evangelos, Fanourakis Ioannis
Lecturer: Damaskos Spyros, Stamatakis Harry **Clinic of Hospital Dentistry, Section of Oral Pathology & Oral Surgery**
Associate Professor: Galiti Ourania
Department of Oral & Maxillofacial Surgery, Section **of Oral Pathology & Oral Surgery**
Professor: Alexandridis Constantinos
Associate Professor: Eleftheriadis Eystathios, Iatrou Ioannis, Skouteris Christos, Stavrou Emmanuel, Fragkiskos Fragkiskos
Assistant Professor: Vagenas Nikolaos, Zografos Ioannis, Kalyvas Demos, Karyampa-Stylogianni Evangelia, Kolokoudias Markos, Marti Kyriaki,
Lecturer: Tzermpos Fotios, Christopoulos Panagiotis

Department of Basic Sciences, Section of Basic Sciences & Oral Biology
Associate Professor: Kitraki Efthymia
Department of Dental Biomaterials, Section of Basic Sciences & Oral Biology
Professor: Eliadis George
Associate Professor: Papadopoulos Triantafyllos
Lecturer: Zinelis Spiros

Table V. Courses of the Undergraduate Study Program (continued in Table VI).

Courses	Website	Coordinator	Mandadory/Elective	Lectures (h/course)
Fixed Prosthodontics IA	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51085a	**Doukoudakis Asterios**	M	26
Fixed Prosthodontics IB	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51085a	Doukoudakis Asterios	M	13
Fixed Prosthodontics I	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51085a	Doukoudakis Asterios	M	13
Fixed Prosthodontics II	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51095c	Doukoudakis Asterios	M	0
Fixed Prosthodontics IIA	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51095a	Doukoudakis Asterios	M	13
Fixed Prosthodontics IIB	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51095a	Doukoudakis Asterios	M	13
Fixed Prosthodontics IIC	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51095c	Doukoudakis Asterios	M	0

Lasers in Dentistry	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51153	Alexandridis Constantinos	E	13
Biology and Genetics	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51201	**Kitraki** Efthymia	M	52
Biochemistry I	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51059	Papavasileiou Athanasios	M	39
Biochemistry II	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51065	Papavasileiou Athanasios	M	35
Biostatistics	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51202	Katsougianni Eleni	M	26
General Histology - Embryology	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51057	Kittas Christos	M	24
General Microbiology - Immunology	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51190	Tseleni-Kotsovili Aggelina	M	52
General Surgery	http://www.dent.uoa.gr/node.php?n=viewcourse&code=51194&lang=en	Papadogeorgakis Nikolaos	M	13
Geriatric Dentistry	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51154	Karkazis Iraklis / Galiti Ourania	E	20
Maxillofacial surgery I	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51093	Alexandridis Constantinos	M	26
Maxillofacial surgery II	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51209	Alexandridis Constantinos	M	13
Maxillofacial surgery IIA	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51209	Alexandridis Constantinos	M	13

Oral Diagnosis and Radiology I	http://www.dent.uoa.gr/node.php?n=oral_diagnosis_radiology_viewcourse&lang=en&code=51203	Tsiklakis **Konstantinos**	M	15
Oral Diagnosis and Radiology II	http://www.dent.uoa.gr/node.php?n=oral_diagnosis_radiology_viewcourse&lang=en&code=51207	Tsiklakis **Konstantinos**	M	0
Oral Diagnosis and Radiology IIA	http://www.dent.uoa.gr/node.php?n=oral_diagnosis_radiology_viewcourse&lang=en&code=51207a	Tsiklakis **Konstantinos**	M	13
Oral Diagnosis and Radiology IIB	http://www.dent.uoa.gr/node.php?n=oral_diagnosis_radiology_viewcourse&lang=en&code=51207a	Tsiklakis **Konstantinos**	M	0
Oral Diagnosis and Radiology IIC	http://www.dent.uoa.gr/node.php?n=oral_diagnosis_radiology_viewcourse&lang=en&code=51207	Tsiklakis **Konstantinos**	M	13
Internal Medicine	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51079	Tentolouris Nikolaos	M	26
Basic Implantology	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51220	Alexandridis Constantinos	M	13
Introduction to Dentistry and Behavioral Sciences	http://www.dent.uoa.gr/node.php?n=preventive_community_dentistry_viewcourse&lang=en&code=51054	**Koletsi - Kounari Charitini**	M	42
Introduction to Informatics	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51151	Demetrios J Halazonetis	E	6
Endodontics I	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lang=en&code=51182	Panopoulos Panagiotis	M	19
Endodontics II	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lang=en&code=51215d	Panopoulos Panagiotis	M	11
Endodontics IIA	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lan	Panopoulos Panagiotis	M	13

	g=en&code=51182			
Endodontics IIB	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lang=en&code=51215b	Panopoulos Panagiotis	M	13
Endodontics IIC	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lang=en&code=51215b	Panopoulos Panagiotis	M	0
Endodontics IID	http://www.dent.uoa.gr/node.php?n=endodontics_viewcourse&lang=en&code=51215d	Panopoulos Panagiotis	M	0
Epidemiology	http://www.dent.uoa.gr/node.php?n=preventive_community_dentistry_viewcourse&lang=en&code=51204	**Polychronopoulou** Argyro	M	52
Applied Psychology in the Dentistry	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51157	Koletsi - Kounari Charitini	E	22
Medical Physics	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51047	Georgiou Evaggelos	M	50
Medical Chemistry I	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51046	Papavasileiou Athanasios / Koulocheri Stauroula	M	39
Medical Chemistry II	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51246	Papavasileiou Athanasios / Koulocheri Stauroula	M	39
Forensic Medicine of Mouth	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51156	Nikolopoulou - Karagianni Ekaterini	E	12
Oral Histology and Embryology	http://www.dent.uoa.gr/node.php?n=oral_pathology_viewcourse&lang=en&code=51158	Sklavounou Alexandra	M	26
Removable Prosthodontics I	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51077a	Zissis Alkiviadis	M	13
Removable Prosthodontics IA	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51077a	Zissis Alkiviadis	M	13

Removable Prosthodontics II	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51219c	Polyzois Grigoris	M	0
Removable Prosthodontics IIA	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51219a	Karkazis Iraklis	M	13
Removable Prosthodontics IIB	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51219a	Karkazis Iraklis	M	13
Removable Prosthodontics IIΓ	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51219c	Polyzois Grigoris	M	0
Clinical application of Dental Biomaterials	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51221	Doukoudakis Asterios	M	13
Community Dentistry	http://www.dent.uoa.gr/node.php?n=preventive_community_dentistry_viewcourse&lang=en&code=51186	Mamai - Chomata Eleni	M	20
Dental Materials	http://www.dent.uoa.gr/node.php?n=prosthodontics_viewcourse&lang=en&code=51159	Doukoudakis Asterios	M	11
Dental Anaesthesia	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51160	Alexandridis Constantinos	M	18
Dental Informatics	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51155	Lagouvardos Panagiotis	E	12
Tooth morphology	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51051	Kakaboura Afroditi	M	0
Operative Dentistry I	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51210	Vougiouklakis George	M	26
Operative Dentistry II	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51218d	Vougiouklakis George	M	10

Operative Dentistry IIA	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51210	Vougiouklakis George	M	13
Operative Dentistry IIB	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51218b	Vougiouklakis George	M	13
Operative Dentistry IIC	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51218b	Vougiouklakis George	M	0
Operative Dentistry IID	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51218d	Vougiouklakis George	M	0
Practice management of private dental office / installation	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51152	Tzoutzas Ioannis	E	16
Orthodontics I	http://www.dent.uoa.gr/node.php?n=orthodontics_viewcourse&lang=en&code=51069	Charalampakis Nickos	M	36
Orthodontics II	http://www.dent.uoa.gr/node.php?n=orthodontics_viewcourse&lang=en&code=51216c	Makou Margarita	M	0
Orthodontics IIA	http://www.dent.uoa.gr/node.php?n=orthodontics_viewcourse&lang=en&code=51216a	Makou Margarita	M	10
Orthodontics IIB	http://www.dent.uoa.gr/node.php?n=orthodontics_viewcourse&lang=en&code=51216a	Makou Margarita	M	11
Orthodontics IIC	http://www.dent.uoa.gr/node.php?n=orthodontics_viewcourse&lang=en&code=51216c	Makou Margarita	M	0
Pathology of Dental Hard Tissues	http://www.dent.uoa.gr/node.php?n=operative_dentistry_viewcourse&lang=en&code=51067	Douvitsas Gerasimos / Siskos Georgios	M	26
Pathology	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51206	Nakopoulou Lydia	M	34

Paidiatric Dentistry I	http://www.dent.uoa.gr/node.php?n=paediatric_dentistry_viewcourse&lang=en&code=51177	Papagiannouli – Laskaridi Liza	M	30
Paidiatric Dentistry IA	http://www.dent.uoa.gr/node.php?n=paediatric_dentistry_viewcourse&lang=en&code=51177a	Papagiannouli – Laskaridi Liza	M	0
Paidiatric Dentistry II	http://www.dent.uoa.gr/node.php?n=paediatric_dentistry_viewcourse&lang=en&code=51217	Papagiannouli – Laskaridi Liza	M	0
Paidiatric Dentistry IIA	http://www.dent.uoa.gr/node.php?n=paediatric_dentistry_viewcourse&lang=en&code=51217	Papagiannouli – Laskaridi Liza	M	13
Experimental Physiology I	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51058	Koutsilieris Michael.	M	53
Experimental Physiology II	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51064	Koutsilieris Michael.	M	53
Descriptive anatomy I	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51060	Anagnostopoulou Sophia.	M	65
Descriptive anatomy II	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51066	Anagnostopoulou Sophia.	M	59
Periodontology I	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51211	Vrotsos Ioannis	M	26
Periodontology II	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51213d	Vrotsos Ioannis	M	26
Periodontology IIA	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51211l	Vrotsos Ioannis	M	13
Periodontology IIB	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51213b	Vrotsos Ioannis	M	13
Periodontology IIC	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51213b	Vrotsos Ioannis	M	0

Periodontology IID	http://www.dent.uoa.gr/node.php?n=periodontics_viewcourse&lang=en&code=51213d	Vrotsos Ioannis	M	0
Practical traning in Oral Diagnosis and Radiology		Tsiklakis Konstantinos	M	0
Preventive Dentistry	http://www.dent.uoa.gr/node.php?n=preventive_community_dentistry_viewcourse&lang=en&code=51080	Mamai - Chomata Eleni	M	27
Oral Surgey I	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51205	Alexandridis Constantinos	M	14
Oral Surgey II	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51208	Alexandridis Constantinos	M	0
Oral Surgey IIA	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51208a	Alexandridis Constantinos	M	0
Oral Surgey IIB	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51208a	Alexandridis Constantinos	M	0
Oral Surgey IIC	http://www.dent.uoa.gr/node.php?n=oral_maxillofacial_surgery_viewcourse&lang=en&code=51208	Alexandridis Constantinos	M	13
Oral Medicine and Pathology I	http://www.dent.uoa.gr/node.php?n=oral_pathology_viewcourse&lang=en&code=51173	Sklavounou Alexandra	M	13
Oral Medicine and Pathology IA	http://www.dent.uoa.gr/node.php?n=oral_pathology_viewcourse&lang=en&code=51173	Sklavounou Alexandra	M	13
Oral Medicine and Pathology II	http://www.dent.uoa.gr/node.php?n=oral_pathology_viewcourse&lang=en&code=51094	Sklavounou Alexandra	M	13
Oral Medicine and Pathology IIA	http://www.dent.uoa.gr/node.php?n=oral_pathology_viewcourse&lang=en&code=51094	Sklavounou Alexandra	M	13

Pharmacology I	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51073	Tesseromati Christina	M	36
Pharmacology II	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51078	Tesseromati Christina	M	37
Physiology of the Stomatognathic system	http://www.dent.uoa.gr/node.php?n=clinic_kasp_viewcourse&lang=en&code=51187	Byron Droukas	M	52
Otorynolarygology	http://www.dent.uoa.gr/node.php?n=viewcourse&lang=en&code=51180	Ferekidis Eleftherios	M	0

Table VI. Courses of the Undergraduate Study Program.

Courses	Literature (suggested)	Total Hours	F/SA/GN/CD (F-foundation, SA-Scientific Area, Gn-General Knowledge, CD-Contemporary Developmenet)	Number of students in final exams	Number of students passed exams
Fixed Prosthodontics IA		46	SA-CD		
Fixed Prosthodontics IB		39	SA-CD		
Fixed Prosthodontics I		39	SA-CD	883	828
Fixed Prosthodontics II	X	30	SA-CD	771	745
Fixed Prosthodontics IIA	X	43	SA-CD		
Fixed Prosthodontics IIB	X	43	SA-CD		
Fixed Prosthodontics IIC	X	30	SA-CD		
Lasers in Dentistry		13	SA		
Biology and Genetics	X	52	F	921	671
Biochemistry I	X	39	F	1604	849
Biochemistry II	X	35	F	1446	913
Biostatistics		30	F	947	669
General Histology - Embryology		52	F	1052	696
General Microbiology - Immunology	X	62	F	942	680
General Surgery		52	F-CD	916	838
Geriatric Dentistry	X	20	SA-CD		
Maxillofacial surgery I		26	SA-CD	827	767

Maxillofacial surgery II		29	SA-CD	894	739
Maxillofacial surgery IIA		29	SA-CD		
Oral Diagnosis and Radiology I		55	SA-CD	935	704
Oral Diagnosis and Radiology II	X	30	SA-CD	844	707
Oral Diagnosis and Radiology IIA	X	43	SA-CD		
Oral Diagnosis and Radiology IIB	X	16	SA-CD		
Oral Diagnosis and Radiology IIC	X	29	SA-CD		
Internal Medicine		52	F	1389	897
Basic Implantology	X	13	SA-CD	801	745
Introduction to Dentistry and Behavioral Sciences	X	55	SA-CD	1137	673
Introduction to Informatics		24	GN		
Endodontics I		52	SA-CD	883	738
Endodontics II		37	SA-CD	831	743
Endodontics IIA		43	SA-CD		
Endodontics IIB		43	SA-CD		
Endodontics IIC		30	SA-CD		
Endodontics IID		30	SA-CD		
Epidemiology		52	F-GN	1038	828
Applied Psychology in the Dentistry		22	SA-CD		
Medical Physics		58	F	998	631
Medical Chemistry I	X	39	F	1064	671
Medical Chemistry II	X	39	F	1051	494
Forensic Medicine of Mouth		13	SA-CD		
Oral Histology and Embryology		65	Y	885	703
Removable Prosthodontics I		63	SA-CD	942	708
Removable Prosthodontics IA		49	SA-CD		
Removable Prosthodontics II		30	SA-CD	782	741
Removable Prosthodontics IIA		43	SA-CD		
Removable Prosthodontics IIB		43	SA-CD		
Removable Prosthodontics IIC		30	SA-CD		
Clinical application of Dental Biomaterials	X	13	SA	721	590
Community Dentistry		20	SA	1152	821
Dental Materials		39	SA-CD	1212	711

Dental Anaesthesia		40	SA-CD	858	767
Dental Informatics		40	SA-CD		
Tooth morphology		26	SA-CD	863	693
Operative Dentistry I		78	SA-CD	835	737
Operative Dentistry II		36	SA-CD	769	747
Operative Dentistry IIA		43	SA-CD		
Operative Dentistry IIB		43	SA-CD		
Operative Dentistry IIC		30	SA-CD		
Operative Dentistry IID		30	SA-CD		
Practice management of private dental office / installation	X	16	CD		
Orthodontics I	X	48	SA-CD	989	720
Orthodontics II		40	SA-CD	913	789
Orthodontics IIA		40	SA-CD		
Orthodontics IIB		41	SA-CD		
Orthodontics IIC		30	SA-CD		
Pathology of Dental Hard Tissues		26	F	963	700
Pathology		44	F	1013	718
Paidiatric Dentistry I		52	SA-CD	929	723
Paidiatric Dentistry IA		33	SA-CD		
Paidiatric Dentistry II		30	SA-CD	803	773
Paidiatric Dentistry IIA		43	SA-CD		
Experimental Physiology I		53	F	1541	664
Experimental Physiology II		53	F	1574	726
Descriptive anatomy I		65	F	980	646
Descriptive anatomy II		59	F	710	510
Periodontology I		26	SA-CD	881	736
Periodontology II		52	SA-CD	1188	748
Periodontology IIA	X	43	SA-CD		
Periodontology IIB	X	43	SA-CD		
Periodontology IIC	X	30	SA-CD		
Periodontology IID	X	30	SA-CD		
Practical traning in Oral Diagnosis and Radiology		0			
Preventive Dentistry		34	SA-CD	1336	783
Oral Surgey I	X	28	SA-CD	816	728
Oral Surgey II		0	SA-CD	874	819
Oral Surgey IIA		0	SA-CD		
Oral Surgey IIB	X	16	SA-CD		
Oral Surgey IIC	X	29	SA-CD		
Oral Medicine and Pathology I		26	SA-CD	846	754
Oral Medicine and Pathology IA		26	SA-CD		
Oral Medicine and Pathology II		29	SA-CD	930	791

Oral Medicine and Pathology IIA		29	SA-CD		
Pharmacology I		36	F	1367	753
Pharmacology II	X	37	F	1543	764
Physiology of the Stomatognathic system		52	SA-CD	800	726
Otorynolarygology		20	F	961	797

16. APPENDICES

Appendix 1. Undergraduate Studies Program (pages 117-208)

Appendix 2. Graduate Program Guide (pages 209-258)

Appendix 3. Undergraduate Courses Assessment (pages 259-276)

Appendix 4. Funded Research Projects (pages 277-286)

Appendix 5. Publications of Faculty Members (pages 287-312)

Appendix 6. Laboratory Equipment (pages 313-321)

APPENDIX 1

UNDERGRADUATE STUDIES PROGRAM

AIM

The aim of the undergraduate curriculum is to educate every student, so that with the termination of his/her studies he should have evolved all necessary *knowledge, skills and attitudes that* allow him to perform general dentistry having as purpose the restoration as well as the preservation of the oral and general health of the population.

For the graduate of dentistry to be considered suitable it is important for all his skills to be based on:

1. Biological bases
2. Preventive direction
3. Social sensitivity and
4. Aptitude for life-long learning

Biological bases are important for the practice of modern dentistry, as without them, dentistry remains only an "art" and not a science. Preventive direction follows ancient medical science whose initial aim was not the cure of the lesion or the disease but its prevention as well as the conservation of the result of the cure. Social sensitivity is what guarantees that the dentist, apart from being a professional, should also be a health official. Aptitude for life-long learning concerns the mentality that the student should adopt during his studies for continuous self updating and improvement of his skills throughout his professional career. This is a necessary pre-requisite in the continuously and dynamically developing scientific and professional environment.

COURSES

88 mandatory and 7 elective courses structure the undergraduate curriculum.

In the next pages, **the aim, objectives, content, educational methods, successful finalization, strengths, weaknesses, opportunities, threats and plans for future changes** are described for individual and in-sequence given courses, listed in an alphabetic rank.

(51085A) - Fixed Prosthodontics I, 4th semester & (51085B) - Fixed Prosthodontics I, 5th semester & (51085) – Fixed Prosthodontics I, 6th semester

AIM

The therapeutic treatment of patients aiming in the preservation of good oral health, normal function and aesthetics on natural teeth and or replacement of missing teeth and their adjacent oral tissues, utilizing prosthetic restorations.

OBJECTIVES

The students at the end of the 6th semester should:

1. Have knowledge of anatomy, histology and physiology of tissues that compose the stomatognathic system.
2. Know the normal stomatognathic system functions and particularly the chewing, speaking, swallowing and the static and dynamic occlusion.
3. Be able to identify general and specific prognosis of existing teeth and restorations.
4. To be able to formulate a treatment plan and gradually fulfil, in simulated conditions, the patients existing pathology, and to propose repairs of the damage or loss of intra-oral tissues.
5. Know how defects or deficiencies in hard dental tissues can be restored by applying biologic principles, which aim to establish and enhance the functions of the stomatognathic system (chewing, speaking) and aesthetics.
6. Know the basic procedures of prostheses construction including tooth preparation, the construction of transitional restorations, the impression, the occlusal adjustment and the cementation of the final restoration.
7. Have knowledge of the construction procedures and the advantages and disadvantages of each rehabilitation
8. Know how to protect the dental pulp and periodontal tissue during the construction of prosthetic restorations and the means to maintain their protection in the final restorations.
9. To aim at building restorations that have the desired morphological, functional and aesthetic characteristics, in accordance with the basic principles of prosthodontics

CONTENT OF THE COURSE

Treatment planning ; Diagnostic models ; Diagnostic wax-up ; fabrication of a celluloid matrix based on the treatment plan ; Tooth preparation ; Fabrication of provisional restoration ; Final impression ; Master model fabrication, removable dies ; Metal framework wax-up ; Casting of metal framework ; Porcelain build up and firing ; Acrylic pattern fabrication for cast post and core on natural ; endodontically treated teeth ; Color selection ; Optical properties of ceramic materials ; Kinesiology of the mandible ; Occlusal reference positions ; Vertical dimension ; Aesthetic principles.

EDUCATIONAL METHODS

- Seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful completion of the 90% of the laboratory exercises.
- Successful midterm written examination.
- Successful final examination.

STRENGTHS

Integration of the theoretical and practical instruction of the various techniques in the overall practice philosophy of contemporary fixed prosthodontics, which aims at the holistic management of the patient.
Detection and recognition of possible mistakes and potential ensuing failures.
Emphasis is given on teaching methods and techniques that intend to avoid possible mistakes (trouble shooting).
Capability of student evaluation and self-evaluation regarding the successful or not completion of each step of the various techniques.
Repetition of the main clinical procedures three times (three semesters) at a laboratory and preclinical level (practice on phantoms) with the objective of familiarizing and optimally preparing the students for the clinical practice.
Constant renewal of the course content with the introduction of modern restoration techniques.
Sufficient and modern equipment.
Adequate audiovisual equipment that fosters affinity between theoretical and practical training as well as interactive education and student self-evaluation.

WEAKNESSES
Insufficient material and technical infrastructure.
Weakness of adequate replacement of worn and torn instruments.
Non-existent maintenance of the heavy equipment and lack of provision of systematic maintenance of the handpieces (4^{th} and 5^{th} semester).
Great number of students.
Insufficient space (4^{th} and 5^{th} semester).

OPPORTUNITIES
Expansion of the student training, not only with demonstrations related to laboratory-technical procedures.

THREATS
Risk of disorientation from the main goals of a restoration, due to confusion with interim procedures.
Accidental changes of the time-table and weakness to replace the hours lost.

PLANS FOR FUTURE CHANGES
Strengthening of interactive education especially in the preclinical 6^{th} semester with emphasis on the prospective management of real cases and treatment planning.
Enrichment of the digital education with the use of internet and CD-ROMs.
Introduction to the basic procedures used in implant-supported restorations.

(51095A) - Fixed Prosthodontics II, 7^{th} semester & (51095B) - Fixed Prosthodontics II, 8^{th} semester

AIM
The aim of the program is to educate the students how to maintain good oral health, function and esthetics of the stomatognathic system by using restorations on natural teeth and restoring loss of soft and hard tissues by artificial substitutes.

OBJECTIVES
Upon completion of 8th semester, the student should be able to:
1. Know the anatomy, histology and physiology of the tissues of stomatognathic system.
2. Know the physiologic function of stomatognathic system, especially mastication, phonetics, swallowing function, static and dynamic occlusion.
3. Use the classic and contemporary methods for examination and diagnosis of problems of the hard and soft tissues of stomatognathic system.

4. Be able to recognize deviations from the physiologic function of stomatognathic system.
5. Be able to recognize clinical signs of pathology of the hard and soft tissues of stomatognathic system.
6. Recognize the clinically acceptable form of every restoration and its influence to the stomatognathic system and surrounding tissues.
7. Recognize the acceptability of possible problems of existing restorations and propose their replacement.
8. Be able to determine the general and specific prognosis of existing teeth and restorations.
9. Create a suitable treatment plan that will gradually treat existing pathology and propose restorations to rehabilitate problems of loss of intraoral tissues.
10. Inform the patient with clarity on the condition of his/her oral health and the proposed or alternative treatment plans.
11. Restore lesions or loss of soft and hard tissues using biologic rules, restoring and improving the basic function of stomatognathic system (mastication, phonetics, aesthetics).
12. Protect the pulp and periodontal tissues during the construction of prosthetic restorations and preserve this protection with final restorations.
13. Be able to cooperate with dental laboratories and control the quality of the constructed restorations.
14. Aim to the construction of restorations with desirable morphological, functional and esthetical characteristics.

CONTENT OF THE COURSE

Abutment selection for prosthetic restorations ; Periodontal approach ; Abutment selection for prosthetic restorations ; Prosthodontic approach ; Diagnostic waxing – provisional restorations ;
Impression materials – impression techniques ; Working casts ; Resin bonded bridges ; Cantilever bridges ; Treatment planning for implants ; Splinting – Telescopic restorations ; Records – Vertical dimension.

Clinical exercise

Clinical examination and treatment planning construction ; Therapeutic treatment of patients with minor of medium prosthetic needs (cooperation with Removable Prosthodontics clinic).

EDUCATIONAL METHODS

- Seminars.

SUCCESSFUL FINALIZATION

- Attendance of at least 80% of the seminars.
- Successful completion of the clinical requirements.

STRENGTHS

Holistic prosthodontic care of the patient in the context of the total patient care clinic.
Students are exposed to a large number of clinical cases with enrichment of their clinical experience.
Students get acquainted with the possibility of cooperation among the dental specialties.
Availability of instructors-specialists who have attended postgraduate studies in Universities of the USA and Europe or have graduated from the Greek postgraduate programs.

WEAKNESSES

Use of more sources for the teaching of the course (multiple books, use of internet for the teaching and demonstration of clinical techniques, etc)
Lack of students and instructors evaluation and self-evaluation.
Lack of adequate update of the teaching books.
Lack of patients' recall.
Large number of students.

OPPORTUNITIES
Expansion of the clinical training of the students to an earlier semester.

THREATS
Focus only to the prosthodontic management of the patients without a holistic view of the patient needs and adherence only to the completion of a specific number of cases-units.

PLANS FOR FUTURE CHANGES
Incorporation of clinical implantology in the total patient care.
Systematic evaluation and self-evaluation.
Addition of seminars with topics of clinical interest.
Use of the internet for the instruction and communication between students-instructors.
Use of multiple teaching sources and books.

(51095C) - Fixed Prosthodontics II, 9th semester & (51095) - Fixed Prosthodontics II, 10th semester

AIM
The aim of the program is to educate the students how to maintain good oral health, function and esthetics of the stomatognathic system by using restorations on natural teeth and restoring loss of soft and hard tissues by artificial substitutes.

OBJECTIVES
Upon completion of 10th semester, the student should be able to:
1. Know the anatomy, histology and physiology of the tissues of stomatognathic system.
2. Know the physiologic function of stomatognathic system, especially mastication, phonetics, swallowing function, static and dynamic occlusion.
3. Use the classic and contemporary methods for examination and diagnosis of problems of the hard and soft tissues of stomatognathic system.
4. Be able to recognize deviations from the physiologic function of stomatognathic system.
5. Be able to recognize clinical signs of pathology of the hard and soft tissues of stomatognathic system.
6. Recognize the clinically acceptable form of every restoration and its influence to the stomatognathic system and surrounding tissues.
7. Recognize the acceptability of possible problems of existing restorations and propose their replacement.
8. Be able to determine the general and specific prognosis of existing teeth and restorations.
9. Create a suitable treatment plan that will gradually treat existing pathology and propose restorations to rehabilitate problems of loss of intraoral tissues.
10. Inform the patient with clarity on the condition of his/her oral health and the proposed or alternative treatment plans.
11. Restore lesions or loss of soft and hard tissues using biologic rules, restoring and improving the basic function of stomatognathic system (mastication, phonetics, esthetics).
12. Protect the pulp and periodontal tissues during the construction of prosthetic restorations and preserve this protection with final restorations.
13. Be able to cooperate with dental laboratories and control the quality of the constructed restorations.
14. Aim to the construction of restorations with desirable morphological, functional and esthetical characteristics.

CONTENT OF THE COURSE
Seminars (9th semester)
Treatment plan-treatment positions ; Dental preparations ; Provisional restorations ; Reconstruction of endodontic treated teeth ; Metal framework for metal-ceramic

restorations ; Final control for metal-ceramic restorations ;Final cementation – selection of cement ; Introduction in dental Aesthetics-Color selection ; Dental ceramic and optical behavior ; Clinical steps for wholeceramic restorations.

Clinical exercise
Clinical examination and treatment planning construction ; Therapeutic treatment of patients with medium to severe prosthetic needs (cooperation with Removable Prosthodontics clinic within the Comprehensive Care Clinic)

EDUCATIONAL METHODS
- Seminars.

SUCCESSFUL FINALIZATION
- Attendance of at least 80% of the seminars.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS
Comprehensive patient care at the prosthodontic patient.
Exposure of student to a variety of clinical procedures enriching his clinical experience.
Exposure of students to multidisciplinary approach for the treatment of patients.
Highly specialized faculty members with studies and experience originating from Europe and U.S.A.

WEAKNESSES
Use of multiple sources to teach the course (textbook, e-learning, e.t.c).
Lack of evaluation and self-assessment for both faculty and students.
Lack of continuous updates of textbooks
Lack of patient recall.
Large number of students.

OPPORTUNITIES
Initiation of clinical education in an earlier semester.

THREATS
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PLANS FOR FUTURE CHANGES
Introduction if implant treatment in the undergraduate curriculum.
Systematic evaluation and self –assessment.
Clinical seminars with topics in Treatment Planning and Treatment Sequencing.
Use of e-class as a method for teaching and communication between faculty and students.
Use of multiple text books.

(51153) - Lasers in Dentistry, 10th semester

AIM
The purpose of this course is to obtain basic knowledge in Laser beams and specific knowledge about their use in Dentistry.

OBJECTIVES
The student at the end of 10th semester should be able to describe:
1. Laser beam characteristics, the types of their emissions and their interaction with dental tissues.
2. The types of Laser beam appliances used in Dentistry and their characteristics.
3. The clinical applications of Lasers in Oral and Maxillofacial Surgery, Endodontology, Periodontology and Implantology.

4. Safety precautions and tissue protection during their use.

CONTENT OF THE COURSE
Basic principles of Laser beams emission; wavelength; biophysics; safety precautions during laser emission; clinical applications of Lasers in Oral and Maxillofacial Surgery; Endodontology; Periodontology and Implantology.

EDUCATIONAL METHODS
- Seminars.

SUCCESSFUL FINALIZATION
- Attendance of at least 90% of the seminars.
- Successful final examination.

STRENGTHS
Adequate coverage of the subject matter.

WEAKNESSES
Demonstration (it has been improved since the current semester) - Clinic

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
Participation of the students in the Clinic during Laser use.

(51021) - Biology and Genetics, 1st semester

AIM
Teaching the basic structures and functions of an eukaryotic cell and the principles of medical genetics

OBJECTIVES
By the end of the first semester students should have the knowledge of:
1. the basic structure and organization of the animal cell
2. the mechanisms of coding and decoding of the genetic information
3. the mechanisms of DNA repair, recombination and evolution
4. the types of intracellular and extracellular communication
5. the types of cell division and the mechanisms of division regulation
6. the principles of Mendelian heredity and
7. the common syndromes due to chromosomal aberrations
8. the molecular basis of common hereditary diseases and that of familial types of cancer
9. the basic principles of gene therapy
10. the basic techniques for the study of the cell

CONTENT OF THE COURSE
Cell organization; Structure and function of macromolecules; DNA replication, repair and recombination; Chromosomes and the regulation of gene expression; From DNA to proteins; Intracellular signaling; Membrane structure and transport; The cytoskeleton; Cell communication; Cell division and its regulation; Basic techniques for the study of the cell; Mendelian heredity; Population genetics; Cytogenetics; Molecular genetics of human diseases; Cancer genetics; Gene therapy.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION

- Successful final examinations.

STRENGTHS

The dynamic progresses in the field of Biology are incorporated into the lectures. This is very appealing for the first-year students, as they are very prone to learn the new achievements and applications of biology in biomedical sciences. In addition, the elimination of unnecessary details helps students to integrate the essentials of biology in their clinical curriculum.

WEAKNESSES

The large number of incoming students in combination with the very few stuff members in Basic Sciences is refractive in using alternative teaching methods (i.e. teaching in small groups, seminars, tutorials, etc). For the aforementioned reasons, we are not yet in the position to introduce practical courses in the lab that would help in the integration of the taught issues and the familiarization with a research environment.

OPPORTUNITIES

To take advantage and invest on the high quality of the incoming students by providing them an array of additional educational activities, like laboratory work, students' research days, etc

THREATS

If we don't succeed in tethering first year students towards the basic and biomedical sciences, we are in danger to loose our own human resources to populate the basic science department in future.

PLANS FOR FUTURE CHANGES

To include laboratory exercises in the course of Biology and Genetics.
To introduce a laboratory course of one semester (optional for students) that will help them become familiarized with the research protocols applied in the School of Dentistry

(51059)-Biochemistry I, 3rd semester

AIM

To familiarize students with the major biochemical processes taking place in the eukaryotic cells

OBJECTIVES

1. To provide the metabolic processes for the major micro- and macro-molecules of the cell
2. To define their physiological role and the importance of their malfunction in the disease state.
3. To provide the mechanisms of bio-molecules' actions in health and disease.

CONTENT OF THE COURSE

Bioenergetics. Principles of thermodynamics. Ways of energy expenditure by the living organisms. Major biochemical reactions during the energy expenditure processes; Glycolysis: carbohydrates and glycobiology; Gluconeogenesis; The pentose phosphate pathway; Mechanisms of glucose / glycogene homeostasis. Regulation of glycolysis / gluconeogenesis. Regulation of glycogen synthesis and degradation. The citric acid cycle: Acetyl-CoA biosynthesis. Reactions and regulation of the citric acid cycle. Oxidative phosphorylation and regulation. Lipids: introduction, structure and function. Lipid catabolism, mobilization and transfer. Lipid oxidation. Ketone bodies. Biosynthesis of lipid acids / ecosanoides. Biosynthesis of: tri acylglycerols, membrane phospholipids, cholesterol, steroids / isoprenoids and amino acids. Principles of azo-compounds' metabolism.

EDUCATIONAL METHODS

- Lectures.

SUCCESSFUL FINALIZATION

- Successful final examinations.

STRENGTHS

The high percentage of the students attending the lectures.

WEAKNESSES

Teaching in the lecture hall than in small groups of students.

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

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(51065) - Biochemistry II, 4th semester

AIM

To familiarize students with the function of cell at the molecular level. The understanding of the flow of genetic information in physiological conditions and how this can be modified by signals acting at the DNA level.

OBJECTIVES

1. to describe in details the regulation of function of all metabolic pathways.
2. to describe the role and the biochemical significance of hormones at the level the cells and the organism.
3. to describe the biochemistry of the major tissues in heath and disease (for instance the central role of liver).
4. to describe the biochemical interactions between the tissues and the mechanisms that regulate metabolism.
5. to describe the mechanisms of cell and tissue responses to extracellular messages in health and disease

CONTENT OF THE COURSE

The flow of genetic information (chromosomes, replication, transcription, translation, post translational modifications, protein targeting). Regulation of gene expression in prokaryotes (operons) and eukaryotes. DNA damage. Mutations. Mechanisms of DNA repair (base excision repair, nucleotide excision repair, mismatch repair MMR). Oncogenes and anti-oncogenes. Carcinogenesis.
Biochemistry of hormones (structure, biosynthesis, catabolism, general mechanism of action, regulation of secretion, actions in target – tissues). Integration of metabolism. Regulation of genetic programs. Regulation of gene expression in eukaryotes (DNA regulatory elements/ response elements/ types of transcription factors/ topography of transcription factors and activation of genetic programs for tissue differentiation). Regulation of transcription factors' activity by external signals (signal transduction, examples from specific pathologies)

EDUCATIONAL METHODS

- Lectures.
- Tutorials.

SUCCESSFUL FINALIZATION

- Successful final examinations.

STRENGTHS
The teaching of the basic biochemical knowledge and of the principles of molecular medicine.

WEAKNESSES

Teaching in the lecture hall than in small groups of students.

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51202) - Biostatistics – 1st semester

AIM
The provision of basic knowledge and the introductory comprehension of Statistics, as applied to Dentistry and to Biomedical research in general.

OBJECTIVES
1. The student should know when, why and in which cases Statistics is applied to Biomedical Research.
2. The student should be able to use simple statistical tests at the end of the semester.
   2.1. To be able to apply simple t-test in pairs.
   2.2. To be able to calculate confidence levels of mean value, difference between mean values and ratio.
   2.3. To be able to apply the X^2 test to assess correlation between categorical variables, heterogeneity, difference between 2 ratios, in pairs and best fit criterion.
   2.4. To know what odds ratio is and what its significance is.
   2.5 To be able to apply the Wilcoxon test for paired and unpaired measurements and the sign test
   2.6. To understand the meaning of the parametric and non-parametric correlation coefficient.
   2.7 To understand the meaning of regression analysis.
3. To be able to understand and judge the statistical results reported in various scientific publications in terms of
   3.1 statistical significance.
   3.2 interval estimation
   3.3 accidental and systematic errors.
   3.4 type I and II errors.
   3.5 the terms of specificity, sensitivity and positive predictive value.
   3.6 to know what random, stratified and cluster sampling are
4. To recognize when more complicated statistical analysis is needed.

CONTENT OF THE COURSE
Necessity of teaching the course to the undergraduate dentistry program; Descriptive statistics; Basic concepts of statistical reasoning; T-test - confidence limits; Qualitative data analysis - X^2 test; Other non parametric statistical tests; Statistical correlation and regression; Introduction to sampling; Evaluation of laboratory findings.

EDUCATIONAL METHODS
- Lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful final examination.

STRENGTHS

The course is adjusted according to the needs of the Dental School and the hours provided by the timetable.
Much experience has been gained and a very satisfactory percentage of 1st year students succeed in the 1st examination period.
The lectures are given exclusively by one instructor.
The students have a single book which includes all the teaching material and is written especially for students in biomedical sciences.
Moreover, the students have an exercise book, which they use to solve exercises.
During student hours, time is allocated to answer queries.

WEAKNESSES

The students who are admitted via transfer from other schools do not attend the lectures of the 1st semester so that they have understanding difficulties. The fact that we cannot check attendance results in a small group of students that do not attend at all.

OPPORTUNITIES

In the past, many lectures were lost due to various reasons related to the School of Dentistry or Medicine (students' assemblies-strikes). This phenomenon has been reduced in the School of Dentistry and movements of the School of Medicine do not affect the School of Dentistry to the same degree anymore.

THREATS

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PLANS FOR FUTURE CHANGES

Possible future plans include greater use of the internet and references to work published in dental journals. However these changes should take into account the volume of information that a student can process in a given period of time.

(51057) – General Histologyc-Embryology, 2nd semester

AIM

To teach students: a) the basic histological techniques for the study of cell morphology at the level of the optic microscopy, b) the basic structure and function of the cell and the histological characteristics of the major human tissues and c) the principles of early and late embryonic growth and of the congenital dysplasias.

OBJECTIVES

Histology: the objective of this course is to teach the student the methods of tissue study at the level of the optic microscope, the structure and function of cells as well as the properties of the major tissues and systems of the organism, like the haemopoietic and the immune system.

Embryology: the objective of this course is to teach the student the basic knowledge on the physiological human growth in utero. In particular the stages from fertilization to blastocoel, the neurulation and embryonic tissue formation, the placenta development and the craniofacial growth. In addition to provide knowledge on the impact of chromosomal aberrations and environmental factors on human embryogenesis.

CONTENT OF THE COURSE

Histology: Histological techniques, structure and function of the cell, epithelial cells, connective tissue cells and extracellular matrix, cartilage, adipose tissue, contractile cells. The

myoskeletal system, the nerve tissue, blood cells, haemopoiesis, the immune system and lymph nodes, the circulatory system.

Embryology: Basic principles of embryonic growth. Early stages of embryonic growth: from fertilization to gastrulation. Neurulation and body formation. Somite development. Craniofacial growth. Late embryonic development. Parturition and congenital abnormalities.

EDUCATIONAL METHODS

- Lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful completion of 90% of the laboratory exercises.
- Successful final examination.

STRENGTHS

To provide students with recently published textbooks (published from 2006-2008) and educational material through the network (e-learning). The laboratorial exercise on the use of light microscopy is aided by new technologies and multimedia.

WEAKNESSES

The relatively small number of students that attend the lectures. The lack of students' examination during the laboratorial exercises. The lack of evaluation of the course and the laboratorial exercises by the students.

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

(51190) - General Microbiology and Immunology, 3rd semester

AIM

The aim is to provide the students with basic knowledge of Microbiology so that the prospective dentist is able to follow the progresses in the field of Microbiology as relates to Dentistry with the goal to advance the health of his patients and the public health as well.

OBJECTIVES

Development of fundamental knowledge pertinent to the subject. Consolidation of knowledge related to the interaction between microbes-host., emphasizing on the pathogenetic mechanisms of infections of special dental interest. Gain of knowledge with regards to the epidemiology, diagnosis of infection and the resistance of microbes against the antimicrobial agents. Familiarization with the establishment and maintenance of a sterile environment. Optimal communication-understanding between the dentist and the laboratory doctor.

CONTENT OF THE COURSE

General properties of bacteria-viruses-fungi-parasites and metazoans; Medical ecology; Interaction between microbes and hosts; Basic immunology; Antibiotics; Chemotherapeutics; Antiseptics; Disinfectants; Bacteriology; Virology; Mycology; Protozoa; Parasites; Hospital infections.

EDUCATIONAL METHODS

- Lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful completion of 90% of the laboratory exercises.

- Successful final examination (oral-written).

STRENGTHS
Instruction of great part of Medical Microbiology in student groups. Great experience of the instructors. Emphasis on microbes responsible for dental infections.

WEAKNESSES
Relatively excessive information taught in a semester.
Limited funding available for student exercise.

OPPORTUNITIES
Optimization of the students' evaluation process using midterm evaluation during the semester.

THREATS
Decrease in the number of Faculty Personnel in the next years.

PLANS FOR FUTURE CHANGES
Further adjustment of the course content to the needs of the dental students. Incorporation of elements related to Oral Microbiology.

(51194) - General Surgery, 7th semester

AIM
Purpose of this course is to teach the students the basic knowledge and principles of general surgery.

OBJECTIVES
The aim is to help the students to get the basic knowledge of general surgery so they will be able to recognize the signs and symptoms of main surgical diseases. Also to help them to become familiar with surgical terminology and the basic surgical procedures.

CONTENT OF THE COURSE
Clinical examinations and investigations for the surgical patient ; Bleeding of upper and lower astrointestinal system ; Acute abdomen ; Obstruction ; Shock ; Deep venous thrombosis ; Pneumothorax – Haemothorax ; Neck swellings ; Management of patients on anticoagulation ; Management of multi trauma patients ; Swelling of thyroid gland ; Surgical infections.

EDUCATIONAL METHODS
- Seminars.
- Clinical training.

SUCCESSFUL FINALIZATION
- Successful final examination.

STRENGTHS
Capability of visiting patients in four General Surgery Clinics of the Hospital ''Evangelismos''.

WEAKNESSES
Time limitations for training on nursing and surgical techniques.

OPPORTUNITIES
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THREATS

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PLANS FOR FUTURE CHANGES

More training on nursing and surgical techniques.

(51154) - Geriatric Dentistry, 10th semester

AIM

The development of the appropriate knowledge, and behavior by the students in order to effectively treat:

1.The elderly dental patients

2. The medically compromised patients who are treated in a Hospital either in an out-patient or an in-patient basis.

OBJECTIVES

The students, after the completion of the Course, must:

1.1 Identify the main aspects of the ageing pathology and determine the dental implications

1.2 Distinguish the age changes from the pathologic alterations

1.3 Make appropriate treatment planning for the elderly dental patient taking into consideration the medical, social, financial, dental and personal aspects of his/ her life.

1.5 Select the appropriate clinical and laboratory techniques for the older individual

1.6 Describe the organization of hospital dentistry applied to the elderly

1.7 Describe the function of day centers for the elderly and the fundamentals of domiciliary dental treatment.

2.1 Recognize & describe the necessary modifications during the dental treatment of the medically compromised patients.

2.2 Recognize which of the medically compromised patients need to be referred to the Hospital for their dental treatment.

2.3 Describe the type of dental practice in a hospital environment.

2.4 Recognize the HIV-related oral lesions both as early clinical markers and as prognostic markers of HIV/AIDS.

2.5 Understand the psychosocial problems of oncology patients in order to be able to communicate with them.

2.6 Recognize the different types and techniques of oncology therapies and their systemic complications in order to communicate with the oncologist.

2.7 Recognize the acute and late complications of oncology therapies in the oral mucosa, jawbones and dental and periodontal tissues.

2.8 Recognize and treat, in collaboration with the patient's oncologist, infectious disease specialist etc, the viral, bacterial and fungal infections of the oral cavity. Furthermore, to recognize the interrelation of oral infections to the systemic infections.

2.9 Know and practice the appropriate dental care before, during and after the completion of oncology therapy, in collaboration with the oncologist, in order to assist in the alleviation of pain and the achievement of an adequate quality of life, as the patient defines it.

CONTENT OF THE COURSE

Epidemiology of ageing ; Medical aspects of ageing ; Orofacial aging ; Oral pathology in the elderly ; Management of dental caries in the elderly ; Periodontal disease in the elderly ; Prosthetic considerations in the elderly ; Oral surgery in the older individual ; Hospital dentistry for the elderly ; Geriatric day-centers and domiciliary treatment ; Treatment planning in the older dental patient ; Introduction to Hospital Dentistry ; The patient in the everyday out patient clinic of the Hospital ; The patient in the emergency clinic ; The patient in the operating room ; The patient with HIV/AIDS ; The patient with cancer ; Psychosocial problems and communication ; The oncology therapies ; Systemic complications and their relation to the oral cavity ; Oral complications as a result of cancer therapies ; Mucositis, Graft versus Host Disease ; Xerostomia, fibrosis, jawbone necrosis ; Oral infections in

patients with immunodeficiency and immunosuppression ; The dental treatment before the initiation, during and after the completion of the oncology therapy.

EDUCATIONAL METHODS

- Seminars.
- Educational hospital visits.

SUCCESSFUL FINALIZATION

- Attendance of 90% of the seminars.
- Successful final examination.

STRENGTHS

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WEAKNESSES

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OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

Add of treatment planning exercises. More educational visits in hospitals and geriatric centers, possibility of practice in the total patient care clinic, written project evaluation.

(51093) - Maxillofacial surgery I, 8th semester

AIM

To provide basic knowledge in order to achieve safety in acting as dental practitioner in the field of Oral & Maxillofacial Surgery.

OBJECTIVES

By the end of the 8th semester the student of dentistry must have basis knowledge in the following fields :

1. Aetiology, clinical features and treatment of facial and neck infections
2. Preprosthetic surgery.
3. Surgical treatment of cysts of the jaws and the soft tissues.
4. Basic principles of Oncological Surgery.
5. Basic Maxillofacial traumatology.
6. Basic Orthognathic Surgery.
7. Treatment of TMJ Diseases.
8. Basic Oral & Maxillofacial Surgery for treatment in children.
9. Cardiopulmonary resuscitation (ATCS).

CONTENT OF THE COURSE

Orofacial and neck infections of dental origin ; Preprosthetic Surgery, Cysts ; Basic principles of Oral and Maxillofacial Surgery.

EDUCATIONAL METHODS

- Lectures.

SUCCESSFUL FINALIZATION

- Successful final examination.

STRENGTHS

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WEAKNESSES

Lectures.

OPPORTUNITIES
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THREATS
Lectures to be completely eliminated.

PLANS FOR FUTURE CHANGES
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(51209A) - Maxillofacial surgery II, 9th semester & (51209) - Maxillofacial surgery II, 10th semester

AIM
To provide knowledge concerning surgical treatment of diseases of the Oral and Maxillofacial region.

OBJECTIVES
By the end of the 10nth semester the student must have knowledge about :
1. Surgical treatment of fractures of the facial skeleton
2. Surgical treatment of orthognathic cases
3. Surgical treatment of benign and malignant tumors of the oral and maxillofacial region
4. Surgical treatment of salivary gland diseases and tumors
5. Surgical treatment of ankylosis and temporomandibular joint diseases

CONTENT OF THE COURSE
Traumatology ; Orthognathic Surgery ; Distraction Osteogenesis, clefts ; Salivary glands ; Oral & maxillofacial Surgery for children ; Preprosthetc – Preimplant surgery ; Surgical Diseases of the maxillary sinus.

EDUCATIONAL METHODS
- Lectures.
- Seminars.
- Clinical exercise.
- Hospital attendance.

SUCCESSFUL FINALIZATION
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS
Students have the opportunity to gain experience of Hospital environment and to participate in major surgical procedures beyond their theoretical lessons, something that did not happen in the past.

WEAKNESSES
Large number of students.

OPPORTUNITIES
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THREATS
The extended strike periods (2 months last year) and the danger of vandalism in the surgery rooms, offices and computers of the Department.

PLANS FOR FUTURE CHANGES
Additional evaluation of students with the use of midterm tests.

Evaluation of the faculty members and given courses.

(51203) – Oral Diagnosis and Radiology I, 3rd semester

AIM

By graduation, all students will have the skills, attitudes and competencies to perform the diagnostic methodology of the diseases of the oral and maxillofacial complex, to organise the treatment planning, to implement – based on the radiation protection principles – the radiographic and imaging techniques that are used in dental practice, to evaluate and interpret the radiographic findings of these techniques and the results of the rest laboratory examinations.

OBJECTIVES

The students at the end of the 3rd semester should:

1. have knowledge of the methodology of taking and registering the medical and dental history.
2. have knowledge of the methodology and be able to use the appropriate means and conditions for performing a clinical examination.
3. be able to perform a complete intraoral and extraoral clinical examination.
4. be able to recognise the normal findings, deviations from normal and distinguish them from the pathological clinical findings.
5. be able to recognise and describe the clinical signs of teeth and periodontal tissues.
6. be able to recognise and describe the clinical signs of oral mucosa.
7. be able to recognise and describe the clinical signs of head, neck and temporomandibular joint.
8. be able to identify the common symptoms of oral and maxillofacial system and describe their general characteristics.
9. have knowledge of the x-rays generation mechanism and their properties.
10. have knowledge of the operation principles of dental radiographic machine and its characteristics.
11. be able to describe the biological effects of radiation and relate them to the biological effects on the human organism.
12. have knowledge of the risks associated with ionizing radiation, the radiation protection principles and be able to apply the appropriate radiation safety procedures for the operator and the personnel, the patient and the general population.
13. have theoretical knowledge concerning the image receptor medium of intraoral and extraoral radiography.
14. have appropriate theoretical knowledge and be able to perform the film processing procedures in the dark room.
15. be able to evaluate the errors attributed to film processing procedures.
16. be able to perform the projection techniques of periapical (paralleling technique – bisecting-angle technique), bitewing and occlusal radiographs.
17. be able to interpret the errors attributed to the projection procedure of intraoral radiographs (periapical, bitewing and occlusal).
18. have knowledge of the principles of tomography and the principles of panoramic radiography.
19. be able to identify the common errors of panoramic radiography.
20. have knowledge of the technique of the lateral cephalometric projection.
21. be able to apply the interpretation methodology of radiographic findings independently of the radiographic technique.
22. be able to recognise the radiographic appearance of normal anatomic structures and their deviations on intraoral, panoramic and cephalometric radiographs.
23. be able to recognise and describe the common pathological radiographic findings on panoramic and cephalometric radiography.

CONTENT OF THE COURSE

Patient history ; Clinical examination ; Signs and symptoms ; Radiation biology – radiation protection ; Intraoral radiographic techniques ; Panoramic radiography.

EDUCATIONAL METHODS

- Seminars in groups.
- Laboratorial exercise.

SUCCESSFUL FINALIZATION

- Follow-up of seminars.
- Successful finalisation of laboratorial exercises.
- Successful final examinations.

STRENGTHS

Small groups of students.
Use of many alternative educational methods.
Laboratory exercise evaluation (OSCE).

WEAKNESSES

The successful teaching of the subject depends on the proper education and training of students on head & neck anatomy, a subject (Medical Course) taught in a previous year.

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

Training of students on electronic charts.

(51207A) – Oral Diagnosis and Radiology II, 7th semester & (51207B) – Oral Diagnosis and Radiology II, 8th semester

AIM

By graduation, all students will have the skills, attitudes and competencies to perform the diagnostic methodology of the diseases of the oral and maxillofacial complex, to organise the treatment planning, to implement – based on the radiation protection principles – the radiographic and imaging techniques that are used in dental practice, to evaluate and interpret the radiographic findings of these techniques and the results of the rest laboratory examinations.

OBJECTIVES

The students at the end of the 8th semester should:

1. have knowledge of the projection techniques of the extraoral radiographs as well as the diagnostic problems that they can solve.
2. have knowledge of the TMJ projection techniques as well as the diagnostic problems that they can solve.
3. be able to choose and interpret the appropriate radiographic projection techniques in order to diagnose fractures of the maxillofacial complex.
4. have knowledge of the projection techniques of sialography and be able to recognise and interpret the findings.
5. have knowledge of the digital image formation procedure.
6. be able to take periapical and bitewing digital radiographs.
7. have essential theoretical knowledge concerning the application of the CT and MRI in dentistry.

8. have knowledge of how the biopsy and cytological examinations can be proved useful in differencing the diagnosis of the diseases manifesting at the oral and maxillofacial complex.
9. have knowledge of how the microbiological examinations can be proved useful in differencing the diagnosis of the diseases manifesting at the oral and maxillofacial complex.
10. have knowledge of the reliability and validity of the hematological as well as the biochemical examinations and be able to interpret their results.
11. be able to implement the principals of the diagnostic methodology and prognosis in dentistry.
12. be able to implement the principles of treatment planning and identify the factors that could modify it.

CONTENT OF THE COURSE
Extraoral radiographic techniques ; Contemporary imaging techniques ; Complementary examinations ; Diagnosis – differential diagnosis ; Treatment planning ; Oral forensic medicine.

EDUCATIONAL METHODS
- Seminars.
- Clinical practice.

SUCCESSFUL FINALIZATION
- Attention of 75% of seminars.
- Successful completion of clinical requirements.

STRENGTHS
Great number of cases of variable degree of complexity in terms of differential diagnosis.

WEAKNESSES
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OPPORTUNITIES
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THREATS
Dependence on the number of patients coming for dental treatment.

PLANS FOR FUTURE CHANGES
Electronic chart filing.

(51207C) – Oral Diagnosis and Radiology II , 9th semester & (51207) – Oral Diagnosis and Radiology II , 10th semester

AIM
By graduation, all students will have the skills, attitudes and competencies to perform the diagnostic methodology of the diseases of the oral and maxillofacial complex, to organise the treatment planning, to implement – based on the radiation protection principles – the radiographic and imaging techniques that are used in dental practice, to evaluate and interpret the radiographic findings of these techniques and the results of the rest laboratory examinations.

OBJECTIVES
The students at the end of the 10th semester should:
1. be able to accomplish a complete examination of a patient registering and recording all the findings.

2. be able to recognise the jaw bone lesions and classify them by radiological criteria.
3. be able to differentiate radiolucent or radiopaque periapical lesions.
4. be able to differentiate pericoronal or intrarradicular radiolucent lesions.
5. be able to differentiate unilocular radiolucent lesions.
6. be able to differentiate multilocular radiolucent lesions.
7. be able to differentiate radiolucent lesions with ill defined borders.
8. be able to differentiate a mixed radiolucent and radiopaque lesions.
9. be able to differentiate radiopaque lesions.
10. be able to differentiate soft tissue calcifications or foreign bodies.
11. be able to collect and evaluate dentomaxillofacial data as evidence for forensic cases.
12. have knowledge of and describe the radiological findings of perfect and imperfect fractures of the tooth's root and crown.

CONTENT OF THE COURSE
Extraoral radiographic techniques ; Contemporary imaging techniques ; Complementary examinations ; Diagnosis – differential diagnosis ; Treatment planning ; Oral forensic medicine.

EDUCATIONAL METHODS
- Seminars.
- Clinical practice.

SUCCESSFUL FINALIZATION
- Attention of 75% of seminars.
- Successful final examination.

STRENGTHS
Great number of cases of variable degree of complexity in terms of differential diagnosis.

WEAKNESSES
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OPPORTUNITIES
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THREATS
Dependence on the number of patients coming for dental treatment.

PLANS FOR FUTURE CHANGES
Electronic chart filing.

(51079)- Special Nosology, 6th semester

AIM
Aim of the course is the acquisition of basic knowledge on Special Nosology so that the student be able to recognize the broader pathologic entities as well as those related to dentistry and to implement this knowledge χρησιμοποιήσει to his training (undergraduate, postgraduate, lifelong), clinical practice and research.

OBJECTIVES
To gain knowledge on the content of the course at a theoretical and clinical level.

CONTENT OF THE COURSE
Infectious Diseases (Parotitis, Measles, Infectious Mononucleosis, Herpes); Infectious Diseases (Diptheria, Meningitis, Encephalitis); Infectious f the oropharynx and the upper aerodigestive tract (Tonsillitis, Pharyngitis, Oropharyngeal mycoses, Laryngitis, Tracheitis); Infections of the Lung and the Pleura (Pneumonias, Pleuritides); Acquired Immunodeficiency

Syndrome (AIDS); Jaundice (hepatocellular, obstructive, hemolytic); Hepatitis (A,B,C, Autoimmune. Prevention); Diseases of the Upper Gastrointestinal System (Esophagitis, Gastroesophageal reflux, Hiatus hernia, Gastroduodenal ulcer, Stomach neoplasms); Valve diseases (stenosis-insufficiency of aortic and mitral valves); More frequent congenital cardiopathies; Coronary disease (Angina, Myocardial Infarct); Heart failure; Arterial hypertension; Anemias (Iron Deficiency, Megalboblastic); Blood Dyscrasias (Leukemias, Agranulocytosis, Polycythemia); Bleeding disorders (Hemorrhagic diatheses: congenital-acquired).
– Kidney failure (Acute-Chronic); Connective tissue diseases (Sjogren syndrome, Adamntiades-Behcet syndrome, Systemic Lupus Eryhtematosus, Scleroderma); Endocrine Gland Diseases (Pituitary Gland, Thyroid gland, Adrenal glands); Metabolic diseases (Diabetes Mellitus, Lipid disorders).

EDUCATIONAL METHODS

- Lectures.
- Seminars.
- Clinical exercise.

SUCCESSFUL FINALIZATION

- Attendance of 90% of seminars.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS
Student participation in small groups in patient clinical examination.

WEAKNESSES
Small attendance of lectures.

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
The course content can include: indications and adverse effects of non steroidal anti-inflammatory drugs and the anticoagulants.

(51220) - Basic Implantology, 10th semester

AIM
To familiarize the student with the established principles of osseointegration, the underlying surgical principles, the physiology of the tissues surrounding the osseointegrated implants, as well as the basic principles of the implant-based prosthetic restoration. Special attention is given to the indications and contra-indications of implant placement, the treatment planning for their position in the jaws as well as the principles of their maintenance.

OBJECTIVES
At the end of the 1oth semester, the student should:

1. Know the basic principles of osseointegration and the biologic behavior of implants.
2. Know the indications and contra-indications of osseointegrated implant application.
3. Select the cases that can be treated with implants and to choose the adequate treatment plan.
4. Evaluate the medical status of the patients.

5. Be able to perform radiographic evaluation of cases planned to be restored with osseointegrated implants.
6. Know the theoretical aspects of the surgical technique of implant placement and the special surgical procedures.
7. Know the restoration of complete or partial edentulousness with implants.
8. Know the restoration of bone with implants.
9. Know periimplantitis.
10. Know the maintenance and the long term outcome of implants.

CONTENT OF THE COURSE
Biologic behavior of implants ; Bone biology ; Osseointegration ; Implant materials ; Patient medical evaluation ; Radiographic presurgical evaluation ; Surgical implant placement ; Special surgical procedures ; Diagnosis ; Treatment planning for complete edentulousness; Dental Impression and Casts ; Single Implants ; Restoration of partial edentulousness; Impant microbiology ; Pathogenesis of periimplant tissue diseases ; Maintenance and long term outcome of implants.

EDUCATIONAL METHODS
- Seminars.

SUCCESSFUL FINALIZATION
- Attendance of 80% of seminars.
- Successful final examination.

STRENGTHS
Covers the spectrum of the subject

WEAKNESSES
Lack of laboratory or clinical exercises

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
Introduction to laboratory exercises of implant placement.
Introduction to clinic.

(51054) - Introduction to Dentistry and Behavioral Sciences, 1st semester

AIM
The course introduces the students to the history of dentistry as well as to modern dental practice. Furthermore, it gives them an understanding of the way dentistry is linked to the psychosocial background of the individuals either receiving or providing dental care, as well as the way behavioral sciences contribute to the understanding and prevention of oral health problems.

OBJECTIVES
By the end of the 1st semester students should:
1. Be aware of the structure and function of the Dental School's curriculum
2. Be able to obtain the knowledge concerning dental science and its practice
3. Be able to form an opinion on the profile of contemporary dentist
4. Be able to understand how dental science developed over time
5. Be able to appreciate the importance of critical thought for scientists

6. Be aware of the complex nature of human behavior and its importance on effective dental practice.
7. Be able to discern the effect of modern societal organization, on the personal values, beliefs and health behavior of the individuals as well as on the management of professional matters
8. Be able to understand the manner in which different social experiences determine the level of health behavior of the individuals

CONTENT OF THE COURSE
Be aware of the content and aims of each dental course ; Profile of the contemporary dentist ; History of dentistry ; Philosophy basics ;Psychology basics ; Sociology basics ; Health sociology basics.

EDUCATIONAL METHODS
- Lectures.
- Laboratorial Exercise.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The education of behavioral sciences is done for the first time by specialists who also are clinical dentists.
Students write papers in subjects related to psychology and sociology (participation is 70-80% and the papers are of high quality)

WEAKNESSES
Old-fashioned mode of instruction

OPPORTUNITIES
The positive outlook that first year students have gives the opportunity for the implementation of more modern teaching methods.

THREATS
Lack of permanent teaching personnel for psychology and sociology.

PLANS FOR FUTURE CHANGES
Introduction to teaching of bioethics
Textbook writing
Change in the way of teaching, provided that the required number of instructors is secured.

(51151) - Introduction to Informatics, 3rd semester

AIM
The purpose of 'Introduction to Informatics' is to provide basic knowledge so that the student will be able to follow the progress of informatics, especially as it pertains to Dentistry, and effectively use applications during undergraduate and postgraduate training, life-long learning, in the clinical setting and in research.

OBJECTIVES
At the end of successful completion, the student should be able to:
1. Describe the binary and hexadecimal system of numbers and the encoding of characters in the ASCII and Unicode system.
2. Describe the basic components of a computer, give technical specifications and be able to select the appropriate computer system according to his/her needs.

3. List the most common operating systems.
4. Describe data storage media and explain principles of file storage.
5. Describe the basics of networking. Effectively take measures against internet threats, such as viruses.
6. Perform basic file manipulation functions, such as copy, move, delete, etc.
7. Create and edit documents using a word processor, including formatting of styles, table creation and editing, insertion of pictures.
8. Create and edit slide presentations, including custom animations, for use in scientific meetings.
9. Create and edit spreadsheets for simple mathematical calculations and graphs.
10. Edit digital images using simple functions such as cropping, resampling, brightness and contrast adjustment, etc.
11. Send and receive email messages.
12. Access web pages.
13. Perform internet searches using the most common search engines, including searching for scientific papers on PubMed, Science Citation Index and Google Scholar.

CONTENT OF THE COURSE

Basic concepts ; computer architecture, technical specifications, operating systems ; Operating system basic functions ; Networks, Internet, Computer security ; Internet applications, e-mail, web ; Internet applications, e-mail, web ; Word processing ; Word processing ; Spreadsheets ; Images and image manipulation ; Presentations ; Presentations.

EDUCATIONAL METHODS

- Seminars.
- Laboratorial exercise.

SUCCESSFUL FINALIZATION

- Follow-up of the 75% of seminars and laboratorial exercises.
- Presentation of final work.

STRENGTHS

Practical student training on computers using real-life examples.
Small number of students.
Training in the 3rd semester, so that the students can apply the acquired knowledge during the subsequent years of their studies.

WEAKNESSES

Heterogeneity in the level of preexisting knowledge of the students, which causes difficulties during the class.
The classroom does not facilitate the communication between the teacher and the students.
The timetable does not aid attendance.

OPPORTUNITIES

The ever increasing experience of students with computers and their knowledge on the subject, create opportunities for more focused content towards the dental and scientific applications.
The availability of Internet sources facilitates the transition of the course towards problem-based learning.

THREATS

The majority of the students have now the basic computer knowledge and a large part of the teaching material is already known. Several of them have attended or acquired ECDL. This fact reduces their interest in the course.
The rapid computer evolution and the new editions of the software require Continuing renewal of the course content and changes in the course schedule.

PLANS FOR FUTURE CHANGES
Schedule changes with elimination of the 3 seminars and replacement with practical training. The theoretical aspects will be covered in interstitial Lectures during the practical training sessions so to highlight their usefulness and to link them directly with the practical application.
Change in the order of the classes so that the basic knowledge of using the internet, literature searching and image processing precede the PowerPoint, Word και Excel applications.
More emphasis on dental knowledge (although this has already been the course direction). E.g.: Emphasis on the knowledge required for preparing good presentations for scientific meetings. Writing of a scientific article. Searching of scientific literature. Creating a network for domestic or office use.
Selected topics for the final project. Presentation of final projects in two or three sessions to allow for more time. Handing of the projects before the final presentation, so to receive instructor comments and to have the opportunity to improve.

(51182) - Endodontics I, 5th semester & (51215A) - Endodontics II, 6th semester

AIM
The understanding of the physiologic and pathologic functions of the pulp and the periradicular tissues, the adequate knowledge of the principles, techniques, instruments and materials utilized during the endodontic therapy, and the ability to perform endodontic therapy on single and multi/rooted extracted teeth.

OBJECTIVES
The students by the end of the 6th semester should be able to:
1. Understand the basic functions of the pulp-dentin complex and periapical tissues as well as the changes occurring during aging or inflammatory process.
2. Classify the indications and contra-indications of endodontic treatment
3. Describe the normal morphology of the root canal system and recognize the deviations in anatomy upon observation of extracted human teeth
4. Understand the basic principles of endodontic treatment and be comfortable with the isolation of the tooth with rubber dam
5. Select the appropriate instruments and materials used during endodontic treatment and quote their mechanical characteristics
6. Prepare access cavities and locate all canals on human extracted teeth as described in the textbook
7. Operate easily the appropriate instruments and materials used in the chemomechanical preparation of simulated plastic teeth and/or extracted teeth .
8. Operate easily the appropriate instruments and materials used in the obturation of simulated plastic teeth and/or extracted teeth
9. Quote the complications occurring during endodontic treatment and describe their aetiology and management
10. Describe the principles and techniques for removal of obturating materials during the retreatment of failed endodontically treated teeth.
11. Describe the principles and techniques for restoration of endodontically treated teeth and prepare the space for post placement

CONTENT OF THE COURSE
Root canal system anatomy ; Armamentarium in Endodontics ; Access cavity preparation ; Root canal cleaning and shaping ; Root canal obturation ; Coronal restoration of endodontically treated teeth ; Procedural errors during endodontic therapy ; Microbiologic aspects of Endodontics ; Diseases of the pulp and the periapical tissues ; Healing of the inflamed periapical tissues ; Dental pain ; Differential diagnosis in Endodontics ; Case

selection for endodontic therapy ; Sterilization-asepsis in Endodontic treatment ; Endodontic-periodontic lesions ; Systemic diseases and Endodontics ; Endodontic-Orthodontic-Prosthodontic interrelationships ; Root fractures ; Vital pulp therapy- therapy on deciduous teeth ; Endodontic therapy on traumatized teeth ; Endodontic treatment of teeth with immature apices ; Endodontic implants- endodontic treatment for over-denture abutments ; Surgical endodontics ; Single-visit endodontic therapy ; Geriatric endodontics ; Microleakage in Endodontics ; Success and failure in Endodontics.

EDUCATIONAL METHODS

- Lectures.
- Seminars in groups.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminars.
- Successful completion of 100% of the laboratory exercises.
- Successful interim written exams (three).
- Successful final examination.

STRENGTHS

Instructors-students ratio (1:6).
Practice on a satisfactory number of teeth.
Satisfactory practical training.

WEAKNESSES

Reduced attendance of students in non-required activities.
Lack of clinical simulation.
Insufficient time for theoretical training.
Insufficient number of faculty members and specialized personnel.

OPPORTUNITIES

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THREATS

Cancellation of lectures due to several reasons (strikes etc).

PLANS FOR FUTURE CHANGES

Laboratory training in the simulation laboratory.
Increase of the number and the length of the seminars.
Use of internet.
Case presentations by students.
Improvement of the evaluation methods.

(51215B) - Endodontics II, 7th semester & (51215C) - Endodontics II, 8th semester

AIM

Knowledge and skills to prevent, diagnose and treat any kind of pulpal disease or pulp-induced periapical pathosis. Ability to differentiate pain of dental origin and treat pain of endodontic origin. Dexterity in performing endodontic therapy in uncomplicated cases, such as initial endodontic treatment in single and multi-rooted teeth with simple anatomy, as well as to retreat single rooted teeth with failed endodontic therapy.

OBJECTIVES

The student by the end of the 8th semester should be able to:

1. Evaluate symptoms and signs after clinical and radiographic examination and make correct diagnosis.

2. Clarify treatment planning to the patient.
3. Perform endodontic treatment in uncomplicated cases successfully.
4. Evaluate the quality of existing endodontic treatment following the appropriate criteria .
5. Perform endodontic treatment in different age groups including the elderly..
6. Know the characteristics of orofacial pain, including pain that results from trauma to the pulp-periapical tissues.
7. Diagnose pain of endodontic origin and perform the appropriate treatment for pain relief .
8. Describe the diagnostic criteria and the treatment of dental trauma, as well as the treatment of teeth with incomplete root formation.
9. Recognize symptoms associated with iatrogenic trauma during endodontic treatment and recommend the appropriate treatment .

CONTENT OF THE COURSE

Armamentarium in Endodontics ; Case selection in Endodontics ; Root canal morphology (clinical and radiographic interpretation) ; Estimation of working length ; Chemo-mechanical preparation techniques of the root canal ; Root canal obturation methods ; Complications during preparation and obturation of the root canal ; Retreatment of endodontic failures ; Treatment of endodontic emergencies in Endodontics ; Microbial flora and disinfection of the root canal ; Pulpal and periapical inflammation ; Restoration of endodontically treated teeth ; Endo-periodontic problems ; Management of tooth resorption ; Endodontic treatment of teeth with immature apex ; Crown and root fractures ; Avulsion of teeth ; Treatment of periapical lesions ; Systemic administration of drugs - Drug prescription ; Modern technologies in Endodontics ; Necessity of endodontic surgical treatment ; General Discussion.

EDUCATIONAL METHODS

- Seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of 80% of the seminars.
- Successful completion of the clinical requirements.

STRENGTHS

Large number and variety of clinical cases.
Instructors with postgraduate studies in universities of the USA and Europe.
Existence of postgraduate program, resulting in the conduct of many research protocols and the rapid integration of new knowledge in the educational process.

WEAKNESSES

Insufficient time for theoretical training.
Lack of adequate number of experienced personnel.
Periodical deficiencies in materials-instruments.
Lack of capability for patients' reevaluation.

OPPORTUNITIES

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THREATS

Cancellation of lectures due to strikes.

PLANS FOR FUTURE CHANGES

Patients' recall system.
Development of methods for more relevant student-faculty evaluation.
Introduction of new technologies in the clinical practical training.
Exploitation of internet capabilities.

(51215D) - Endodontics II, 9th semester & (51215) - Endodontics II, 10th semester

AIM

In depth knowledge and skills to prevent, diagnose and treat any kind of pulpal disease or pulp-induced periapical pathosis. Ability to differentiate and treat pain of dental origin. Ability to diagnose and treat the traumatic injuries of the teeth. Knowledge of the endodontic techniques used in the treatment of teeth with peculiar anatomy and for the bleaching procedures of endodontically treated teeth. Finally, the acquisition of dexterity in the retreatment of failed endodontic treatments.

OBJECTIVES

The student by the end of the 10th semester should be able to:

1. Perform endodontic treatment in uncomplicated cases successfully
2. Evaluate the quality of existing endodontic treatment following the appropriate criteria
3. Perform endodontic treatment in different age groups including the elderly
4. Diagnose and treat pain of endodontic origin.
5. Understand the basic principles of the science of biomaterials and pharmacology in relation to Endodontics
6. Describe the diagnostic criteria and the treatment of dental trauma
7. Recognize symptoms associated with iatrogenic trauma during endodontic treatment and recommend the appropriate treatment
8. Understand the indications for endodontic surgery and be able to choose between conservative and surgical treatment of failed endodontic cases
9. To be knowledgeable of the techniques used for the bleaching of endodontiacally treated teeth
10. To cooperate with other colleagues, if necessary, for the treatment planning and the total care of the patient.
11. Understand the criteria of endodontic success and failure and to present with treatment alternatives.

CONTENT OF THE COURSE

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EDUCATIONAL METHODS

- Seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

Large number and variety of clinical cases.
Instructors with postgraduate studies in universities of the USA and Europe.
Existence of postgraduate program, resulting in the conduct of many research protocols and the rapid integration of new knowledge in the educational process.

WEAKNESSES

Insufficient time for theoretical training.
Lack of adequate number of experienced personnel.
Periodical deficiencies in materials-instruments.
Lack of capability for patients' reevaluation.

OPPORTUNITIES

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THREATS

Cancellation of lectures due to strikes.

PLANS FOR FUTURE CHANGES
Patients' recall system.
Development of methods for more relevant student-faculty evaluation.
Introduction of new technologies in the clinical practical training.
Exploitation of internet capabilities.

(51204) – Epidemiology, 4th semester

AIM
The student acquires the knowledge and faculties that are essential in order to:
1. Conduct epidemiologic research.
2. Be informed on scientific research issues.
3. Study scientific magazines.

OBJECTIVES
The course constitutes an introduction to Epidemiologic research.
Upon course completion, the student will be able to:
1. Calculate and interpret the indicators of disease frequency and disease association (e.g. prevalence, incidence, relative risk, attributable risk)
2. Evaluate descriptive epidemiologic data taking into consideration the characteristics of persons, time, and place.
3. Point out the advantages and disadvantages of different epidemiologic study designs in the investigation of disease etiology (e.g. clinical trials, cohort studies, case-control studies, cross-sectional studies).
4. Formulate etiologic hypotheses between various causative factors and various diseases.
5. Determine sources of systematic and random error in epidemiologic research and propose strategies of control.
6. Locate complex problems that result at the application of scientific documentation.

CONTENT OF THE COURSE
Measurement of Disease Frequency ; Measurement of Disease Association ; Descriptive Studies ; Cohort Studies ; Case-control studies ; Intervention studies ; Systematic error ; Confounding error ; Random error-Causality.

EDUCATIONAL METHODS
- Team-centered learning.
- Seminar training.

SUCCESSFUL FINALIZATION
- Attendance of 90% of seminar training sessions.
- Successful interim written exams (9 individual exercises , 9 group exercises, 9 group applications).
- Successful written exam (1 individual application).

STRENGTHS
Active participation of the majority of the students.
Acquisition of deep knowledge.
Direct application of knowledge.
Co-operation between students.
Development of critical thinking, argumentation.
Interesting and pleasant instruction mode.

WEAKNESSES

Time requirements for the preparation of the material before the beginning of the class as well as after the end of the class .
Requirements for teaching personnel.
Practical problems that require direct solutions.

OPPORTUNITIES
Completion of research project: questionnaire preparation, data collection, data analysis, results presentation.
Collaboration with other disciplines for small scale research activities.

THREATS
Requirement for teaching assistants for implementing team-centered learning method.

PLANS FOR FUTURE CHANGES
Development of critical evaluation of dental literature by the students.
Further enhancement of debate / argumentation among student groups.

(51306) - Applied Psychology in Dentistry, 9th semester

AIM
To provide students an understanding of social and psychological matters related to dental care of their patients, with special emphasis on dentist - patients relationships.

OBJECTIVES
By the end of the 9th semester the students should:
1. Be able to comprehend the importance of social and psychological parameters which are associated with oral health and the practice of dentistry.
2. Be able to exhibit the appropriate skills in communication as are necessary for dental practice.
3. Be able to understand the mechanisms of development and characteristics of dental stress and anxiety and be able to manage it.
4. Be able to recognize and assess the overt and latent symptoms of pain in clinical practice.
5. Be able to understand the importance of behavioral change of individuals regarding oral health.
6. Be able to acquire: a) a sense of bioethics related to dental profession and b) a sense of the ethical problems
7. and moral dilemmas that arise in dental clinical practice and which the dentist must solve for his patients, for himself and for society.

CONTENT OF THE COURSE
The social and professional roles related to dental practice ; Personality ; The dentist-patient relationship ; Communication ; Pain, Fear, Anxiety ; Dental Practice ; The philosophy of prevention and behavior modification of the patient ; General principles of bio-ethics; Bio-ethics and Dentistry.

EDUCATIONAL METHODS
- Group seminars.

SUCCESSFUL FINALIZATION
- Attendance of 80% of seminars.
- Active participation of students in the sub-groups and the discussion.

STRENGTHS
Small number of students.
Discussion in very small groups.
Active participation of all students.

WEAKNESSES
Often there is not enough time to discuss all students' views.

OPPORTUNITIES
Students' interest and the positive course evaluation gives the opportunity fir the introduction of more modern instruction methods.

THREATS
The lack of permanent teaching personnel for the larger part of the course.

PLANS FOR FUTURE CHANGES
Increase the number of practical exercises.

(51047) – Medical Physics , 1st semester

AIM
Teaching the basic principles of Physics applied in Medicine. More specifically, the topics related to the functions of human body and to the use of radiation in medical technology for the diagnosis and treatment of diseases.

OBJECTIVES
By the end of the 1st semester the student must have the following knowledge and competencies
1. on the ways of matrix-ionizing radiation interaction
2. on the diagnostic applications of x-rays in medicine and dentistry. The student should be able to understand the critical parameters that influence the quality of an x-ray image and consequently its diagnostic application.
3. on the biological effects of ionizing radiation. The student should know the biological impact of ionizing radiation and the inducing mechanisms
4. on the basic principles of radioprotection. The student should know the basic rules of radioprotection concerning both the personnel and the patients and the ways to reduce the dose of radioactivity obtained.
5. on radiodrugs and principles of nuclear medicine. The student should know the radiodrugs applied for diagnostic and therapeutic purposes and the mechanisms through which they are released from the organism. The student should understand the use of radiodrugs in nuclear medicine applications and estimate the radioactive dose stemming out from their use.
6. Principles of radiotherapy. The student should know and compare the radiotherapy techniques used in cancer treatment.
7. Biomaterials. The student should know the properties of biomaterials and their applications in medicine and dentistry.
8. Waves and ultrasounds. The student should know the principles of sound waves and understand the way that the ultrasound images are produced in medicine, as well as their biological significance.
9. Heat. The student should know the basic principles of heat in relation of its application in medicine.
10. Electricity- Magnetism. The student should know the basic principles of electricity, magnetism and electromagnetic waves, as well as how they relate to the functions of the human body and how they are used in clinical applications.
11. Physics of the human body. The student should know the principal physical lows that relate to the function of the human body.

CONTENT OF THE COURSE

Medical radiophysics. Matter composition. Radioactivity, X-Rays. Interactions between ionizing radiation and matter. Measurement of ionizing radiation. Biological effects of ionizing radiation. Principles of Radiodiagnostics. Principles of nuclear medicine. Principles of radiotherapeutics.
Mechanics – Waves. International units system (SI). Biomaterials. Waves, Ultrasounds.
Heat: mechanical theory of heat, temperature-calorimetry and thermal conductance. Medical applications of heat. Application of thermodynamics in biology. Introduction to environmental physics and pollution.
Electricity-Electronics: magnetism, static electricity, electric currents, electromagnetic phenomena, introduction to electronics, electric signal- electricity of the human body. Recording currents of the human body. Effects of electricity in humans.
Physics of the human body. Terminology and counts. Muscles and forces. Physics of the skeleton, pressure on human body, physics of the cardiovascular system. Electric signals from the body. Sound and talk. Physics of the ear and hearing.

EDUCATIONAL METHODS

- Lectures.
- Laboratorial Exercise.

SUCCESSFUL FINALIZATION

- Successful final examinations.

STRENGTHS

Education in medical physics is tightly related to the contemporary technologies applied in clinical work.

WEAKNESSES

The low number of students attending the lectures.

OPPORTUNITIES

The update of the infrastructure of the Lab of Medical Physics will allow in the near future the acquaintance of the students with the contemporary techniques of medical imaging.

THREATS

The upgrading of the infrastructure of a students' laboratory cannot follow the rapid and continuous development in the techniques of medical imaging.

PLANS FOR FUTURE CHANGES

The improvement of the educational material and the upgrading of the students' laboratory

(51046) - Medical Chemistry I, 1st semester

AIM

To elucidate the principles of Chemistry in relation to biomedical sciences. Emphasis is given in the description of chemical and biochemical reactions taking place in the living organisms and of the biological functions at the molecular level.

OBJECTIVES

To familiarize students with the terminology, the objectives and the basic principles of Chemistry and to reveal the molecular basis of biological sciences. This way the students will be able to understand the chemical and biochemical procedures in the living organisms.

CONTENT OF THE COURSE

Atomic structure. Periodic system of elements. Chemical bonds-Molecules. Intermolecular forces. Thermodynamics-Chemical equilibrium. Acids and bases, Oxidation and Reduction reactions.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The high number of students attending the lectures. The adaptation of the course content to the needs of Biochemistry.

WEAKNESSES
Teaching in the lecture hall than in small groups of students. The content of the lectures is not sufficiently adapted to the needs of Dental students.

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51246) - Medical Chemistry II , 2nd semester

AIM
To elucidate the principles of Chemistry in relation to biomedical sciences. Emphasis is given in the description of chemical and biochemical reactions taking place in the living organisms and of the biological functions at the molecular level.

OBJECTIVES
1. To teach the principles of organic chemistry
2. To teach the structure and function of biomolecules
3. To inter relate the chemical and biochemical processes in biological systems
4. To adjust the lectures in the field of biomedical sciences

CONTENT OF THE COURSE
Carbon chemistry concepts, functional groups of biomolecules, stereochemistry, carbohydrates, amino acids and proteins, enzymes- enzyme kinetics, co-enzymes, nucleic acids, lipids.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The high number of students attending the lectures. The adaptation of the course content to the needs of Biochemistry.

WEAKNESSES
Teaching in the lecture hall than in small groups of students. The content of the lectures is not sufficiently adapted to the needs of Dental students.

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51156) - Forensic Dentistry, 9th semester

AIM
The objective of this course is to teach the students the principles of Forensic Dentistry in order to be capable to solve Forensic Dentistry cases.

OBJECTIVES
The students at the end of the 9th semester should:
1. be familiar with the principles of Forensic Odontology.
2. know the importance of keeping accurate Medical and Dental records.
3. be able to participate in teams of Forensic scientists.
4. to be able to offer in various occasions of social need
5. be prepared to take part in DVI (disaster victim identification) teams.
6. be familiar with the basic principles of dental ethics and law.

CONTENT OF THE COURSE
The history of Forensic Odontology ; Identification methods ; Dental identification methods ; Identification of domestic violence victims ; Mass disaster victim identification ; Dental ethics and Law ; Contribution in Archaeological and Anthropological studies.

EDUCATIONAL METHODS
- Seminars.
- Laboratory training.

SUCCESSFUL FINALIZATION
- Attendance of 90% of seminars.
- Successful final examination.

STRENGTHS
Small number of students. Training on real cases
(persons of unknown identity, victims of mass disasters).

WEAKNESSES
Limited laboratory training.

OPPORTUNITIES
Opportunity for collaboration with state agencies such as police, hospitals, embassies, Greek Justice, frensic agencies

THREATS
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PLANS FOR FUTURE CHANGES
Course evaluation by the students
Considerations to lengthen the laboratory training.

(51158) - Oral Histology and Embryology, 2nd semester

AIM

Knowledge of the embryonic development and the microscopic structure of the soft and hard tissues of the orofacial region, jawbones and salivary glands, and correlation of their structure to their function.

OBJECTIVES

At the end of the 2nd semester, the dental student should be able to:

1. Describe and explicate the embryonic development of the orofacial region, jawbones, and salivary glands.
2. Describe and explicate the microscopic structure of the normal soft and hard tissues (teeth and jawbones) of the orofacial region, and the major salivary glands.
3. Identify using the light microscope the normal soft and hard tissues (teeth and jawbones) of the orofacial region, and the major salivary glands, and recognize their main microscopic features.
4. Correlate the microscopic structure of the normal soft and hard tissues of the orofacial region, and the major salivary glands, to their function.
5. Correlate, in a primary level, the microscopic features of the oral tissues with changes in their clinical appearance.

CONTENT OF THE COURSE

Orofacial embryology ; Histology of the oral mucosa ; Histology of the salivary glands ; Odontogenesis – Tooth embryology ; Histology of the enamel ; Histology of the dentin ; Histology of the dentin-pulp complex ; Histology of the periodontal ligament ; Histology of the gingiva and gingival sulcus ; Histology of the jawbones and cementum ; Mechanisms of tooth eruption ; Molecular mechanisms of odontogenesis.

EDUCATIONAL METHODS

- Lectures.
- Laboratory training.

SUCCESSFUL FINALIZATION

- Successful completion of 82% of laboratory exercises.
- Successful examination.

STRENGTHS

Incentives for student participation with continuous laboratory evaluation and paper writing.
Limited material allows better student comprehension.

WEAKNESSES

In the second semester, the students do not have fundamental theoretical knowledge necessary for course comprehension and communication with the instructors.
The course focuses on clinical useful knowledge. However, considering the significant time gap between teaching the course (2^{nd} semester) and the application of the acquired knowledge (after the 5^{th} semester), the students a) cannot realize its usefulness and b) when they enroll in semesters requiring this knowledge, they have forgotten it.
Lack of personnel and secretary assistance and large number of students limit the capabilities of adequate laboratory training and evaluation.
Frequent specimen wear – difficulty in obtaining/preparing new specimens, especially those of hard dental tissues limit the capabilities of adequate laboratory training.

OPPORTUNITIES

Closer collaboration with the various disciplines that participate in the teaching of the course, in order to put emphasis on the acquisition of knowledge of clinical value.
Co-operation with the course of General Histology and Embryology.

THREATS
Downgrading due to emphasis on clinical courses.

PLANS FOR FUTURE CHANGES
The General Histology and Embryology course could precede the Oral Histology course.
Completed internet notes.
Electronic archive of photomicrographs Accessible through the internet.
Interactive educational applications.
Replacement of microscope use with a digital system, e.g. Digital Slide box / Digital Microscope.

(51077A) - Removable Prosthodontics I, 5th semester & (51077) – Removable Prosthodontics I, 6th semester

AIM
The students should acquire the theoretical knowledge in order to be able to undertake the clinical construction either of complete or partial dentures.

OBJECTIVES
The student at the end of the 6th semester should be able to:
1. Analyse the theoretical data and identify particularities in anatomy and physiology of the stomatognathic system of the completely and partially edentulous patients
2. Describe the materials and techniques for constructing complete dentures
3. Construct a pair of complete laboratory dentures according to the laboratory manual
4. Describe the clinical stages for constructing complete dentures
5. Classify the partially edentulous patients according to Kennedy's classification
6. Describe the parts of a partial denture
7. Use a surveyor according to the laboratory manual
8. Design metal frameworks for partial dentures
9. Describe the materials, laboratory and clinical techniques for the construction of partial dentures
10. Check and assess all laboratory stages needed for the construction of complete and partial dentures

CONTENT OF THE COURSE
5th semester
A. Introduction in Removable Prosthodontics
History review ; Basic elements of the anatomy of the stomatognathic system ; Basic elements of the physiology of the stomatognathic system ; Jaw relationships ; Articulators ; Denture Materials ; General Principles and techniques for making impressions ; General Principles of occlusion ; General Principles for the selection and arrangement of artificial teeth ; Processing of removable prostheses ; Functional stability of removable prostheses.
B. Theoretical guidelines for constructing complete dentures
Examination of Edentulous Patients – Mouth preparation ; Impression making ; Recording of jaw relationships ; Try-in procedures ; Insertion – Selective grinding – Delivery of Complete Dentures ; Pitfalls – Post-insertion problems.
C. Laboratory exercises in constructing complete dentures

Construction of customized impression trays (close-fitting and spaced trays) ; Construction of temporary denture bases ; Construction of wax record rims ; Transferring the jaw relationships on a Hanau articulator ; Setting up artificial teeth ; Waxing up the trial denture ; Try-in procedures on the articulator ; Selective grinding.

6th semester
A. Theoretical guidelines for constructing partial dentures

Introduction –indications for providing partial dentures ; Kennedy classification ; Clinical Examination of a partially dentate patient – Treatment Plan ; Cast Analysis on surveyor ; Selection of Major Connector ; Selection of Retainers ; Impression making ; Principles for a metal frame work design ; Checking the metal frame work ; Recording the jaw relationships ; Try- in Procedures ; Insertion – Selective grinding – Delivery of Partial Dentures ; Pitfalls – Post-insertion problems.

C. Laboratory exercises in constructing partial dentures

Recognizing a partial edentulousness on study casts ; Surveying ; Cast Analysis on surveyor ; Selection of Major Connector ; Selection of Retainers ; Metal frame work design ; Checking a metal frame work ; Temporary denture bases and occlusal rims for recording preliminary jaw relationships .

EDUCATIONAL METHODS

- Seminars (6th semester).
- Group seminars (5th semester).
- Laboratory exercise.
- Clinical demonstration of complete denture construction in students' groups.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminars.
- Attendance of 80% of seminar-type lectures.
- Successful completion of the laboratory exercises.
- Successful final examination.

STRENGTHS

5th Semester:

Seminars take place at the same place on the same day just before the laboratory exercise
Adequate laboratory and audiovisual equipment
Timely distribution of the laboratory guide

6th Semester:

The laboratory space is adequate for the size of each group (about 35 students)
Adequate laboratory and audiovisual equipment
Timely distribution of the laboratory guide

WEAKNESSES

5th Semester:

The laboratory space is not ideal for the size of each group (about 50 students)

6th Semester:

Seminars do not take place at the same place on the same day just before the laboratory exercise

OPPORTUNITIES

Clinical demonstration of complete denture construction in students' groups (1 hour per week) in the postgraduate Prosthodontics clinic

THREATS

PLANS FOR FUTURE CHANGES

To commence the exercise in Removable Prosthodontics in the 4th semester, in parallel with the Fixed Prosthodontics course

To establish the clinical demonstration in students' groups in parallel with their laboratory exercise (2 hours per week in 4 students' groups)
The clinical exercise in complete denture construction could start in the 6th semester outside the context of the Total Patient Care Clinic

(51219A) - Removable Prosthodontics II, 7th semester & (51219B) - Removable Prosthodontics II, 8th semester

AIM
At the end of the 8th semester the students should be able to construct a pair of complete dentures.

OBJECTIVES
At the end of the 8th semester the students should be able
1. To evaluate the findings from the clinical examination of complete or partially edentulous patients and to develop treatment plans.
2. To select the most appropriate treatment plan for the construction of a partial denture
3. To carry-out the required clinical stages and evaluate the corresponding laboratory ones for construction a complete and partial denture
4. To identify and resolve any post-insertion problems.

CONTENT OF THE COURSE
Clinical stages of complete and partial denture construction ; Clinical examination ; mouth preparation ; making impressions ; Jaw registration procedures ; teeth set-up ; Try-in procedures ; Processing ; Delivery of complete dentures ; Pitfalls and post insertion problems.

EDUCATIONAL METHODS
- Group seminars.
- Clinical exercise.

SUCCESSFUL FINALIZATION
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS
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WEAKNESSES
Inability to comprehend the various stages due to lack of clinical demonstrations
OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
The availability of clinical demonstrations before the beginning of patient management outside the context of the Total Patient Care Clinic

(51219C) - Removable Prosthodontics II, 9th semester & (51219) - Removable Prosthodontics II, 10th semester

AIM
Rehabilitation of partial and total edentulousness with removable prostheses in all ages

OBJECTIVES

1. To examine and evaluate the findings of oral condition and general health in patients with total and partial edentulousness
2. To make a prosthetic treatment plan included in the total rehabilitation one collaborating with all other specialties involved.
3. To describe the different types of removable prostheses and their modifications.
4. To rehabilitate the partial/total edentulousness with full, partial, immediate removable prostheses and overdentures.
5. To identify and resolve the various problems encountered after the insertion of removable prostheses.
6. To describe and know the principles of treating gerodontic and maxillofacial prosthetics patients.

CONTENT OF THE COURSE

Clinical stages of the construction of full ; partial ; immediate dentures ; overdentures ; copy dentures; neutral zone construction ; implant retained overdentures ; Oral examinations ; preparing of the mouth ; taking impressions ; jaw relationships ; teeth set up ; try in ; delivery of dentures ; post insertion problems ; Immediate dentures ; overdentures ; implant retained overdentures ; Denture repairs ; rebasing and relining of dentures ; Effect of dentures on stomatognathic system ; The problem of resorbed alveolar ridges; Combination syndrome ; Vomiting and dentures ; Liners (soft /hard) for dentures; Copy / duplicate dentures ; Microwave curing of dentures ; Visible light cured resins for the construction of dentures ; Denture aesthetics ; Denture phonetics ; Rapport between dentist/patient.

EDUCATIONAL METHODS

- Group seminars.

SUCCESSFUL FINALIZATION

- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

During total patient care, the student has the opportunity to overview the total management of the patients.

WEAKNESSES

During total patient care, the student often does not have the opportunity to observe, let alone to manage, the whole spectrum of removable prostheses.

OPPORTUNITIES

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THREATS

Small opportunity to observe and manage the whole spectrum of removable prostheses.

PLANS FOR FUTURE CHANGES

To offer the opportunity at least to observe different techniques of constructing removable prostheses and their possible clinical application.

(51221) – Clinical application of Dental Biomaterials, 10th semester

AIM

Teaching of clinical and laboratory application of taught dental materials. Evaluation of knowledge on properties, selection and use of dental materials

OBJECTIVES

The student at the end of the semester must

1. Be familiar with the clinical effects of dental materials on the stomatognathic system.
2. Be aware of the biomechanical properties of dental materials and their proper clinical use.
3. Be able to select the proper dental material for the construction of a restoration.
4. Aim to the fabrication of restorations with favorable morphological, functional and esthetical characteristics.
5. Be able to inform the patient regarding the materials used, as well as existing alternative choices.
6. Be aware of the importance of recording on the pt's chart, the materials and the techniques employed.
7. Be aware of the basic dental materials' and literature evaluation methods.
8. Have developed his scientific thinking based on evidenced based dentistry in order to be able to evaluate materials and techniques in the future

CONTENT OF THE COURSE

Mechanical properties of dental biomaterials (External forces applied to the oral cavity ; Proportional limit ; Elastic limit ; Modulus of Elasticity ; Yield strength ; Ductile and malleable materials) – Polymerization (Evaluation of Polymers-metals bonding systems ; Composites for interim restorations) ; Composite restorative materials ; Clinical significance of characteristics and properties ; Glass Ionomer cements ; Dental cements ; Amalgam ; Clinical significance of characteristics and properties ; Clinical implication of endodontic materials ; Impression materials (Selection of proper material ; Techniques) ;Dental ceramics (Classification and evaluation ; All ceramic restorations-preparation considerations ; Cementation) ; Soft liners ; Dental Casting Alloys (Types and composition ; Selection).

EDUCATIONAL METHODS

- Lectures.

SUCCESSFUL FINALIZATION

- Successful final examination.

STRENGTHS

The students have a pre-existing clinical experience and good knowledge of the subject and this enables an in depth analysis of the clinical applications of biomaterials. The problems arising during the routine clinical application of the biomaterials are also thoroughly discussed.

WEAKNESSES

Absence of clinical practice specifically designed for the particular lesson
Absence of seminars in small groups
The limited time for lectures and contact with the students

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

Seminars in small groups
Journal club by the students

(51186) - Community Dentistry, 7th semester

AIM

To give students an understanding of the principles and the philosophy of Community Dentistry and its application for the promotion of the oral health of the population.

OBJECTIVES

By the end of the 7th semester students should be able to:

1. Understand the concept and the principles of Public Health and Community Dentistry
2. Define the concept of health and disease and describe their determinants.
3. Understand health inequalities.
4. Comprehend the basic principles of primary health care.
5. Comprehend the basic principles of health promotion.
6. Assess the oral health needs of the population using the appropriate oral health indices.
7. Describe the trends in the epidemiology of oral diseases in Greece and globally.
8. Comprehend the basic principles of verbal and non-verbal communication.
9. Describe the basic theories of health behavioural change.
10. Be able to understand the concept and the importance of health education and describe the means and methods of its application.
11. Comprehend the public health programmes for the prevention of dental caries.
12. Understand the effect of nutrition and diet on oral health and the appropriate interventions for its promotion.
13. Understand the contemporary health care systems and describe the oral health care system in Greece.
14. Understand the importance of applying economic theories in health and health systems.
15. Understand the evolution and development of the oral health workforce in Greece and globally**.**

CONTENT OF THE COURSE

Introduction to Public Health and Community Dentistry ; The concept of health and disease ; Health inequalities ; Primary health care ; Health promotion ; Methods for recording and evaluating oral diseases ; Trends in the epidemiology of oral diseases ; Communication ; Health behavior change ; Health education ; Public health programs for the prevention of caries ; Strategies for the promotion of healthy diets ; Health care systems ; Health economics ; Human resources in the health care sector-Dentistry ; Dental auxiliaries.

EDUCATIONAL METHODS

- Seminar-type lectures.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminar type lectures.
- Successful final examination.

STRENGTHS

1. Given that the course is taught in required seminar-type lectures, all students have the opportunity to attend and benefit.
2. The textbook provided to the students includes all the contemporary knowledge and views required for education in Community Dentistry.

WEAKNESSES

1. The large number of students and the lack of time in the timetable do not allow their participation in community-based oral health and prevention programs.
2. Given that the course is taught in the 7th semester, during which the students begin their clinical training, their interest is focused on the clinic underestimating the value of the Community Dentistry course.

OPPORTUNITIES

If the course is transferred to an earlier semester, it is believed that the students will be more interested in Community Dentistry.

THREATS
Despite that the fact that one of the program goals is to educate the students to develop and demonstrate social sensitivity upon graduation, their very heavy program and the small number of faculty members in the laboratory of Preventive and Community Dentistry does not allow the development of the course towards the direction of achieving this goal.

PLANS FOR FUTURE CHANGES
1. To transfer the course to an earlier semester
2. Active student participation in community-based oral health and prevention programs.

(51156) - Dental Materials, 2nd semester

AIM
To learn and be familiar with dental materials' structure and properties, to evaluate each material according to it's use, and to be eligible to explain non expected results after each material's usage.

OBJECTIVES
At the end of the 2nd semester, each student should be able to:
1. Be aware of the physical, mechanical, and chemical properties of biomaterials in general and specifically dental materials.
2. Be familiar with all groups of dental materials and their use.
3. Be able to compare and evaluate their behavior according to their composition and use.
4. Be able to select the proper material for every situation.
5. Be able to recognize and explain possible failures during each material's use.

CONTENT OF THE COURSE
Structure and properties of dental materials ; Properties, composition and usage of dental materials ; Toxicity and precautions during their use.

EDUCATIONAL METHODS
- Seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION
- Attendance of at least 85% of the seminars.
- Successful completion of the laboratory exercises.
- Successful final examination.

STRENGTHS
Seminar-type lectures in small groups of students
Laboratory exercise in small groups of students that gives the opportunity for detailed discussion and analysis of particular issues and the questions arising.
Infrastructure: Each student can practice him/hershelf in the lab by using a separate small device that allows for a better learning and consolidation of knowledge.

WEAKNESSES
The limited time in the timetable for teaching and practicing due to the extended content of the course.

The course is taught in an early semester (2ο) and the students do not have yet the adequate background

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
To expand teaching in more semesters.
Laboratory testing of the properties of more dental materials

(51160) - Dental Anaesthesia, 5th semester

AIM
The achievement of mandibular anesthesia and regional anesthesia of the oral cavity by nerve block and infiltration. The detection of complications and dealing with difficulties in achieving dental anesthesia in general practice. The knowledge of particularly specific anesthetic-analgetic methods.

OBJECTIVES
In the end of the 5th semester the student should be able to :
1. Know the basic anatomical elements of oral cavity and the necessary anatomical considerations for mandibular anesthesia.
2. Know the variety of devices and instruments being used in local anesthesia.
3. Achieve general knowledge concearning anesthetics and their combination with different vascoconstrictors
4. Know the procedure of inferior alveolar nerve block on phantoms
5. Know the procedure of infiltration anesthesia on phantoms
6. Know the procedure of infraorbitalis nerve block, alveolaris superior posterior, nerves block, buccalis and lingualis nerve block and nasopalatinus and magnus palatinus nerve block on phantoms.
7. Know the alternative techniques for inferior alveolar nerve block on phantoms, as well as the extraoral techniques of anesthesia
8. Know the reasons for local anesthesia failures
9. Know the alternative specific anesthetic – analgetic methods (use of nitrus oxide – intravenous sedation)
10. Know the nerve block techniques on children
11. Recognise and deal the topical complications of local anesthesia
12. Recognise the general complications of dental anesthesia (allergic reactions, overdose, heart failure, loss of consciousness.

CONTENT OF THE COURSE
Anesthetics – vascoconstrictors ; Proceding local anesthesia techniques/Specific anesthetic methods/nitrus oxide/intravascular sedation ; Complications due to local anesthesia/Dealing with complications.

EDUCATIONAL METHODS
- Seminars.
- Laboratory exercise.
- Clinical exercise.

SUCCESSFUL FINALIZATION
- Successful completion of 80% of laboratory exercises.
- Successful intermediate examination

- Successful final examination.

STRENGTHS
This is the first contact of new students with the dental practice

WEAKNESSES
Absence of the adequate place for students' exercise.
There is need for more convenient laboratory rooms and a smaller number of students in each group.

OPPORTUNITIES

THREATS

PLANS FOR FUTURE CHANGES

(51155) - Dental Informatics, 8th semester

AIM
The course of Dental Informatics aims to develop the utilization of computers in Dentistry, to motivate students to deepen their knowledge and to devote more time on this subject and to enhance, theoretically and practically, the teaching of other subjects and disciplines in the School.

OBJECTIVES
1. The briefing of the students in the various applications of Informatics in Dentistry,
2. The theoretical and practical training in the most useful applications for the needs of practicing the dental profession,
3. The acquisition of experience in some of these applications and
4. The stirring of interest for more complicated and demanding techniques so that the student will realize not only the usefulness of informatics in the practice of dentistry but also its necessity for the application of a more modern and effective dentistry.

CONTENT OF THE COURSE
Lab operation briefing; Networks and Internet to the service of Dentist and Dental Office; Data and information in Dentistry; The nature of dental information; Informatics in Dental Research; Applications of Information Technology to Dentistry; Dental image and electronic processing; Computer-based presentations ; Moving image – Copying and processing for Dentistry; Programs for Dental Office Management; Expert systems in dentistry (applications, particularities, utility, trends); Necessary documents in the Dental Office (design and production through computers); Computer sound; Multimedia applications for dentistry (ideas, applications, programs); The future of Dental Informatics.

EDUCATIONAL METHODS
- Seminar-type lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION
- Attendance of 90% of seminars.
- Timely handing of all personal exercises.
- Timely handing of group exercises.

STRENGTHS

The adequate background of the instructors in their subjects.

WEAKNESSES
The inadequate time for the supervised training of the time-consuming practical component.

OPPORTUNITIES
The continuous evolution of Informatics moves along Dental Informatics towards valuable applications.

THREATS
Unstable relationship of the instructors with the course, slow modernization of informatic systems, inability for direct installation of desired programs.

PLANS FOR FUTURE CHANGES
Determination of Section,
Unification with Basic Informatics into a comprehensive discipline for direct and timely design, adjustment, renewal and application to training,
Independent handling of the funds and personnel exclusively for the course by the responsible coordinator,
More timetable hours in a different semester.

(51051) – Tooth Morphology, 2nd semester

AIM
The learning of morphological characteristics of permanent teeth, so that the students to be able to recognize each one of teeth, to realize their functional and aesthetic role in the stomatognathic system as well as to be able to reproduce t the tooth characteristics by wax on casts.

OBJECTIVES
The students at the end of the 2nd semester to be able to:
1. List the teeth of the permanent and primary dentition, to report the times of eruption of primary teeth and dedentition, which permanent tooth erupts in the place of each primary and to code each tooth by the FDI system.
2. Recognize the principle morphological features of each permanent tooth and to describe its clinical role.
3. Describe the significant morphological differences between permanent upper and lower central-lateral incisors, upper-lower canines, upper and lower first-second premolars and upper, lower first-second molars.
4. Identify each tooth either in plastic models or by sketches, images etc.
5. Assign errors in morphological characteristics of permanent teeth
6. Describe the major morphological differences between the correspondence pairs of permanent-primary teeth.
7. Reproduce by wax surfaces or parts of the teeth. With the appropriate shape
8. Describe the relations of the anterior and posterior teeth at the position of central occlusion and during movements of mandibles.

CONTENT OF THE COURSE
Principle elements of primary and permanent dentition ; Terminology and basic tooth morphological characteristics ; Upper central and lateral incisors ; Lower central and lateral incisors ; Upper and lower canines ; Upper first and second premolars ; Lower first and second premolars ; Upper first and second molars ; Lower first and second molars.

EDUCATIONAL METHODS
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful completion of 90% of laboratory exercises.
- Successful final evaluation.

STRENGTHS
The fact that this is the first time that the course will be taught in the format described here precludes such assessment.

WEAKNESSES
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OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
Improvement of the educational video presented to the students.

(51210) - Operative Dentistry I, 5th semester & (51218A) - Operative Dentistry I, 6th semester

AIM
The students should acquire the foundation theoretical knowledge of Operative Dentistry and to develop manual skills practicing direct restorations in a simulated oral environment in the laboratory.

OBJECTIVES
At the end of the 6th semester the students should:

1. List the requirements that a clinically acceptable restorative material and a restoration should meet.
2. Quote the physic o mechanical properties of enamel and dentin.
3. Describe the clinical and other characteristics (activity, progress rate) of dental caries and to name the diagnostic methods available for dental caries detection with their related characteristics.
4. Define the morphological and histological differentiations of the tooth cervical area; classify the non-carious lesions of the region, and describe their clinical characteristics, the contributor factors and the epidemiological profile.
5. Describe the current status for the caries control management; list and analyze the factors for caries risk assessment; name and analyze the caries risk groups, their criteria of entry as well as the respective protocols for caries treatment.
6. Name the principles of tooth preparation; describe the techniques and the instrumentation for healthy and carious hard dental tissue removal; explain the mechanisms of tissue cutting, the efficacy of cutting instruments and their interaction with the pulp and the hard dental tissues.
7. Operate the classic hand and rotary instruments for caries removal and hard dental tissue cutting/finishing, and those of placement, carving, contouring, finishing and polishing of dental materials.
8. Classify cavities according to Black, as well as to other classification systems; know the terminology related to cavities; describe the mechanical and biological principles that govern cavity preparation.
9. Prepare in plastic teeth all typical Black cavities, according to the criteria described in the Laboratory Manual.
10. Prepare cavities in human extracted teeth for all types of restorative materials.
11. Describe the stimuli and the mechanisms related to pulp injury; define the factors that direct the necessity for pulp protection; list the composition, characteristics, and clinical uses of pulp protection materials.

12. Handle and place liners or/and bases under amalgam and resin composite restorations in plastic and human extracted teeth.
13. Describe the composition, types, setting reaction, structure, physical, mechanical and biological properties of dental restorative materials (amalgam - resin composite - glass ionomer cements - dental ceramics - laboratory-processed resin composites), and to determine their clinical relevance.
14. Fill typical cavities prepared in plastic and extracted human teeth with amalgam, resin composite and glass ionomer cement.
15. Describe the principles of adhesion on hard dental tissues and understand the basic composition of the adhesive systems
16. Describe the composition, setting reaction, characteristics, and the clinical use of the resin cements.
17. Apply the adhesive systems in resin composite restorations prepared in human extracted teeth.
18. Name the mechanical retentive means and techniques for complex restorations, and to describe their characteristics and clinical procedures.
19. Place prefabricated posts in extensive amalgam restorations in human extracted teeth.
20. Explain the dental restorations-periodontal tissues and dental restorations-occlusion interaction.
21. List the basic principles of tooth characteristics and colour related to aesthetics
22. Name the criteria for clinical evaluation of restorations according to various classification systems.

CONTENT OF THE COURSE

Foundational principles of conservative restorations and restorative materials ; Dental caries diagnosis ; Non-carious cervical dental lesions ; Caries risk assessment and caries management ; Instruments and equipment for hard tissue and materials cutting and removal ; Restorative dental materials (amalgam - resin composite - glass ionomer cement - dental ceramic - laboratory-processed resin composite) ; Retention and adhesion of dental restorations - Mechanical, micromechanical and chemical aspects ; Pulp protection ; Periodontal tissues and dental restorations ; Treatment of teeth with incipient caries ; Treatment of decayed teeth with moderate caries ; Treatment of teeth with extensive tooth loss ; Tooth fracture. -Diagnosis and treatment ; Evaluation and restoration of teeth with aesthetic problems ; Clinical evaluation of dental restorations.

EDUCATIONAL METHODS

- Lectures.
- Seminar-type lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Attendance of 50% of lectures.
- Successful completion of 100% of laboratory exercises.
- Midterm written exams (three).
- Handing of written assignment.
- Successful final examination.

STRENGTHS

The application of the current IT technology in teaching of the 5th semester course.

WEAKNESSES

Less laboratory exercise practice of the students during the 6th semester compared with the 5th as well as the absence of pre-clinical practice of the students.

OPPORTUNITIES
Incorporation of contemporary teaching methods, particularly, the distance learning, and the enhancement procedures for student evaluation.

THREATS
New knowledge added in the field of operative dentistry and continuous progress in technology creates as essentials the renewal and replacement of the educational material.

PLANS FOR FUTURE CHANGES
We are planning a new strategy concerning changes in the teaching methodology and the increase in laboratory and pre-clinical exercise hours in Operative Dentistry.

(51218B) - Operative Dentistry II, 7th semester & (51218C) - Operative Dentistry II, 8th semester

AIM
The aim is for students to enrich their clinical skills in diagnosis, prevention and restoration of dental caries and other types of lesions of tooth hard tissues. The student should restore functionality and aesthetics in a total patient care approach.

OBJECTIVES
The student at he end of the 8th semester should:
1. Complete the patient's medical and dental history; assess the caries risk group of the patient; decide for the appropriate protocol of dental caries management.
2. Diagnose all types of carious lesions, based on clinical and radiographic examination; correlate the clinical situation with the histological stage of carious lesions; effectively remove carious dental tissues.
3. Evaluate the quality of the restorations based on clinical criteria.
4. Treat incipient caries with preventive measures, and place pit & fissure sealants and microconservative restorations.
5. Treat teeth with moderate carious lesions; select and apply the appropriate restorative technique.
6. Treat non-carious cervical lesions and root caries; specify their causes and select and apply the appropriate restorative technique.
7. Select the appropriate restorative technique and retentive features for complex cavities with extensive tissue loss in vital and endodontically treated teeth; describe the clinical steps applied.
8. Restore endodontically treated teeth with severe hard tissue loss.
9. Select the appropriate technique for the treatment of teeth with aesthetic problems; describe the sequent clinical steps and to apply them, optionally, in some cases

CONTENT OF THE COURSE
Diagnosis of several types of caries and other hard tissue tooth lesions ; Clinical evaluation of restorations. Case studies and clinical practice ; Retention of restorations (cavities, pins, prefabricated posts, enamel and dentin etching, bonding) ; Case studies and clinical practice ; Pulp protection – Principles, case studies and clinical practice ; Non-carious cervical lesions - Case studies and clinical practice ; Treatment of incipient caries – Case studies and clinical practice ; Treatment of moderate cavitated carious lesions - Case studies and clinical practice ; Treatment of teeth with extensive tissue loss - Case studies and clinical practice ; Treatment of fractured teeth - Case studies ; Treatment of teeth with aesthetic problems - Case studies ; Periodontium and dental restorations.

EDUCATIONAL METHODS
- Group seminars.
- Clinical exercise.

SUCCESSFUL FINALIZATION

- Attendance of 85%of seminar-type lectures.
- Successful completion of clinical requirements.

STRENGTHS

Students apply clinical procedures of operative dentistry under a total patient care approach, which offers several advantages. In this respect, students make a total treatment plan and they commonly make complicated, extended restorations in teeth presented various clinical problems. Under these educational conditions, the students gain considerable experience that causes an in-deep discussion during the individual discipline seminars of operative dentistry.

WEAKNESSES

Student evaluation in operative dentistry procedures can not be easily applied because of the clinical practice of the students in the Total Patient Treatment Clinic.

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

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(51218D) - Operative Dentistry II, 9th semester & (51218) - Operative Dentistry II, 10th semester

AIM

The aim is to further improve the clinical skills of the students to enable them to manage and treat extended hard tissue loss and esthetic problems using conservative procedures under a total patient care approach.

OBJECTIVES

At the end of the 10th semester the student should:

1. Make treatment plan for conservative restorations in total patient care cases.
2. Schedule restorations in proper sequence total patient care treatment plans.
3. Make decision and restore teeth that will be covered with crowns or will be abutments for fixed partial dentures.
4. Evaluate existing restorations for repair or replacement.

CONTENT OF THE COURSE

Treatment of aesthetic problems of anterior teeth using direct and indirect conservative techniques ; Core build-up restorations ; Extended restorations of posterior teeth by direct and indirect aesthetic techniques ; Management of tooth fractures.

EDUCATIONAL METHODS

- Group seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

Practice of the students in the Total Patient Treatment Clinic provides a realistic clinical environment, achieves the chance for collaboration with all specialties and gives the ability to the students to treat teeth with extended tissues loss.

WEAKNESSES
Practice of the students in the Total Patient Treatment Clinic, under a patient-oriented aspect, results in an individual training profile of each student. As a sequence, it has been noted that several students are not experienced in the complete spectrum of the clinical procedures included into the curriculum of operative dentistry. Under this consideration, the clinical experience and skills achieved may be less in relation to the available clinical educational hours. Furthermore, under the current educational conditions, practice of the students to prevention of carious lesions and to treatment with non-operative or/and micro-conservative procedures is very limited.

OPPORTUNITIES
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THREATS
The fast technological advancement in the field of Operative Dentistry often necessitates adjusting the curriculum also increasing the spectrum of clinical acts in which the student should be trained or exposed. Moreover, the prosthodontics-centered nature of the Total Patient Care Clinic decreases the time students spent in Operative Dentistry acts.

PLANS FOR FUTURE CHANGES
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(51152) – Practice management of private dental office/installation, 10th semester

AIM
The purpose of this lesson is to inform future dentists on various topics related to the professional aspect of their science, the conditions under which they will practice dentistry, their obligations and rights, in a Country operating under the state of Law and Discipline.

OBJECTIVES
The objectives of this lesson are the Administrative part of Dentistry, the Bylaws, the Insurance and Welfare details, the Financial topics related to the fees, salaries, logistics and relevant provisions, the internal revenue laws and books, the technical details of the whole installation, as well as infection control topics and professional diseases.

The continuous education topic is an interesting presentation among the 15 other presentations, characterizing the lesson. The abilities and the obligation of the future scientist to attend various scientific activities, to purchase scientific books and magazines is described, in order to maintain in a high level his knowledge and skills.

The presentations last from one to two hours. They start in February and end in the beginning of June. All of them take place in the Auditorium or in selected lecture rooms of the Athens Dental School. The audience are 10th semester students and the curriculum is provided to them either using electronic methodology and equipment or with printed material, yearly informed and renovated.
Written exams follow the whole presentation and take place on mid June period.

CONTENT OF THE COURSE
Professional Legislation ; Insurance legislation ; Financial topics and Labor Legislation ; Logistics ; Revenue topics ; Technical and Infrastructure topics ; Infection Control – Four

hands' dentistry ; Professional Hazards and Dentistry related diseases ; Continuous Education ; European Union Legislation ; Social affairs.

EDUCATIONAL METHODS

- Seminar-type lectures.

SUCCESSFUL FINALIZATION

- Attendance of 92% of seminar-type lectures.
- Successful final examination.

STRENGTHS

The timely provision of knowledge to the students so they may be able to proceed in the near future with the necessary procedures for professional licensure and installation, applications to different agencies, market research, financial funding and loaning, and to be legally informed of aspects of Dentistry that constitute the basis of this profession beyond the strictly scientific spectrum. Subject details are presented in the course content on the webpage of the School of Dentistry.

WEAKNESSES

It is exceptionally difficult to always provide instructors/lecturers with knowledge of the special topics of the course, such as the determination of dental act costs, the strategies of patient approach and communication, the European Union matters.

OPPORTUNITIES

The transfer to the core of required courses for the last semester curriculum is deemed necessary. The large number of students who attend the seminar-type lectures throughout the years attests the high degree of interest of this course for the new Dentist.

THREATS

No threat for the course is anticipated within the context of a modern and complete curriculum.

PLANS FOR FUTURE CHANGES

Writing of a unified flexible textbook with provision for additions or modifications of the covered material per year.
Course inclusion in the core of required courses as listed in the curriculum for last semester students.

(51069) - Orthodontics I, 4th semester

AIM

The acquisition of basic knowledge in Orthodontics, which is necessary for every clinical dentist constitutes the infrastructure for further specialization in the subject of Orthodontics.

OBJECTIVES

The student at the end of the 4th semester must be able :

1. To describe the stage of foetal formation of the human face and jaws.
2. To describe normal craniofacial growth and especially the mechanisms of hard and soft tissue growth as well as the theories of growth.
3. To describe the factors, which influence the growth and development of the craniofacial complex.
4. To describe the methods which study the growth proceeding and evaluate the skeletal maturation and the methods for predicting the craniofacial growth.
5. To describe the changes, which are observed on the face during growth and maturation.

6. To describe the harmonious morphology of the face (proportions and relations between the different elements) in the profile and frontal view.
7. To describe the methods of evaluation of the face morphology (clinical, laboratory).
8. To explain the relation between the external morphology of the face and the infrastructure of dental and skeletal elements.
9. To describe the stages of dental development and to relate them to the age that these happen.
10. To describe the stage of occlusal development in relation to the correspondent ages.
11. To report the sequence of the teeth's eruption, the correspondent ages and the most common variations.
12. To describe the changes in length and width of the dental arches during the different stages of dental development.
13. To describe the morphological and functional characteristics if ideal occlusion in mixed permanent dentition.
14. To describe the Angle's classification for malocclusions with reference to each one's characteristics.
15. To report and determine the malocclusions, which originate from teeth's anomalies of shape, number, position etc.
16. To describe and explain how malocclusions relate to facial aesthetics.
17. To report the diagnostic tools, which are used in Orthodontics for the diagnosis of malocclusion.
18. To report the factor, that may have a detrimental effect on teeth's development as well as their impact .
19. To report the factor, that may have a detrimental effect the normal eruption of the teeth and on the teeth position in the dental arches.
20. To describe laboratory diagnostic methods for evaluation of skeletal and dental relations.

CONTENT OF THE COURSE

Embryology ; growth and development of craniofacial complex ; development and stages of dental occlusion; determination and classification of dental occlusion ; basic principles of diagnosis.

EDUCATIONAL METHODS

- Lectures.
- Group seminars.
- Tutorials

SUCCESSFUL FINALIZATION

- Attendance of at least 90% of the seminars.
- Successful final examination.

STRENGTHS

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WEAKNESSES

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OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

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(51216A) - Orthodontics II, 7th semester

AIM
The student should be able to construct an upper and lower removable appliance of Hawley type.
These appliances should be able to adapt to the mouth of a patient.

OBJECTIVES
The students at the end of the 7th semester should be in place to:

1. Bend orthodontic wires and construct Hawley appliances and space retainers
2. Take impressions of the upper and lower dental arches.
3. Construct orthodontic casts
4. Recognize the basic parts of fixed orthodontic system and explain their function.
5. Adapt a removable orthodontic appliance to the mouth of a patient.
6. Write a literature review on the construction and use of various removable orthodontic appliances.

CONTENT OF THE COURSE
Take impressions of upper and lower dental arches-construction of orthodontic casts ; Construct geometric patterns with orthodontic wires ; Construct Hawley appliances and space retainers ; Write a literature review.

EDUCATIONAL METHODS

- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Successful completion of laboratory exercises.

STRENGTHS
The possibilities of taking impressions of the upper and lower dental arches to construct a removable appliance and to place it in the mouth of the patient (student in this case).

WEAKNESSES
The limited laboratory possibilities for better construction of the acrylic plate.

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
Better organization of the orthodontic laboratory for the construction of the orthodontic appliances.

(51216B) - Orthodontics II, 8th semester

AIM
The student at the end of the 8th semester should be able to make thoroughly diagnosis of orthodontic problems clinically and through cephalometric analysis

OBJECTIVES
The student at the end of 8th semester should be able :
1.To establish a good doctor-patient relationship
2.To make a complete clinical examination of the face and mouth
3.To make clinical of the face and diagnose the existing morphological and skeletal relationships and discrepancies between them
4.To evaluation recognize the teeth, the development of the occlusion and to do mixed dentition analysis

5.To take the necessary records for the proper evaluation of face and dentition
6.To now the cephalometric points, their location and meaning
7.To perform a cephalometric analysis and evaluate it
8.To now the etiological factors that can influence the normal skeletal and dental development
9.To describe the methods of evaluation clinically the face frontal and anteroposteriorly
10.To explain the relation between the external morphology of the face and the underline skeletal and dental units
11.Now the genetic and environmental influences on the development of occlusion
12. Now malocclusions due to malformed and supernumerary teeth, ectopic eruption, early loss of primarily teeth, etc
13.Now and describe proper therapies to prevent or interrupt developmental problems of the craniomandibular complex
14.Now to recognize and intercept problems in the mixed dentition
15.Now the biological control of tooth movement
16.Now the types of force and their effects on tooth movement
17.Now the deleterious effects of orthodontic force
18.To explain to patient and parents the existing orthodontic problem with accuracy and simplicity

CONTENT OF THE COURSE
Completion of a clinical examination form ; Clinical examination ; Cephalometry.

EDUCATIONAL METHODS

- Group seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Attendance of at least 80% of the seminars
- Successful completion of the clinical requirements

STRENGTHS
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WEAKNESSES
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OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51216C) - Orthodontics II, 9th semester & (51216) - Orthodontics II, 10th semester

AIM
The student at the end of the 10th semester should be able to diagnose an existing malocclusion, to recognize its severity, the necessity and time of intervention by the general practitioner or the orthodontic specialist

OBJECTIVES
The student at the end of the 10th semester should:
1.Make a clinical examination resulting in an evidence based diagnosis of the existing dental and skeletal problems of the patient

2.Now the detrimental habits, their mechanism and their effects on the craniomandibular complex
3.Now the commonly congenital missing teeth, their effect on the occlusion and how to manage them
4.Now the functional factors and their effect on the craniomandibular complex
5.Recognize the clinical morphological traits of the face and occlusion due to functional problems
6.Now the clinical trials and other diagnostic records necessary for the diagnosis o of functional problems
7.Now the long term effects of an untreated functional problem
8.Recognize existing etiological factors that disturb the normal occlusion and how to intercept them
9.Now the treatment strategies that can be applied in order to teat a malocclusion
10.Recognize the malocclusions that as general practitioner can not treat and the right time for the referral to the specialist
11.Now clearly the aims of each stage of a proposed therapy
12.Now how to intercept a malocclusion using removable orthodontic appliances
13.Be in situation to recognize the clefts of the facial region, their mechanism and development and their treatment protocol
14.Now the sleep apnea syndrome, its consequences and treatment methods
15.Now how orthodontics can help patients with complex problems (prostodontic, periodontic, skeletal or apneic)
16.Be able to recognize the possible long-term effects of a malocclusion on the function and harmonious development of the dentofacial complex

CONTENT OF THE COURSE
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EDUCATIONAL METHODS

- Group seminars.
- Clinical exercise.

SUCCESSFUL FINALIZATION

- Attendance of at least 80% of the seminars.
- Successful completion of the clinical requirements.
- Successful practical examination
- Successful final examination.

STRENGTHS
Clinical examination of patients
Treatment of simple orthodontic anomalies

WEAKNESSES
The small number of patients for preventive therapy
Absence of a constructed laboratory and technician

OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51067) - Pathology of Dental Hard Tissues, 3rd semester

AIM

To know the development, the histopathology and the clinical features of hard tissue lesions and especially the dental decay, the erosion, the abrasion, the dental abnormalities, the dental discolouration, the root absorption and the fractures of teeth.

OBJECTIVES

The student in the end of 3rd semester will be able to:

1. Describe the theories related to the development of dental caries.
2. Define the influence of the oral environment parameters on the development of dental caries.
3. Quote the embryological origin of enamel.
4. Define the influence of the diet on the development of dental caries.
5. Describe the histopathology of enamel, dentin and cementum caries.
6. Name the clinical features of active and arrested dental caries.
7. List the clinical features of pit and fissure caries and of smooth surfaces caries.
8. Describe the mechanism of demineralization of hard dental tissues.
9. Recognize the clinical significance of hard dental tissues remineralization
10. Cause the tooth cervical erosion, abrasion and abfraction lesions
11. Name the anatomical and histological characteristics of the cervical region of teeth.
12. List the clinical features of erosion, abrasion and abfraction dental lesions.
13. Classify of teeth abnormalities.
14. Describe the etiology, the clinical and x-ray features, the differential diagnosis and the clinical significance of abnormalities in the number, the size, the form, the structure in the eruption of teeth.

15 Classify the teeth discolorations.

16. Describe the etiology, the clinical and x-ray features, the differential diagnosis and the clinical significance of teeth discolorations reasoning to structural changes.
17. Decribe the etiology, the clinical and and x-ray features, the histological characteristics, the differential diagnosis and the clinical significance of teeth discolorations reasoning to external and internal staining.
18. Recognize the significance of tooth absorption and of tooth protection mechanisms.
19. Classificy the tooth absorption types.
20. Describe the etiological factors and the pathogenesis of tooth absorption.
21. Describe the etiology, the clinical and x-ray features and the clinical significance of external tooth absorption.
22. Describe the etiology, the clinical and x-ray features, the differential diagnosis, the histological characteristics, the prevention and the clinical significance of internal and external inflammatory tooth absorption.
23. Describe the etiology, the clinical and x-ray features, the differential diagnosis, the histological characteristics, the prevention and the clinical importance of replace mental tooth absorption.
24. Describe the clinical and x-ray features, the etiology and the classification of crown and root teeth fractures.

CONTENT OF THE COURSE

Tooth caries; erosion-abrasion ; abfraction ; tooth anomalies; tooth discoloration ; tooth resorption ; tooth fractures.

EDUCATIONAL METHODS

- Lectures.
- Written short report

SUCCESSFUL FINALIZATION

- Successful written report
- Successful final examination.

STRENGTHS
Instruction by a small number of high ranked faculty members.
It offers, practically, prerequisite knowledge for Operative Dentistry and Endodontics.

WEAKNESSES
Instruction in an early semester (3rd) resulting in lack of comprehension of several concepts due to lack of basic knowledge.
Lack of secretary assistance.

OPPORTUNITIES
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THREATS
Risk of course degradation because it has not been designated as prerequisite.
Risk of a mechanistic approach of knowledge by the students, due to instruction in an early semester.

PLANS FOR FUTURE CHANGES
Connection with students' laboratory exercise.

(51206) – Pathology, 4th semester

AIM
The aim of the course is the provision of basic pathology knowledge with emphasis on the field of General Anatomic Pathology and the grasp of the basic models of histologic alteration in human, as well as the histologic changes of benign and malignant diseases of the head and neck and systemic diseases.

OBJECTIVES
At the end of the 4th semester, the student should have the following knowledge and dexterities:

1. To comprehend the General Anatomic Pathology As the basis of the pathologic conditions of the human body
2. To familiarize with the morphology, the mechanisms and the importance of the pathologic conditions
3. Through direct microscopy to visually consolidate the differences among pathologic and healthy states
4. To comprehend the pathology terminology in order to be in a position to evaluate the information of histopathologic reports
5. To be aware of the diagnostic potential of biopsy.

CONTENT OF THE COURSE
Cell structure in physiologic and pathologic conditions – Principles of cytology; Tissue degeneration, necrosis-apoptosis; Inflammation-Repair process; Aberrations of cell growth and differentiation; Principles of carcinogenesis; Nomenclature and classification of neoplasms, patterns of spread, defensive mechanisms against neoplasms, histologic prognostic factors; Immunogic diseases-AIDS; Multisystem diseases (systemic lupus erythematosus, amyloidosis, diabetes); Environmental diseases; Genetic diseases, nutritional disorders; Blood circulation disorders; Neoplasms of the oral cavity, head and neck; tissue processing techniques; Macroscopic and microscopic observation of the aforementioned pathologic conditions.

EDUCATIONAL METHODS

- Seminar-type lectures.
- Group seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION
- Attendance of 60% of seminar-type lectures.
- Successful completion of 90% of laboratory exercises.
- Successful final examination.

STRENGTHS
Combination of theoretical knowledge and practical training on a required basis. Clinicopathologic correlation of diseases.

WEAKNESSES
Lack of evaluation.

OPPORTUNITIES
Participation in research activities of the Laboratory.

THREATS
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PLANS FOR FUTURE CHANGES
Availability of educational material in an electronic format.
Optional preparation and presentation of scientific project by the students.

(51177) - Paediatric Dentistry I, 7th semester

AIM
The aim of the 7th semester is for the student to:
1. know the basic theoretical knowledge of paediatric dentistry
2. to apply the preventive and therapeutic techniques used in Paediatric Dentistry in the laboratory under clinical simulation.

OBJECTIVES
The student at the end of the 7th semester should
a. know:
1. The child's normal physical, mental and psychological development
2. The factors responsible for establishing a positive attitude and cooperative behavior of the child in the dental operatory.
3. The behavior management techniques that can be used for the child's behavior management during dental treatment.
4. The use of nitrous oxide (N2O) for behavior modification for the fearful child and adolescent.
5. The normal process of tooth development in the deciduous and mixed dentition, the different stages of tooth calcification and their clinical relevance, the time and sequence of deciduous and permanent tooth eruption, as well as the possible complications in the occlusion resulting from aberrations in tooth development and eruption.
6. Practice management and the principles of four-handed dentistry for the paediatric dental office.
7. To complete a dental record, perform a radiographic exam, diagnose and treatment plan.
8. To diagnose dental caries in deciduous and permanent teeth
9. The characteristics of the healthy periodontium in deciduous dentition and identify the differences from the periodontium of permanent dentition.
10. To plan a preventive program prenatally and at the first year of the child's life.

11. Plan and apply an individualized preventive program in the dental office and at home for children and adolescents.
12. To apply the different techniques for rubber dam isolation both for the anterior and posterior teeth, in plastic teeth.
13. To administer successfully local anesthesia, as well as its possible limitations and complications.
14. The indications for sealant application, the different types of sealant materials, the steps of clinical application, and be able to apply sealants in primary and permanent plastic and natural teeth successfully.
15. The indications and clinical steps for preventive resin restorations. Be able to perform preventive resin restorations in natural deciduous and permanent teeth.
16. The anatomic differences between primary and permanent teeth.
17. The cavity preparation modifications used for primary teeth, as well as the indications for Class I, II, III, IV and V restorations in deciduous teeth.
18. Which restorative materials are appropriate for each type of restoration.
19. The materials used for pulp protection in primary teeth as well as the indications for using each of them.
20. How to treat pulp pathology in children and adolescents.
21. The indications and clinical steps of a pulpotomy in deciduous teeth.
22. The indications, preparation, adaption and cementation of stainless steel crowns in deciduous and permanent teeth.
23. The indications for space maintenance following premature loss of a primary tooth, as well as to select the appropriate appliance in each case.
24. The epidemiology and classification of dental injuries in the deciduous and mixed dentition to record and evaluate the dental history in such cases and be able to perform a clinical examination.
25. The types of traumatic injuries of the hard dental tissues as well as their management.
26. The types of traumatic injuries of the periodontal tissues and as well as their management.
27. The indications and technique for extracting primary teeth.
28. The common findings of oral pathology in babies and children.
29. The epidemiology and the different categories of handicap and medically compromised patients, as well as the office design and necessary equipment needed to treat such patients.
30. The dental treatment considerations for the medically compromised child and adolescent (heart disease, blood dyscrasias)
31. The dental treatment considerations for the child and adolescent with a cleft lip and palate.

b. be able to:

1. Prepare Class I, II, III, IV and V composite resin, glass-ionomer and amalgam restorations in plastic and natural deciduous teeth.
2. Perform pulpotomy in extracted primary teeth.
3. Prepare and adapt a stainless steel crown in plastic primary teeth.

CONTENT OF THE COURSE

The child's normal growth and development ; Tooth development, tooth eruption and prevention of orthodontic anomalies ; The child's behavior in the dental clinic. Control of pain, fear and stress during dental treatment ; Examination – Diagnosis - Treatment planning ; Aetiology and treatment of hard dental tissue diseases as well as periodontal diseases in deciduous and mixed dentition ; Management of caries in deciduous, mixed and permanent dentition in children and adolescents (prevention, monitor of caries, restorations, stainless steel crowns, extractions) ; Prevention and therapy of pulp pathology in deciduous and permanent teeth in children and adolescents ; Dental considerations in the prevention and care of patients with special needs (handicapped and with chronic medical diseases) ; Four handed dentistry, organization and management of the paediatric dental office.

EDUCATIONAL METHODS

- Lectures.
- Group seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Two successful interim exams. Επιτυχείς εξετάσεις 2 ενδιάμεσων προόδων.
- Three successful laboratory exams.
- Successful final examination.

STRENGTHS

Emphasis on the total management of the child from the beginning of the students' contact with the subject.
Self-evaluation forms for laboratory exercises help consolidate the knowledge.
Training in the basic techniques of Paediatric Dentistry under conditions of clinical simulation.
Ratio of instructors to students is 1:6.
Adequate installation of audiovisual equipment, 1 screen per 6 students.

WEAKNESSES

The evaluation of the laboratory exercise does not count in the final grade.
Inadequate and relatively old dental instruments equipment.
Only 2 of the instructors are faculty members, the remaining four being paediatric dentists-collaborators or postgraduate students.

OPPORTUNITIES

Student participation in scientific projects for presentation in the student's meeting or other scientific congress.

THREATS

Inadequate phantom service and unit malfunction.

PLANS FOR FUTURE CHANGES

Renewal of the laboratory guide.
The total performance of students in the lab should reflect in the final grade.
Course evaluation by the students.
Infrastructure improvement and maintenance of laboratory equipment.

(51177A) - Paediatric Dentistry I, 8th semester

AIM

The aim of the 8th semester is for the student in cooperative school aged children and adolescents:

1. to be able to record a dental record, perform a dental and radiographic examination and treatment planning.
2. to apply preventive programs.
3. to perform preventive resin restorations and other simple restorations in primary and permanent teeth.
4. to perform recalls.

OBJECTIVES

The student at the end of the 8th semester, in cooperative school aged children and adolescents should be able to:

1. Apply all the infection control measures for the protection of the patient, the dental assistant and the dentist from infections during dental treatment.
2. Apply the basic principles of four-handed dentistry, by working both as a dentist and as a dental assistant.
3. Record medical and dental history in children, adolescents and special patients.
4. Evaluate the child's growth according to its weight and height, using standard national weight and height curves.
5. Assess the patient's medical history in relation to its dental treatment needs.
6. Evaluate dental age according to the patient's chronological age
7. Examine and diagnose caries, gingivitis, tooth abnormalities as well as orthodontic problems.
8. Perform intraoral and bite-wing radiographs.
9. Diagnose radiographically caries, or any other dental or periodontal pathology.
10. Evaluate in panoramic radiographs tooth development and identify tooth number abnormalities as well as other pathologic conditions of the jaws.
11. Inform both the patient and the parents about oral diseases, by using the clinic's patient instruction pamphlet.
12. Perform diet analysis and give accordingly dietary advice both to parents and child.
13. Estimate the patient caries risk using information from the dental history, the clinical and x-ray examination and the diet analysis.
14. Plan and apply preventive programs appropriate for the child's age, caries risk and risk periodontal disease.
15. Apply topical fluoride (gel or varnish).
16. Manage initial occlusal caries, with sealants or preventive resin restorations.
17. Administer local anesthesia painlessly assisted by the dental assistant.
18. Know how to prescribe fluoride supplements or/and antimicrobial agents for home use.
19. Recall patients appropriately according to their caries and periodontal disease risk.

CONTENT OF THE COURSE

EDUCATIONAL METHODS

- Clinical exercise.
- Clinical evaluation.

SUCCESSFUL FINALIZATION

- Attendance of 80% of preclinical and clinical exercises.

STRENGTHS

Emphasis on the total management of the child from the beginning of the students' contact with the subject.
Clinical training in groups of 2 students / four-handed dentistry.
Emphasis on the administration of preventive care in clinic.
Adequate numbers of patients for recalls.
Optional project assignment and presentation.

WEAKNESSES

Lack of clinical evaluation.
Lack of faculty members.
Old dental instrument equipment, lack of handpieces.
Deficient unit function on a daily basis.
Lack of secretary support.

OPPORTUNITIES

Students may observe as assistants in the postgraduate clinic.

Students may become familiar with special need patients in the dental office of the Sikiarideion Foundation.
Implementation of oral hygiene program in elementary schools in the vicinity of the school.

THREATS
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PLANS FOR FUTURE CHANGES
Clinical guide.
Evaluation of clinical acts (by faculty members) and consideration in the final grade.
Self-evaluation of clinical acts.
Renewal of dental instrument and handpiece equipment.
Implementation of e-filing.
Course evaluation by the students.

(51217A) - Paediatric Dentistry II, 9th semester & (51217) - Paediatric Dentistry II, 10th semester

AIM
The 10th semester graduate should be able to diagnose oral health problems in healthy children, adolescents and special patients, to plan and apply appropriate preventive dental care programs for such patients and to treat cooperative school aged children and adolescents.

OBJECTIVES
The student at the end of the 10th semester in cooperative children and adolescents should:

a. be able to :

1. perform quadrant dentistry
2. clinically evaluate the development of the dentition according to the chronological age of the patients
3. prescribe fluoride supplements and/or antimicrobial agents for home use.
4. perform complex restorations in primary and permanent teeth with amalgam, composite resins and glass ionomers.
5. perform recalls
6. perform pulpotomies in primary and permanent teeth
7. restore primary and permanent teeth with a stainless steel crown
8. extract primary teeth

b. know:

9. the dental management of non cooperative medically compromised patients or special patients.
10. the aetiology and epidemiology of early childhood caries
11. the prevalence and aetiology of periodontal diseases in children and adolescents as well as the indices used for recording
12. the sequalae of primary teeth trauma to the permanent dentition
13. the management of the side effects occurring with traumatic injuries
14. the dental management of patients with mental retardation, autism and physical disabilities.
15. the dental management of oncology children and adolescents.
16. the dental management of children and adolescents with clefts.

CONTENT OF THE COURSE
Contemporary views for the psychologic techniques of behavioral control in potentially cooperative children; Caries in the deciduous and mixed dentition and its management ; Multiple early childhood caries ; Preventive sealants and restorations ; Periodontal diseases in children and adolescents ; Primary teeth trauma and sequalae to the permanent dentition ;

Management of sequelae to the injured teeth and periodontal tissues ; Categories of special need individuals. Dental practice design for handicapped individuals ; Dental management of individuals with mental retardation, autism ; Dental management of individuals with physical disabilities ; Dental management of children and adolescents with clefts ; Dental management of oncology children and adolescents.

EDUCATIONAL METHODS

- Group seminars.
- Clinical exercise.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminars.
- Successful completion of clinical requirements.
- Successful final examination.

STRENGTHS

Emphasis on the total management of the child from the beginning of the students' contact with the subject.
Clinical training in groups of 2 students / four-handed dentistry.
Emphasis on the administration of preventive care in clinic.
Optional project assignment for writing and presentation in collaboration with faculty members.

WEAKNESSES

Lack of clinical evaluation.
Lack of faculty members.
Relative lack of complicated cases.
Old dental instrument equipment, lack of handpieces.
Deficient unit function on a daily basis.
Lack of secretary support.

OPPORTUNITIES

Students may observe as assistants in the postgraduate clinic.
Students may become familiar with special need patients in the dental office of the Sikiarideion Foundation.
Implementation of oral hygiene program in elementary schools in the vicinity of the school.

THREATS

Caries decline with ensuing patient decrease.

PLANS FOR FUTURE CHANGES

Clinical guide.
Evaluation of clinical acts (by faculty members) and consideration in the final grade.
Self-evaluation of clinical acts.
Renewal of dental instrument and handpiece equipment.
Implementation of e-filing.
Course evaluation by the students.

(51058) -Experimental Physiology I, 4th semester

AIM

To provide students with a substantial understanding of the principles of physiology and of the mechanisms governing body functions at different levels of organization from cellular and molecular to that of tissues and organs. This approach will offer students the opportunity to approach and resolve problems in an integrated and practical way.

OBJECTIVES
The student should consolidate the knowledge concerning the mechanisms involved in the function of the physiological systems.

CONTENT OF THE COURSE
Physiology of the haemopoietic and immune system. Physiology of the cardiovascular system. Physiology of the respiration – Acid-base balance. Physiology of the uropoietic system and of body fluids. Physiology of the gastrointestinal system.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The frequent update of the text books for students and the integration in the lectures the most recent advances in the field of Physiology. The text book provided is a translation of a worldwide used and well established educational book of Physiology.

WEAKNESSES
The course is provided by the teaching staff of Medical School that has a heavy load of teaching duties in Medical School and other Schools as well. Consequently, teaching in small groups, laboratorial exercises or seminars are not feasible for dental students. It should be also noted that laboratorial exercises require extra hours (at least 2h per exercise) that are not provisioned in the time table of dental students.

OPPORTUNITIES
The increase in the number of the teaching staff of Medical School, or the teaching tenure by the Dental School staff, would allow for teaching in small groups, laboratorial exercises or seminars. This would definitely lead to the improvement of the teaching procedure.

THREATS
Re-adjustment of the curriculum and the teaching approaches in Medical School (i.e. teaching in small groups of students) will result in the inability of the Medical School staff to teach the course in Dental students.

PLANS FOR FUTURE CHANGES
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(51064) – Experimental Physiology II, 3rd semester

AIM
To provide students with a substantial understanding of the principles of physiology and of the mechanisms governing body functions at different levels of organization from cellular and molecular to that of tissues and organs. This approach will offer students the opportunity to approach and resolve problems in an integrated and practical way.

OBJECTIVES

The student should consolidate the knowledge concerning the mechanisms involved in the function of the physiological systems.

CONTENT OF THE COURSE
Principles of cellular Physiology. Physiology of the nervous system and sense organs. Physiology of the endocrine and reproductive system. Metabolism and thermoregulation.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The frequent update of the text books for students and the integration in the lectures the most recent advances in the field of Physiology. The text book provided is a translation of a worldwide used and well established educational book of Physiology.

WEAKNESSES
The course is provided by the teaching staff of Medical School that has a heavy load of teaching duties in Medical School and other Schools as well. Consequently, teaching in small groups, laboratorial exercises or seminars are not feasible for dental students. It should be also noted that laboratorial exercises require extra hours (at least 2h per exercise) that are not provisioned in the time table of dental students.

OPPORTUNITIES
The increase in the number of the teaching staff of Medical School, or the teaching tenure by the Dental School staff, would allow for teaching in small groups, laboratorial exercises or seminars. This would definitely lead to the improvement of the teaching procedure.

THREATS
Re-adjustment of the curriculum and the teaching approaches in Medical School (i.e. teaching in small groups of students) will result in the inability of the Medical School staff to teach the course in Dental students.

PLANS FOR FUTURE CHANGES
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(51060) - Descriptive Anatomy I, 1st semester

AIM
Teaching the anatomy of the human body.

OBJECTIVES
The precise knowledge of the structure of the human body, a prerequisite for the building of dental student's scientific background.

CONTENT OF THE COURSE
General part ; Heart ; Respiratory System ; Digestive System ; Urinary System; Male and Female Genital System.

EDUCATIONAL METHODS
- Lectures.

SUCCESSFUL FINALIZATION
- Successful final examination.

STRENGTHS
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WEAKNESSES
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OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51066) - Descriptive Anatomy II , 2nd semester

AIM
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OBJECTIVES
To provide Dental students with a precise knowledge of the structure of the human body, a prerequisite for the building of dental student's scientific background.

CONTENT OF THE COURSE
Per region cadavera dissection and study of Osteology ; Arthrology ; Muscle System ; Vascular System; Peripheral Nervous System; and Splachnology.

EDUCATIONAL METHODS
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SUCCESSFUL FINALIZATION
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STRENGTHS
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WEAKNESSES
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OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51211) - Periodontology I, 5th semester & (51213A) - Periodontology II, 6th semester

AIM
The aim of the curriculum is the prevention and treatment of periodontal disease, as well as the treatment of any type of lesions of the periodontal tissues providing in each case the appropriate therapy, based on biologic principles that aim in the re-establishment of periodontal health and its long-term maintenance.

OBJECTIVES
The undergraduate student, by the end of the 6th semester should be able:
1. To recognise the tissues that comprise the periodontium and to describe the clinical and morphological characteristics of normal and clinically healthy periodontium.
2. To understand the pathogenetic mechanisms of periodontal diseases. Especially to be aware of the role of calculus and the iatrogenic factors in the etiopathogenesis of periodontal diseases, the mechanisms of the innate and adaptive immunity and the

mechanisms of tissue destruction. To acknowledge the interaction of periodontal diseases with other systemic diseases.
3. To classify and describe the periodontal diseases based on their pathological characteristics using modern terminology.
4. To be aware of what is included in the methodology of examination and diagnosis and to distinguish the basic clinical parameters that characterize the pathological periodontium, like bleeding on probing (inflammation), deepening of the gingival crevice (pocket) and clinical attachment loss and gingival recession.
5. To be aware of the diagnostic value of radiographs and laboratory tests, their limitations and their possibilities in relation with the periodontal diseases.
6. To recognize and compose the clinical, radiographical and laboratorial data in order to make a diagnosis.
7. To be aware of what is the prognosis in Periodontology and which are the different factors that influence general and specific prognosis.
8. To acknowledge the distribution and the development of periodontal diseases within the human population, and recognize the parameters that constitute or influence them. Furthermore, to distinguish the epidemiological indexes and their use in each occasion.
9. To be aware of the aim and the objectives of periodontal therapy.
10. To fill in and analyse medical and dental history of the periodontal patient and to recognize the existing periodontal defects, and the possible contributing factors.
11. To be aware of the basic principles of the use of prophylactic antibiotics for the periodontal patient.
12. To comprehend the hierarchy of different therapeutic actions that concern exclusively the periodontium, and to recognize other therapeutic needs that are related to the completion of periodontal treatment.
13. To be aware of the role of dental plaque in periodontal disease, the stage of its maturation and also the current methods of its study.
14. To be intimate with the methods of oral hygiene and the oral hygiene products (toothbrush, interproximal brushes, dental floss).
15. To be familiar with the periodontal instruments (of examination-diagnosis-scaling-root planing), their sharpening methods and also the way of using them and holding them.
16. To be capable to remove with the periodontal instruments an artificial subgingival calculus from a cast in phantoms and to evaluate the roughness of the root surface.
17. To be aware of the tooth splitting techniques.
18. By the end of the laboratory exercises to be able to discuss, to diagnose, emphasize were needed and suggest the appropriate therapeutic interventions for clinical cases presented through slides or video presentation.

CONTENT OF THE COURSE

Lectures (topics)

1st cycle of courses

1. introduction in Periodontology
2. Normal, clinically healthy periodontium
3. Introduction in pathogenesis of periodontal diseases-Microbial factor-Calculus-Iatrogenic factors
4. Defensive mechanisms-Systemic factor
5. Revision and emphasis on the main topics of the previous lectures

2nd cycle of courses

1. Classification –progression of periodontal diseases and conditions
2. Gingival diseases
3. Chronic periodontitis, Aggressive periodontitis, Periodontitis associated with systemic diseases
4. Necrotizing ulcerative diseases, Abscesses, Periodontitis associated with endodontic lesions and developmental or acquired deformities and conditions, Bone resorption
5. Revision and emphasis on the main topics of the previous lectures

3rd cycle of courses

1. Clinical examination of the periodontal patient
2. Tooth mobility
3. Radiographic examination. Laboratory practice and tests
4. Revision and emphasis on the main topics of the previous lectures

4th cycle of courses

1. Prognosis
2. Epidemiology of periodontal diseases
3. Revision and emphasis on the main topics of the previous lectures

Seminars (topics)

1. Introduction. Objectives of periodontal therapy
2. Evaluation of the periodontal patient medical history
3. Means of periodontal therapy
4. Treatment planning
5. Oral hygiene (Self-performed plaque control)
6. Scaling-root planning
7. Use of antimicrobials in Periodontology
8. Splinting
9. Presentation of cases treated for gingivitis, after the completion of periodontal therapy. Discussion about diagnosis, prognosis and treatment planning.
10. Presentation of cases completed only with cause related therapy. Discussion about diagnosis, prognosis and treatment planning.
11. Presentation of periodontitis cases in patients with systemic diseases. Discussion about diagnosis, prognosis and treatment planning.

Revision and emphasis in therapeutic modalities as they are applied in clinical training of the students

EDUCATIONAL METHODS

- Seminar-type lectures.
- Group seminars.
- Laboratory exercise.

SUCCESSFUL FINALIZATION

- Attendance of 85% of seminars.
- Successful completion of the laboratory exercises.
- Successful final examination.

STRENGTHS

The directness, the provision of material and the structure of the presentations lead the students to the classroom although their attendance is not mandatory.

WEAKNESSES

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OPPORTUNITIES

Student participation in the simulation lab.

THREATS

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PLANS FOR FUTURE CHANGES

To include lessons and interactive seminars in the website of the School.

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(51213B) - Periodontology II, 7th semester & (51213C) - Periodontology II, 8th semester

AIM

The aim of the curriculum is the prevention and treatment of periodontal disease, as well as the treatment of any type of lesions of the periodontal tissues providing in each case the appropriate therapy, based on biologic principles that aim in the re-establishment of periodontal health and its long-term maintenance.

OBJECTIVES

At the end of the 8th semester, the student should be able to:

1. Distinguish between regular and pathological periodontium after clinical examination of the gingiva.
2. Examine and diagnose the patient's periodontal problem after full clinical examination and necessary radiographs (based on the clinical examination findings).
3. Suitably assess findings from clinical examination and radiographs and document findings in patient's chart.
4. Identify the type, extend and severity of periodontal disease and give a prognosis for the affected teeth after periodontal treatment.
5. Set-up an individual periodontal treatment plan and select the optimum technique to treat periodontal problems, taking into account the patient individually.
6. Handle cases of patients (medical compromised patients, children and young adults, special types of periodontal disease) or periodontal problems (furcation problems, clinical pharmacology applied locally or systematically), for which alternative treatment is required.
7. Assess particular cases of patients (necrotizing ulcerative gingivitis-NUG, necrotizing ulcerative periodontitis-NUP) or periodontal problems (gingival and periodontal abscess), for which immediate treatment is necessary and apply corresponding techniques.
8. Design and successfully implement a treatment plan for any patient with gingivitis, mild or moderate periodontitis.
9. Demonstrate good oral hygiene practice and encourage the patient to adopt it.
10. Identify the periodontal instruments (scaling/root planing) and be familiar with the way of using them (grasp and finger rest) in the clinics, working positions, depending on the jaw (upper or lower), quadrant, and the type of teeth that he/she works on.
11. Evaluate the outcome of periodontal treatment after recording and evaluating qualitatively certain clinical parameters.
12. Identify, during re-evaluation, the cases that require further treatment, i.e. surgical treatment.
13. Design and apply a recall system to every treated patient, depending on particular needs, in order to better understand the value of periodical recall and re-examination during periodontal maintenance therapy.
14. Integrate periodontal therapy on the concept of total patient treatment.

CONTENT OF THE COURSE

Introduction in periodontal treatment ; Non-surgical therapy, Scaling-root planning. Evaluation of it's effectiveness ; The use of antimicrobial agents in periodontal therapy ; Periodontal pocket. Diagnosis and therapeutic approach ; Discussion on clinically interesting issues ; Intraosseous lesions. Diagnosis and therapeutic approach ; Gingival recession. Mucogingival problems ; Diagnosis and therapeutic approach ; Furcation involvement. Diagnosis and therapeutic approach ; Gingival overgrowth ; Diagnosis and therapeutic approach ; Discussion on clinically interesting issues ; Periodontal wound healing ; Periodontal surgery ; Periodontal treatment and orthodontics ; Periodontal treatment and reconstructive dentistry ; Reasons of failure of periodontal treatment ; Periodontal diseases in children and adolescents ; Supportive periodontal care ; Discussion on clinically interesting issues.

EDUCATIONAL METHODS

- Group seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of 85% of seminars.
- Successful completion of the clinical requirements.

STRENGTHS

The classification of the course content in teaching units presented in small groups of students giving the opportunity for a deep and global approach of each subject resulting in better comprehension and acquisition of knowledge by the students.

WEAKNESSES

There is no provision for examination which would further motivate the students.

OPPORTUNITIES

There is opportunity for combined, at the same time, theoretical background and documentation with clinical training and development of dexterities in conjunction with other disciplines in the context of total patient care.

THREATS

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PLANS FOR FUTURE CHANGES

To include the course in the website of the School.

(51213D) - Periodontology II, 9th semester & (51213) - Periodontology II, 10th semester

AIM

The aim of the curriculum is the prevention and treatment of periodontal disease, as well as the treatment of any type of lesions of the periodontal tissues providing in each case the appropriate therapy, based on biologic principles that aim in the re-establishment of periodontal health and its long-term maintenance.

OBJECTIVES

At the end of the 10th semester, a student should be able to:

1. incorporate periodontal therapy in the general treatment plan of the dental patient .
2. categorize the necessary and required treatments which are included in the treatment plan.
3. form an initial, an alternative and a final treatment plan, not only for the periodontal diseases but for the whole dental needs of the patient.
4. provide supportive treatment after the completion of the active treatment, for all kinds of treatment.

CONTENT OF THE COURSE

Evaluation of teeth as fixed prosthetic abutments (diagnosis, prognosis, and utilization) ; Special patient cases and accidents during endodontic treatment ; Restoration of endodontically treated teeth. Selection of techniques and materials (posts, inlays, crowns) ; Selection of treatment sites and impression taking in prosthetic dentistry ; Crown lengthening. When and how? ; Treatment of fractured teeth. Selection of the appropriate techniques and materials (Composite resins, post and core-prefabricated and custom made, and crowns) ; The importance of reexamination of patients and of maintenance care program ; Discussion on clinical cases.

EDUCATIONAL METHODS

- Group seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Seminar attendance.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

The student has the opportunity to realize the role and importance of Periodontology within the context of total patient care and to transfer the theoretical background in the daily clinical practice. Adequate (large) number of clinical cases.
Adequate number of moderate to heavy cases which are managed in collaboration with the Postgraduate Periodontology Clinic.
Increased number of cases in terms of content (patient in active treatment, recall patient, patient with systemic illnesses etc.).

WEAKNESSES

Lack of professionally trained Dental Hygienists.
Lack of a significant part of technical equipment (e.g. ultrasound device per student, surgical suction etc.).
A rapid system of clinical examination at least during the initial stages of the examination.

OPPORTUNITIES

The student has the opportunity to co-operate with other specialties in the order to achieve the treatment goal (perio-endo, perio-prostho, perio-ortho).
Ability to follow treatment effectiveness through recall.

THREATS

In a small number of cases, the needs of prosthetic rehabilitation overrun the need for complexity of periodontal cases.
Over-simplification of treatment plans, due to time restrictions.
Implant placement without the corresponding adequate training may modify the treatment plan towards one direction.

PLANS FOR FUTURE CHANGES

Reshaping the content of the clinical training aiming at improving the clinical skills necessary to manage heavier cases.
Student enrolment – Instruction – Training on implant applications.
Student exposure to a larger number of patients with systemic health problems that reflect the daily practice conditions.
The ability for limited therapeutic intervention (supportive treatment) keeping up with the philosophy of daily clinical practice.
Four-handed clinical training.

Practical Training in Oral Diagnosis and Radiology

AIM

Clinical training of the 4th semester students in taking intraoral radiographs referred to the Department of Oral Diagnosis and Radiology. This training is a pre-requisite for the

7th semester course in Oral Diagnosis and Radiology. Clinical training is performed in small groups of students

OBJECTIVES
Students familiarization to the intraoral radiographic techniques performed on patients.

CONTENT OF THE COURSE
Taking intraoral radiographs on patients.

EDUCATIONAL METHODS

- Clinical training.

SUCCESSFUL FINALIZATION

- Successful completion of 75% of the laboratory exercises.

STRENGTHS
Small groups of students

WEAKNESSES
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OPPORTUNITIES
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THREATS
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PLANS FOR FUTURE CHANGES
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(51080) - Preventive Dentistry, 6th semester

AIM
To provide the students the necessary knowledge, skills and attitudes that will allow them to implement the means and methods of oral diseases prevention.

OBJECTIVES
By the end of the 6th semester the students should be able to:

1. Have a good understanding of the concept of primary, secondary and tertiary prevention, as well as their effect on oral health and quality of life of the individuals.
2. Evaluate the dental status of the patient, using the appropriate clinical and epidemiological indices.
3. Describe the physiology of the secretions in the oral cavity, their composition, the biochemical and biological properties of their components and their role in the aetiology, pathogenesis and prevention of oral diseases.
4. Describe the formation, the chemical and microbial structure and the metabolic activity of dental plaque, along with its role in the aetiology of dental caries and periodontal diseases.
5. Describe the formation and composition of calculus and its role in oral health.
6. Understand the physiochemical principles related to saliva and enamel equilibrium and describe the mechanisms of demineralization and remineralization of hard dental tissues.
7. Describe the stages of dental caries progression, explain the significance of its early diagnosis and describe the appropriate preventive strategies.
8. Describe and apply the means and methods of oral hygiene and compare their effectiveness and safety.
9. Describe antimicrobial dental plaque control and understand the limitations of its use.
10. Describe the properties, metabolism and biological effects of fluoride and its role in caries prevention.
11. Apply fluoride products (varnish, gel) in the oral cavity.

12. Understand the effect of diet in oral health.
13. Evaluate the dietary status of the patients through dietary analysis and provide them with the appropriate dietary counselling.
14. Use and apply fissure sealants on extracted teeth and understand the indications and contraindications of their application.
15. Describe the aetiology and pathology of dental erosion along with the methods of its prevention.
16. Describe the available methods for testing patients' caries activity.
17. Understand the importance of oral disease risk assessment.
18. Plan individualized oral health preventive programmes.
19. Describe the preventive programmes for special patient categories (i.e. cancer patients).
20. Describe smoking cessation programmes in the dental office.

CONTENT OF THE COURSE

Introduction to the philosophy of preventive dentistry ; Methods of evaluating oral health status ; Secretions in the oral cavity ; Organic and inorganic deposits in the oral cavity ; Saliva-enamel physiochemical equilibrium. De-Remineralization of dental hard tissues ; Means and methods for dental plaque control ; Diet and oral health ; The use of fluoride in dentistry ; Prevention of oral diseases ; Oral diseases risk assessment ; The dentist's role in smoking cessation ; Special dental care for the compromised patient.

EDUCATIONAL METHODS

- Lectures.
- Group seminars.
- Laboratory exercise.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminars.
- Successful completion of the laboratory exercises.
- Successful final examination.

STRENGTHS

The instruction of the largest part of the course takes place in group seminars facilitating the communication between the instructor and the students.
Offers the opportunity for pre-clinical student training.

WEAKNESSES

The course of Preventive Dentistry is not included in the clinical training of the students.

OPPORTUNITIES

If the number of the faculty members increases, it will allow the participation in the clinical training of the students.

THREATS

Despite the fact that a major goal of the undergraduate curriculum is to generate dentists with a preventive attitude, in recent years there is more emphasis on restorative treatment rather than prevention.

PLANS FOR FUTURE CHANGES

Preparing course notes that cover the contemporary knowledge and views on Preventive Dentistry topics.
Participation in the clinical training of students.

(51205) - Oral Surgey I, 6th semester

AIM
Basic surgical principles, simple and surgical extractions, complications, emergencies

OBJECTIVES
By the end of the 6th semester the student must know :

1. The basic principles of sterilization, disinfection-antisepsis.
2. The basic principles of surgery
3. To be able to recognize the necessary instruments and the way to use them
4. To know the kinds of incisions used in the oral surgery and be able/capable to apply them on certain/specific models.
5. To know the kinds of sutures and be able to perform/apply on specific/certain models.
6. The complications that may occur during or after surgery in the oral cavity.
7. To be able to take pulse and the blood pressure.
8. The anatomy of the venus plexus of the dorsal surface of the hand and the articubital fossa.
9. To be able to puncture a vein.
10. To be able to relate theoretical the conducting procedures with the general medical status of the patient.
11. To know what means cardiopulmonary resuscitation and be able to perform the basic steps on the phantom.

CONTENT OF THE COURSE
Basic surgical principles (sterilization- incisions- flaps- suturing-hemostasis); Simple and surgical extraction (indications – instruments-techniques); Complications (prevention-management); Emergency situations (prevention- management).

EDUCATIONAL METHODS

- Lectures.
- Laboratory exercise.
- Clinical training.

SUCCESSFUL FINALIZATION

- Successful completion of 90% the laboratory exercises.
- Successful midsemester exam.
- Successful final examination.

STRENGTHS
They get a good level of knowledge for the clinical training in the next semester (7th).

WEAKNESSES
The rather big difference between the laboratory (theoretical) exercise and the clinical application . Too many teachers involved.

OPPORTUNITIES
The use of m in all the teaching stages. The midsemester exams.

PLANS FOR FUTURE CHANGES
Reorganization of the teaching material, acquisition of phantoms. Limitation of the number of students.

(51208A) - Oral Surgey II, 7th semester & (51208B) - Oral Surgey II -8th semester

AIM

The student should learn the basic minor oral surgical procedures.

OBJECTIVES

The student by the end of the 8th semester should know:

1) To perform simple extractions of teeth.
2) To perform multiple extractions of teeth and alveoloplasty .
3) To perform surgical extractions of teeth and roots.
4) To access the degree of difficulty of a simple or surgical extraction.
5) To know the technique of the surgical removal of the impacted wisdom teeth , canines and other impacted teeth.
6) To know the technique of the apicoectomy.
7) To know the oral surgical procedures which are related to the orthodontics.
8) To know the technique of the surgical removal of small , benign tumors of the oral mucosa.
9) To recognize the complications of the oral surgical procedures.
10) To know the principles and the methods of alveolar ridge preservation.
11) To know elements of surgical implantology.
12) To recognize and manage emergency situations in the dental office.
13) To know and perform cardiopulmonary resuscitation (Basic-BLS).

CONTENT OF THE COURSE

Multiple extractions- alveoloplasty; Basic preprosthetic surgery; Surgical removal of impacted teeth- in general; Apicoectomy; Surgery of the benign tumors of the oral mucosa ; Biopsy technique; Implants; Technique of harvesting autografts .

EDUCATIONAL METHODS

- Seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of seminars.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

To be able to perform a simple or a surgical extraction – biopsy.

WEAKNESSES

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OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

Cooperation with KSA.

(51208C) - Oral Surgey II, 9th semester & (51208) - Oral Surgey II, 10th semester

AIM

The student should Know to perform all the oral surgical procedures under local anesthesia.

OBJECTIVES

The student by the end of the 10th semester should be capable fo the goals 1-10 of the 7th and 8th semester as also:

1) To know and to perform the simple procedures of the basic preprosthetic surgery.
2) To perform surgical extractions of teeth- roots.
3) To know the diagnostic methodology of the usual oral surgical clinical cases and to know the methods of their management.

CONTENT OF THE COURSE

Simple and surgical extraction; Surgery of the impacted teeth; Preprosthetic surgery; Apicoectomy; Infections of dental origin; Biopsy and histopathological exam; Surgical removal of periapical cysts; Surgical removal of the bone and soft tissue cysts; Occurrences.

EDUCATIONAL METHODS

- Seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of seminars.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

The ability of the students to perform only simple extractions of teeth .

WEAKNESSES

Inability of a thorough training due to inadequate number of patients.
Limited number of staff.
Lack of a room for the management of emergency cases (organized operating room).
Limited number of dental chairs.

OPPORTUNITIES

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THREATS

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PLANS FOR FUTURE CHANGES

Enrichment of the educational process with modern technical and electronic means (video-dvd e.t.c.)

(51173A) - Oral Medicine and Pathology I , 7th semester & (51173) - Oral Medicine and Pathology I, 8th semester

AIM
Knowledge of the clinical and histopathological features of the pathologic conditions of the oral mucosa, the salivary glands, and the jawbones.

OBJECTIVES
At the end of the 8th semester, the dental student should be able to:
1. Understand the etiology and pathogenesis of the various genetic syndromes and developmental disorders of the orofacial tissues and the possible role of infectious or/and pharmacological factors during the patient's embryonic development.
2. Recognize microscopically any change of the normal histological structure of the oral mucosa, salivary glands, and jawbones.
3. Recognize and describe basic lesions and correlate their clinical features to the microscopic findings.
4. Differentiate a benign from a malignant lesion of the oral mucosa, salivary glands, and jawbones, and describe their clinical, radiographic and histopathologic features.
5. Understand the possible factors and pathways involved in the etiology and pathogenesis of oral diseases.
6. Understand the etiology and pathogenesis of systemic diseases and recognize their oral manifestations.

CONTENT OF THE COURSE
Basic principles of human genetics, genetic syndromes, and developmental disorders of the mouth ; jawbones, salivary glands, and facial tissues ; Basic lesions of the oral mucosa ; Diagnostic approach of oral diseases ; Clinical and histopathological features of oral tumors and cysts ; Clinical and histopathological features of oral inflammatory conditions ; Clinical and histopathological features of oral pigmented lesions ; Clinical and histopathological features of intraosseous lesions of the jawbones ; Diseases of the salivary glands ; Oral manifestations of infectious diseases ; Oral manifestations of mucocutaneous diseases ; Oral manifestations of autoimmune diseases ; Oral manifestations of hematological diseases and nutritional deficiencies ; Oral cancer prevention.

EDUCATIONAL METHODS
- Seminar-type lectures.
- Laboratory exercise.

SUCCESSFUL FINALIZATION
- Attendance of 80% of seminar-type lectures.
- Successful completion of 80% of laboratory exercises.
- Successful interim written exams (two).
- Successful final examination.

STRENGTHS
The student gets acquainted with a spectrum of pathologic entities that are related with oral health but go beyond the limits of dental and periodontal restoration.
The student has the opportunity to apply knowledge obtained from basic sciences and biomedical courses and to develop the medical thinking.

WEAKNESSES
Lack of personnel-faculty members and secretarial assistance
Large number of students
Frequent wear and loss of specimens resulting in need for continuous renewal and sorting.

OPPORTUNITIES

There is opportunity for collaboration with many medical specialties (Hematology, Dermatology, Rheumatology, Immunology, Anatomic Pathology etc.)
There is opportunity for collaboration with other dental disciplines
There is opportunity for collaboration with the courses of Special Nosology, Otorhinolaryngology and General Surgery

THREATS
Small to minimal students' interest for microscopic study of tissue specimens. Their interest is focused on the management of patients in the clinics of other dental disciplines.

PLANS FOR FUTURE CHANGES
Completed laboratory guide.
Electronic archive of internet-accessible photomicrographs.
Possible replacement of microscope use by systems like Digital Slide box / Digital Microscope

(51094A) - Oral Medicine and Pathology II , 9th semester & (51094) - Oral Medicine and Pathology II, 10th semester

AIM
Diagnosis and treatment of orofacial diseases, ability to perform a biopsy and referral of patients with systemic diseases to the appropriate medical specialty.

OBJECTIVES
At the end of the 10th semester, the dental student should be able to:
1. Follow the appropriate diagnostic process based on the patient's history in correlation with the clinical findings.
2. Select the necessary laboratory tests and procedures required for the final diagnosis and have the ability to perform an incisional or excisional biopsy.
3. Evaluate the clinical findings in correlation with the results of the diagnostic tests and distinguish a benign or inflammatory from a malignant lesion.
4. Correlate the histopathological or cytological findings to the patient's oral pathologic condition.
5. Provide the recommended medical therapy, when necessary, or refer the patient to the appropriate medical specialty.
6. Recognize the oral complications of radio-chemotherapy and other systemic drug administration and participate in oral health prevention and rehabilitation.
7. Discuss and explain to the patient the risk factors for the development of oral cancer and propose prevention measures.

CONTENT OF THE COURSE
Basic principles of human genetics, genetic syndromes, and developmental disorders of the mouth, jawbones, salivary glands, and facial tissues ; Basic lesions of the oral mucosa ; Diagnostic approach of oral diseases ; Diagnostic methodology of oral tumors and cysts ; Diagnostic methodology and treatment of oral ulcerative conditions ; Diagnostic methodology and treatment of oral pigmented lesions ; Diagnostic methodology of intraosseous lesions of the jawbones ; Diagnostic methodology and treatment of diseases of the salivary glands ; Diagnostic methodology and treatment of oral inflammatory diseases ; Diagnostic methodology and treatment of oral manifestations of infectious diseases ; Diagnostic methodology and treatment of oral manifestations of mucocutaneous diseases ; Diagnostic methodology and treatment of oral manifestations of autoimmune diseases ; Diagnostic methodology and treatment of oral manifestations of hematological diseases and nutritional deficiencies ; Oral cancer prevention.

EDUCATIONAL METHODS

- Group seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of 80% of seminars.
- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS

The student gets acquainted with a spectrum of pathologic entities that are related with oral health but go beyond the limits of dental and periodontal restoration.
The student has the opportunity to directly interact with patients with oral diseases and to apply knowledge obtained from basic sciences and biomedical course, as well as to develop the medical thinking and judgment.
The student has the opportunity to contribute to the early diagnosis of systemic diseases from their oral manifestations highlighting the role of modern dentist in the broader medical field**.**

WEAKNESSES

Lack of personnel-faculty members and secretarial assistance
Lack of nursing personnel.
Large number of students per group.

OPPORTUNITIES

There is opportunity for collaboration with other clinical and laboratory medical specialties.
There is opportunity for collaboration with other dental disciplines.

THREATS

Small interest of a proportion of the students for the diagnosis and treatment of oral diseases. Their interest is focused on the management of patients in the clinics of other dental disciplines.

PLANS FOR FUTURE CHANGES

Electronic archive of internet-accessible clinical photographs.
Clinical training of students in an affiliated hospital as part of the undergraduate curriculum.
Oral Medicine textbook with focus on clinical differential diagnosis.

(51073)-Pharmacology I, 5th semester

AIM

To provide lectures on the following chapters:
1. Principles of Pharmacology (Pharmacokinetics –Pharmacodynamics)
2. Specific issues: Drugs of the autonomous nervous system. Drugs of the cardiovascular system. Drugs of the respiratory system. Drugs of the digestive system.

OBJECTIVES

The main objectives of the course are:
To help student approach and understand the general principles of pharmacology that will enable him to correctly use drugs for therapeutic reasons. The student should learn the mechanism of drug actions, interactions and side effects, as well as the principles of drug bio-availability. The student should then be able to select the appropriate form of a drug and the way of its administration. More specifically, the dental student is sensitized to the basic categories of drugs received by a patient that could interfere with the dental practice. For

example, drugs taken chronically for heart diseases can interfere with local anesthetics, or in other instances the use of antibiotics may precede a surgical intervention. Additionally, the student is familiarized with the groups of drugs often used in dental practice and with the side effects that other drugs can have in the oral cavity. The teaching is focused in the application of the principles of Pharmacology in selected paradigms.

CONTENT OF THE COURSE

Introduction to the general principles of Pharmacology (pharmacokinetics, pharmacodynamics, molecular basis of drug actions and bio-availability). Drugs of the autonomous nervous system. Drugs of the cardiovascular system. Drugs of the respiratory system. Drugs of the digestive system. Mechanism of inflammation, anti-inflammatory and anti-histaminic drugs. Drugs in blood diseases, anti-agglutination drugs, etc

EDUCATIONAL METHODS

- Lectures.
- Seminars.

SUCCESSFUL FINALIZATION

- Successful finalisation of laboratorial exercises.
- Successful final examinations.

STRENGTHS

The addition of 9h of teaching in the 5th semester and the adaptation of the course content to the needs of dental students

WEAKNESSES

Dental and medical students share common lectures in Pharmacology. Dental students in particular attend only the two out of three lectures per week and this interrupts the continuity of the context. Although dental students are interested in the course, they are overloaded with other dental courses at the end of the 5th semester, so as they don't have enough time to read for the exams of Pharmacology. They tend to transfer this examination in upcoming semesters and as a result their performance in the exams is poor. During the academic year 2007-8, only 19 students participated in the exams and 12 of them passed the course.

OPPORTUNITIES

To change the curriculum and to provide lectures independently from medical school that should be adapted to the needs of dental students

THREATS

Not in-depth knowledge, unsuccessful use of drugs in clinical practice and inability to face possible side effects of commonly used drugs.

PLANS FOR FUTURE CHANGES

Teaching independently from medical school and adaptation of the context to the needs of dental students

Pharmacology II (51078), 6th semester

AIM

To provide lectures on the following chapters:

1. Principles of drug actions in the central nervous system to control pain, anxiety and other situations related to the dental practice.

2. Principles of chemotherapy. Anti-microbial, anti-fungal, anti-viral and anti-neoplastic drugs.
3. Principles of hormone actions

OBJECTIVES
The student should be able:
1. to provide the appropriate drugs for the management of possible deregulations
2. to properly use the analgesic drugs (as in the cases of trigeminal nerve neuralgia)
3. to know the problems from the use of chemotherapeutic drugs (preventive chemotherapy in dental practice, selection of the appropriate antibiotic, development of antibiotic resistance)
4. to know the pharmacological action of hormones and in particular the action of anti-diabetic drugs and the proper use of corticosteroids

CONTENT OF THE COURSE
Principles of chemotherapy. Anti-microbial drugs. Anti-cancer drugs. Drugs of the central nervous system. Analgesics- anesthetics (local and general anesthesia). Hormones.

EDUCATIONAL METHODS
- Lectures.
- Seminars.

SUCCESSFUL FINALIZATION
- Successful final examinations.

STRENGTHS
The addition of 6 more hours of teaching in the 5th semester and the adjustment of the contents to the needs of the dental student.

WEAKNESSES
Similarly to Pharmacology I (5th semester), dental and medical students share common lectures in Pharmacology II (6th semester). Dental students in particular attend only the two out of three lectures per week and this interrupts the continuity of the context. Although dental students are interested in the course, they are overloaded with other dental courses so as they don't have enough time to read for the exams of Pharmacology II. They tend to transfer this examination to the final graduation exams and their performance in the exams is poor.

OPPORTUNITIES
To change the curriculum and to provide lectures independently from medical school that should be adapted to the needs of dental students

THREATS
Not in-depth knowledge, unsuccessful use of drugs in clinical practice and inability to face possible side effects of commonly used drugs.

PLANS FOR FUTURE CHANGES
Teaching independently from medical school and adaptation of the context to the needs of dental students

(51187) –Physiology of the Stomatognathic system, 5th semester

AIM
The purpose of the program is to provide to the student the basic knowledge on the function and the dysfunction of the stomatognathic system. Furthermore, the student has the

opportunity to use and establish in TMD patients, gained knowledge, at the undergraduate student clinic of total patient care during the 8th semester.

OBJECTIVES

The aim of the program is to provide the 6th semester students the theoretical knowledge and the clinical experience on the management and therapy of the dysfunction of the Stomatognathic System.

At the end of the program students should:

1. know the epidemiological facts that concern the functional disturbances of the Stomatognathic System
2. Posses exceptional knowledge of the anatomy and function of the head and neck
3. have solid knowledge of the physiology and pathology of the above mentioned areas, and especially those of the Stomatognathic System
4. Understand the pain genesis mechanisms that refer to the Stomatognathic system and the adjacent area.
5. Take the patient`s history efficiently and appraise the data from the clinical examination
6. Organize and accomplish a treatment therapy plan, and appraise accurately the prognosis. Also, inform the patient about the nature of his problem with clarity
7. Be able to refer accurately to other dental or medical specialists, if the patient`s problem either is diagnostically involved or co-existent
8. Be in position to clarify which case should be surgically treated.
9. Know in depth the use and the side-effects of the drugs used in the orofacial pain management
10. Be able to apply the whole therapeutic armamentarium in their clinical practice eg:
    - fabrication and use of the various types of intraoral splints
    - Various methods of physical therapy

CONTENT OF THE COURSE

Anatomy of the Stomatognathic system ; The muscles of mastication ; The Temporomandibular Joint ; The Physiology of the Stomatognathic system ; Muscle contraction ; The mechanism of energy supply ; Muscle fatigue ; The function and the functional characteristics of the muscles of the Stomatognathic system, Neurophysiology of mastication ; Tactile sensibility, bite force, masticatory efficiency ; Dysfunction of the Stomatognathic system ; History of the dysfunction of the patient ; Clinical examination ; Palpation of the muscles and the Temporomandibular Joint of the Stomatognathic system ; Maximal opening, maximal protrusion, maximal laterotrusion ; Horizontal and vertical overbite ; Dental occlusion ; Examination and registration of the details of the Dental occlusion ; Selective grinding and occlusal equilibration of the natural and the artificial dentition ; Clinical diagnosis of neuromuscular disorders ; Management of neuromuscular disorders ; Clinical diagnosis of internal derangements of the temporomandibular joint ; Management of internal derangement of the temporomandibular joint ; Helkimo clinical dysfunction index ; The management of craniomandibular disorders ; The basic characteristics of the splint ; The fabrication of the splint and it’s insertion in the mouth of the patient ; Oral parafunction, Bruxism ; The occlusion of the teeth ; Articulators.

EDUCATIONAL METHODS

- Lectures.
- Group seminars.
- Clinical training.

SUCCESSFUL FINALIZATION

- Attendance of 90% of seminars.
- Attendance of 90% of seminar-type lectures.

- Successful completion of the clinical requirements.
- Successful final examination.

STRENGTHS
--
WEAKNESSES
--
OPPORTUNITIES
--
THREATS
--
PLANS FOR FUTURE CHANGES
--

(51180) – Otorynolarygology, 8th semester

AIM
The purpose of the course is to provide the student with the basic knowledge of otorhinolaryngology. The student should be able to use the knowledge gained during their training, to apply them in clinical practice and research and finally to follow the future evolutions.

OBJECTIVES
The course aims at teaching the students the various pathological conditions affecting the ear, nose, pharynx, larynx and generally the head and neck. It is attempted to render the student able to diagnose and manage various diseases, especially those being frequent, urgent or dangerous for the patient. The students receive all the necessary theoretical knowledge and practical experience through their direct participation in the daily clinical practice.

CONTENT OF THE COURSE
Physiology of the hearing-types of hearing impairment-hearing examination-Causes of hearing impairment-childhood hearing impairment-deaf-mutism-otosclerosis; chronic purulent otitis media; cholosteatoma ; tympanoplasty; complications of purulent otitis media; Clinical examination of the ear-diseases of the external ear-acute otitis media-secretory otitis-traumatic rupture of the tympanic membrane-reflex otalgias-aero-otitis ; Examination of the larynx-injuries of the larynx-vocal cord nodules-inflammatory diseases of the larynx-vocal cord polyps-laryngeal palsy;
Sinusitis-nose polyps- tumors of the nose and the sinuses; Physiology of vestibular system-functional examination of the posterior labyrinths -vertigo-Meniere disease-Acoustic neuroma; Diseases of adenoids and tonsils-tumors of the pharynx; Clinical examination of the nose-Fractures of nose and face-pathologic conditions of the nasal septum -epistaxis-rhinitis; Congenital anomalies of the neck-inflammatory diseases of the neck-tumors of the neck-salivary glands; Management of acute obstruction of the respiratory tract –tumors of the larynx-foreign bodies of the trachea, bronchi, esophagus.

EDUCATIONAL METHODS
- Clinical training.

SUCCESSFUL FINALIZATION
- Attendance of 90% of seminars.
- Successful final examination.

STRENGTHS
The students have the opportunity to get acquainted with the diseases of otolrhinolaryngology and their management.

WEAKNESSES
Large number of students-trainees.
Patient examination is not in-depth.

OPPORTUNITIES
The students have the opportunity to discuss with patients about their diseases.

THREATS
Increase in the number of students will be devastating.

PLANS FOR FUTURE CHANGES
Smaller groups of students.
More training of practice in clinical diseases.

WEEKLY SCHEDULE /SEMESTER

(C)-Clinical exercise, (L)-Laboratory exercise, (LE)-Lectures, (S)-Seminar

1ST SEMESTER					
HOUR	**MONDAY**	**TUESDAY**	**WENSDAY**	**THURSDAY**	**FRIDAY**
8-9	Medical Chemistry I (LE)	Medical Chemistry I (LE)	Medical Physics (LE)	Medical Physics (LE)	
9-10		Introduction to Dentistry and Behavioral Sciences (LE)			Introduction to Dentistry and Behavioral Sciences (LE)
10-11	Biology and Genetics (LE)	Biostatistics (LE)	Biology and Genetics (LE)	Biostatistics (LE)	
11-12		Medical Physics (L)		Medical Physics (LE)	Medical Chemistry I (LE)
12-13			Medical Physics (L)	Medical Physics (L)	
13-14	Descriptive anatomy II (LE)	Medical Physics (LE)	Descriptive anatomy II (LE)	Descriptive anatomy II (LE)	Descriptive anatomy II (LE)
14-15	Introduction to Dentistry and Behavioral Sciences (LE)		Introduction to Dentistry and Behavioral Sciences (L)		Introduction to Dentistry and Behavioral Sciences (L)
15-16	Introduction to Dentistry and Behavioral Sciences (L)		Biostatistics (L)		
16-17					

2nd SEMESTER

HOUR	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
8-9	(L)Descriptive anatomy I / Oral Histology and Embryology (L) / Dental Materials (L)	(L)Descriptive anatomy I / Oral Histology and Embryology (L) / Dental Materials (L)	(L)Descriptive anatomy I / Oral Histology and Embryology (L)	(L)Descriptive anatomy I / Oral Histology and Embryology (L) / Dental Materials (L)	(L)Descriptive anatomy I
9-10					
10-11					Dental Materials (L)
11-12	Tooth morphology (L)	Oral Histology and Embryology (LE)	Tooth morphology (L)	Oral Histology and Embryology (LE)	General Histology - Embryology (LE)
12-13		General Histology - Embryology (LE)		General Histology - Embryology (П) (NAAO)	
13-14	Descriptive anatomy I (LE)	Descriptive anatomy I (LE)	Descriptive anatomy I (LE)	Descriptive anatomy I (LE)	Descriptive anatomy I (LE)
14-15					
15-16	Medical Chemistry II (LE)	Medical Chemistry II (LE)		Medical ChemistryII (LE)	
16-17					

3rd SEMESTER					
HOUR	**MONDAY**	**TUESDAY**	**WENSDAY**	**THURSDAY**	**FRIDAY**
8-9	Oral Diagnosis and Radiology I (L)	Oral Diagnosis and Radiology I (L)	Oral Diagnosis and Radiology I (L)	Pathology of Dental Hard Tissues (LE)	Oral Diagnosis and Radiology I (L)
9-10				General Microbiology - Immunology (LE)	
10-11				Oral Diagnosis and Radiology I (S)	
11-12	Biochemistry I (LE)	Pathology of Dental Hard Tissues (LE)	Experimental Physiology II (LE)	General Microbiology - Immunology (L)	General Microbiology - Immunology (L)
12-13	Experimental Physiology II (LE)	Biochemistry I (LE)		Experimental Physiology II (LE)	Biochemistry I (LE)
13-14	Oral Diagnosis and Radiology I (LE)		Oral Diagnosis and Radiology I (LE)		General Microbiology - Immunology (LE)
14-15	General Microbiology - Immunology (LE)	General Microbiology - Immunology (LE)		General Microbiology - Immunology (L)	Introduction to Informatics (L)
15-16		Introduction to Informatics (elective)			
16-17					

4th SEMESTER

HOUR	MONDAY		TUESDAY		WENSDAY		THURSDAY		FRIDAY	
8-9	Practical traning in Oral Diagnosis and Radiology (L)	(L)Pathology	Practical traning in Oral Diagnosis and Radiology (L)		Pathology (L)		Practical traning in Oral Diagnosis and Radiology (L)		Practical traning in Oral Diagnosis and Radiology (L)	Pathology (L)
9-10										
10-11	Fixed Prosthodontics I (LE)		Epidemiology (LE)		Orthodontics I (LE)		Orthodontics I (LE)		Epidemiology (LE)	
11-12	Biochemistry II (LE)		Patholog(LE)		Experimental Physiology I (LE)		Pathology (LE)			
12-13	Experimental Physiology I (LE)		Biochemistry II (LE)				Experimental Physiology I (LE)		Biochemistry II (LE)	
13-14	(L)Operative Dentistry I	(L)Removable Prosthodontics I	(L)Fixed Prosthodontics I	(L)Operative DentistryI	(L)Operative Dentistry I	(L)Removable ProsthodonticsI	(L)Fixed Prosthodontics I	(L)Operative Dentistry I	Fixed ProsthodonticsI (LE)	
14-15									OrthodonticsI (LE)	
15-16										
16-17										

5th SEMESTER

HOUR	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
8-9	Operative Dentistry I (LE)	Operative Dentistry I (LE)		Endodontics I (LE)	Endodontics I (LE)
9-10	Physiology of the Stomatognathic system (LE)	Removable Prosthodontics I (L) / Endodontics I (L)	Removable Prosthodontics I (L) / Endodontics I (L)	Removable Prosthodontics I (L) / Endodontics I (L)	Periodontology I (LE)
10-11	Pharmacology I (LE)				Pharmacology I (LE)
11-12	Periodontology I (LE)	Dental (L) Anaesthesia	Dental Anaesthesia (L)	Dental Anaesthesia (L)	
12-13	Fixed Prosthodontics I (LE)				Dental Anaesthesia (LE)
13-14	(L)Operative Dentistry I / Physiology of the Stomatognathic system (LE)	(L)Operative Dentistry I	(L)Operative Dentistry I / Physiology of the Stomatognathic system (LE)	Physiology of the Stomatognathic system (LE)	(L)Operative Dentistry I / Physiology of the Stomatognathic system (LE)
14-15				Dental Anaesthesia (LE)	
15-16	Fixed Prosthodontics I (L)		Fixed Prosthodontics I (L)		Fixed Prosthodontics I (L)
16-17					

6th SEMESTER

HOUR	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
8-9	Fixed Prosthodontics I (L) / Internal Medicine (C)	Endodontics II (LE)	Fixed Prosthodontics I (L) / (L)Endodontics II / (L)Oral Surgey I	Fixed Prosthodontics I (LE)	Fixed Prosthodontics I (L) / (C)Internal Medicine
9-10		Preventive Dentistry (LE)		Oral Surgey I (LE)	
10-11	Pharmacology II (LE)	Internal Medicine (LE)	(L)Periodontology II / Fixed Prosthodontics I (L) / (L)Endodontics II / (L)Oral Surgey I	Internal Medicine (LE)	Pharmacology II (LE)
11-12	Fixed Prosthodontics I (L) / Periodontology II (S)	(L)Endodontics II / (L)Periodontology II / (L)Preventive Dentistry	(L)Periodontology II / (L)Endodontics II / (L)Oral Surgey I	(L)Endodontics II / Periodontology II (LE) / (L)Periodontology II	Periodontology II (L)
12-13	Fixed Prosthodontics I (L) / Removable Prosthodontics I (LE)		Endodontics II (LE)	Preventive Dentistry (L)	
13-14	Removable Prosthodontics I (C)	(L)Preventive Dentistry	Removable Prosthodontics I (C)		Oral Surgey I (L)
14-15				Preventive Dentistry (L)	
15-16					Oral Surgey I (L)
16-17					

7th SEMESTER

HOUR	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
8-9	(S)Endodontics II / I (L)Oral Medicine and Pathology / Paidiatric Dentistry I (L) / General Surgery (C)	Endodontics II (S) / I (L)Oral Medicine and Pathology / Paidiatric Dentistry I (L) / General Surgery (C)		(S)Endodontics II / (L)Oral Medicine and Pathology / (L)Paidiatric Dentistry I / General Surgery (C)	(S)Endodontics II / I (L)Oral Medicine and Pathology / Paidiatric Dentistry I (L) / General Surgery (C)
9-10			Operative Dentistry II (S) / Periodonto-logy II (S)		
10-11			Operative Dentistry II (S) / Periodonto-logyII (S)		
11-12	Operative Dentistry II (S) / Periodontology II (S)	Preventive Dentistry (LE)	Preventive Dentistry (LE)	Operative Dentistry II (S) / Periodonto-logyII (S)	Oral Medicine and Pathology I (LE)
12-13		Paidiatric Dentistry I (LE)	Paidiatric Dentistry I (LE)	General Surgery (LE)	Preventive Dentistry (LE)
13-14	Orthodontics II / Total Patient Care Clinic (C) / Oral Diagnosis & Radiology/	Orthodontics II	Orthodontics II / Total Patient Care Clinic (C) / Oral Diagnosis & Radiology/	Orthodontics II / Total Patient Care Clinic (C) / Oral Diagnosis & Radiology/	Total Patient Care Clinic (C)
14-15					

15-16	(L)		Oral Pathdlogy Clinic (C)	(L)	Total Patient Care Clinic (C)	Oral Diagnosis & Radiology / Oral Pathology	(L)		Oral Pathdlogy Clinic (C)	(L)		Oral Pathdlogy Clinic (C)		Oral Diagnosis & Radiology / Oral Pathology Clinic (C)
16-17														

8th SEMESTER

HOUR	MONDAY	TUESDAY	WENSDAY	THURSDAY	FRIDAY
8-9	Removable Prosthodontics II (S) / Fixed Prosthodontics II (S) / Oral Surgey II (S)	Removable Prosthodontics II (S) / (S)Fixed Prosthodontics II / Oral Surgey II (S)	(LE)Maxillofacial surgery I	Removable (S)Prosthodontics II / (S)Fixed Prosthodontics II / (S)Oral Diagnosis and Radiology II	Removable (S)Prosthodontics II / (S)Fixed Prosthodontics II / Oral Surgey II (S)
9-10	Periodontology II (S) / Operative Dentistry II (S) / Oral Diagnosis and Radiology II (S)	Periodontology II (S) / Operative Dentistry II (S) / Oral Diagnosis and Radiology II (S)		(S)Periodontology II / Operative Dentistry II (S) / (S)Oral Diagnosis and Radiology II	Periodontology II (S) / Operative Dentistry II (S) / Oral Diagnosis and Radiology II (S)
10-11	Orthodontics II (S) / Endodontics II (S)	Orthodontics II (S) / Endodontics II (S)	(elective)Dental Informatics	Orthodontics II (S) / Endodontics II (S)	(elective)Dental Informatics / Orthodontics II (S) / Endodontics II (S)
11-12	Oral Medicine and Pathology I (L)	Oral Medicine and Pathology I (L) / Otorynolarygology (LE)- (C)	Oral Medicine and Pathology I (L)	Oral Medicine and Pathology I (L) / Otorynolarygology (LE)- (C)	
12-13					

13-14	14-15	15-16	16-17
Orthodontics Clinic (C)Paediatric Dentistry/	Total Patient Care Clinic (C)		
Oral Pathology Clinic (C)Oral Diagnosis & Radiology/			
Orthodontics Clinic (C)Paediatric Dentistry/			
Total Patient Care Clinic (C)			
Oral Diagnosis & Radiology / Oral Pathology Clinic (C)			
Orthodontics Clinic (C)Paediatric Dentistry/			
Total Patient Care Clinic (C)			
Oral Diagnosis & Radiology/ Oral Pathology Clinic (C)			
Orthodontics Clinic (C)Paediatric Dentistry/			
Total Patient Care Clinic (C)			
Oral Pathology Clinic (C)Oral Diagnosis & Radiology/			
Orthodontics Clinic (C)Paediatric Dentistry/			
Total Patient Care Clinic (C)			
Orthodontics Clinic (C)Paediatric Dentistry/			

9th SEMESTER

HOUR	MONDAY			TUESDAY			WENSDAY			THURSDAY			FRIDAY		
8-9		Total Patient Care Clinic (C)	Oral Pathology Clinic (C)Oral Diagnosis & Radiology/		Total Patient Care Clinic (C)	Oral Pathology Clinic (C)Oral Diagnosis & Radiology/		Total Patient Care Clinic (C)	Oral Pathology Clinic (C)Oral Diagnosis & Radiology/		Total Patient Care Clinic (C)	Oral Pathology Clinic (C)Oral Diagnosis & Radiology/		Total Patient Care Clinic (C)	Oral Pathology Clinic (C)Oral Diagnosis & Radiology/
9-10	Orthodontics Clinic (C) Paediatric Dentistry/			Orthodontics Clinic (C)Paediatric Dentistry/			Orthodontics Clinic (C)Paediatric Dentistry/			Orthodontics Clinic (C)Paediatric Dentistry/			Orthodontics Clinic (C)Paediatric Dentistry/		
10-11															
11-12															
12-13															
13-14	Oral Medicine and Pathology II (S)		Orthodontics II (S)	Oral Medicine and Pathology II (S)		Orthodontics II (S)	Oral Medicine and Pathology II (S)		Orthodontics II (S)	Oral Medicine and Pathology II (S)		Orthodontics II (s)			

14-15	Fixed Prosthodontics II (s)	Removable Prosthodontics II (S)	Oral Surgey II (S)	Fixed Prosthodontics II (S)	Removable Prosthodontics II (S)	Oral Surgey II (S)	Fixed Prosthodontics II (s)	Removable Prosthodontics III (S)	Oral Surgey II (S)	Fixed Prosthodontics II (S)	Removable Prosthodontics III (S)	Oral Surgey II (S)	
15-16				Applied Psychology in the Dentistry (elective)			Forensic Medicine of Mouth (elective)						
16-17													

10th SEMESTER

HOUR	MONDAY			TUESDAY			WENSDAY			THURSDAY			FRIDAY		
8-9	Total Patient Care Clinic (S)		Oral Pathology Clinic (C)Oral Diagnosis & Radiology/	Total Patient Care Clinic (S)		Oral Pathology Clinic (C)Oral Diagnosis & Radiology/	Total Patient Care Clinic (S)		Oral Pathology Clinic (C)Oral Diagnosis & Radiology/	Total Patient Care Clinic (S)		Oral Pathology Clinic (C)Oral Diagnosis & Radiology/			Oral Pathology Clinic (C)Oral Diagnosis & Radiology/
9-10	Orthodontics Clinic (C)Paediatric Dentistry/	Total Patient Care Clinic (C)		Orthodontics Clinic (C)Paediatric Dentistry/	Total Patient Care Clinic (C)		Orthodontics Clinic (C)Paediatric Dentistry/	Total Patient Care Clinic (C)		Orthodontics Clinic (C)Paediatric Dentistry/	Total Patient Care Clinic (C)		Orthodontics Clinic (C) Paediatric Dentistry/	Total Patient Care Clinic (C)	
10-11															
11-12															
12-13		Oral Diagnosis and Radiology II	Oral Medicine and Pathology II		Oral Diagnosis and Radiology II	Oral Medicine and Pathology II					Oral Diagnosis and Radiology II	Oral Medicine and Pathology II		Oral Diagnosis and Radiology II	Oral Medicine and Pathology II
13-14	Maxillofacial surgery.II (S)	(s)Oral	(s)Oral Medicine and Pathology II	Maxillofacial surgery.II (s)	Oral Diagnosis and Radiology II (s)	Oral Medicine and Pathology II (s)	Basic Implantology (LE)			Maxillofacial surgery.II (s)	Oral Diagnosis and Radiology II (s)	Oral Medicine and Pathology II (S)	Maxillofacial surgery.II (s)	Oral Diagnosis and Radiology II (S)	Oral Medicine and Pathology II (s)

14-15	Oral Surgey. II (S)	Paidiatric Dentistry II	(s)Periodontology II	Oral Surgey. II (S)	Paidiatric Dentistry III (s)	Periodontology II (s)	Clinical application of Dental Biomaterials (LE)	Oral SurgeyII (s)	Paidiatric Dentistry III (s)	Periodontology II (s)	Oral Surgey. II (s)	Paidiatric Dentistry III (S)	Periodontology II (s)		
15-16	Geriatric Dentistry (elective)			Practice management of private dental office / installation (elective)				Lasers in Dentistry (elective)							
16-17															

APPENDIX 2

GRADUATE PROGRAM GUIDE

1. INTRODUCTION

The Dental School of the National and Kapodistrian University of Athens (DSNKUA) has a structured Postgraduate Studies Program (PSP) since 1994, when it was officially founded with the B7/83 ministerial act, which was posted in the Journal of the Government (ΦΕΚ, pg 260, 12th April 1994).

Since 1994 there have been 4 additional legislature modifications of the original act. These modifications were B7/476 (EK pg. 989, 12th September 1998), 107060/B7 along with 92449/B7 (EK, pg. 1506, 3rd December 2002), 28105/B7 (EK pg. 355, 18 March 2005) and 53990/B7 (EK pg. 772, 28th June 2006).

It is the aim of the Dental School PSP to produce graduates, in all specialty areas of dentistry, able to contribute to the development of the dental science, to address contemporary developments and to advance the scientific process, as well as, to provide high level specialized clinical care.

Furthermore, it is expected that these graduates will be involved in the education system. Not only by serving in the education of the predoctoral and postdoctoral dental students, but also in the education of their colleagues by contributing to continuing education functions, as well as, in the awareness of the public in oral health issues.

The dental school PSP is divided into two stages. The first stage comprises of two groups of Postgraduate Programs of Specialization (PPS). The first PPS group includes the basic sciences and the disciplines that belong to the greater scientific area of Dentistry. The primary goal of this PPS is to offer the knowledge foundation and to establish a solid scientific background, adequate to promote dental research in a specific field. The fields of the first PPS are:

1. Community Dentistry
2. Oral Biology
3. Dental Biomaterials
4. Oral Pathobiology

The second PPS of the first stage is focused on the clinical aspect of dental specialties and its goal is the development of clinical skills, based on a solid knowledge background, and the establishment of continuing education and prevention as important prerequisites. The fields of the second PPS are:

1. Orthodontics
2. Paediatric Dentistry
3. Operative Dentistry

4. Periodontology
5. Endodontics
6. Prosthodontics
7. Oral Medicine and Pathology
8. Oral Radiology and Diagnosis
9. Orofacial Pain Management Clinic
10. Oral Pathobiology with direction to Oral Surgery

The PSP grants a Postgraduate Specialty Certificate (PSC) to the students who successfully complete a PPS in one of the above 14 fields.

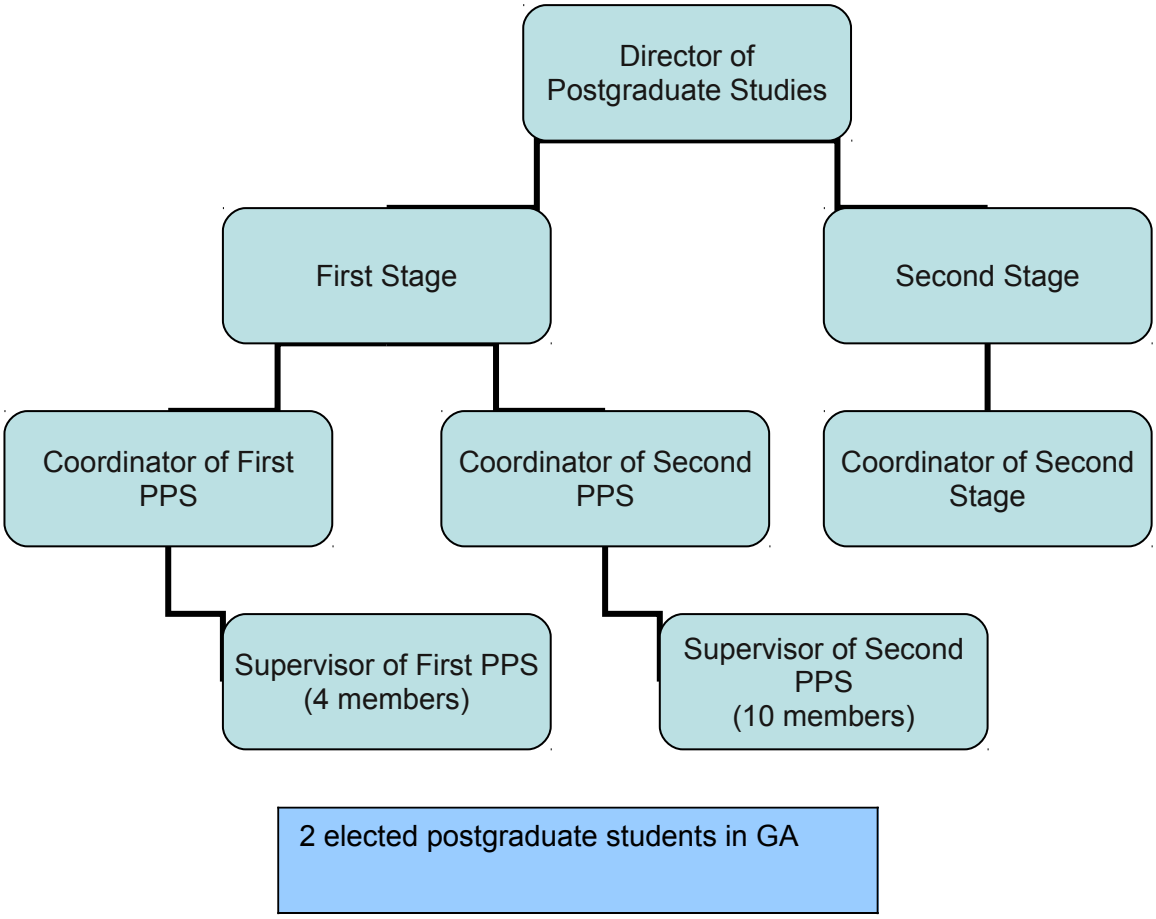
The second stage of the PSP includes studies that culminate to a doctoral dissertation and the attainment of a doctor of philosophy degree in one of the four basic dental sciences; Community Dentistry, Oral Biology, Dental Biomaterials and Oral Pathology.

2. ADMINISTRATIVE STRUCTURE

The highest administrative body of PSP is the General Assembly (GA) as it is ordered by article 12, §1, line Γ of Act 2083/92.

The GA is compiled by the Dean of the Dental School, all elected faculty members and 2 elected postgraduate students. The GA is brought into order and is chaired by the Dean of the Dental School. Active participation in GA has also the Director of Postgraduate Studies according to Act 2454/97 article 6. The Director of Postgraduate Studies introduces the topics for discussion. The Director of Postgraduate Studies must be of the rank of a full Professor or Associate Professor and is elected by GA to serve for 2 years.

The Director of Postgraduate Studies is assisted by the Postgraduate Committee (PC). The structure of the PC is shown in the diagram below:



All PPS maters are discussed in the GA.

The coordinators of first and second PPS and the one of the second stage of the PC are selected in the GA from all the PPS supervisors after nomination by the Director of Postgraduate Studies. The 3 coordinators serve for 2 years.

The supervisors of all PPS are the directors of Laboratories and Clinics relative with the subject of each PPS, except when the Director nominates a different supervisor (must be of the rank of Professor or Associate Professor). In case that such Laboratory or Clinic does not exist a faculty member is selected from the above two ranks of the most relative field after his nomination by the respective coordinator in CPC and his election in the GA.

Furthermore, a substitute is selected for each supervisor with the right to participate and vote in absence of this supervisor. These supervisor substitutes must belong at the rank of the Assistant Professor or higher, with an active interest and participation in postgraduate education and must be qualified for the position. Their appointment to this position does not require the vote of the GA.

3. ANNOUNCEMENT OF FIRST STAGE POSTGRADUATE STUDENT POSITIONS

The number of postgraduate students (PS) per PPS for each academic year is set after suggestion by the respective PPS supervisor in PC and vote by the GA. The total number of PS in all PPS can not exceed 40 per academic year. Applications are accepted from early January (until 15th of January) and for 45 days thereafter.

4. GROUPS OF GRADUATES THAT ARE ACCEPTED IN THE FIRST STAGE OF STUDIES

1. Dental School graduates of Greek Universities or accredited international institutions.
2. In certain circumstances, graduates of other University Schools, Greek or accredited international ones and only for the 4 basic science PPS of the first stage.
3. Graduates of Greek Technical Educational Institutions (TEI) in fields relative to dentistry according to article 5 of Act 2916/2001 (Government Journal, pg 114, issue A).
4. Dental Graduates with a certificate of clinical specialization in one of the clinical specialties included in PSP, acquired after attending a structured postgraduate program in Greece or abroad. In case they are accepted, the supervisor of the PPS that the PS will attend will individualize a program for the PS that will be submitted to CPC. The customization of the above program will depend on the evaluation of the curriculum of the program that the candidate has completed and will require the completion of a thesis.

Active PS in one of the 14 PPS can not apply to another PPS before he successfully completes his thesis defense.

5. APPLICATION REQUIREMENTS FOR THE FIRST STAGE POSTGRADUATE STUDENT.

1. Completed application indicating 2 PPS in the order of preference of the applicant.
2. Copy of the Greek Dental School diploma or from a foreign Dental School which needs to be accredited by appropriate authorities.

3. Transcripts
4. Curriculum Vitae
5. Proof of command of the English language either by submitting the respective certificate or by examination (PPS specific examination)
6. Certificates of participation in postgraduate courses and research activity, including presentations, seminars and conferences attended in Greece and abroad.
7. Publications in scientific journals.
8. PSC from a Greek or international institution along with the detailed curriculum.

All certificates must be validated from the respective authorities and must bear the engraved seal of the institution should this be an international institution.

6. ADMISSION QUALIFICATIONS OF FIRST STAGE POSTGRADUATE STUDENTS

The selection process of postgraduate students is done according to the following criteria of admission (Act 2083/92, §2a) :

1. The Grade Point Average (GPA) must at least be “Very Good”. In certain circumstances a candidate can be accepted with the grade of “Good” when the candidate demonstrates impressive academic activity after graduation according to the selection committee.
2. The grades in predoctoral courses relative with the program that the candidate is applying for.
3. The command of the English language for all applicants and that of the Greek language for all international applicants. Proof is required either in the form of certificates officially validated or by means of a language examination in dental subjects and terminology.
4. The research activity and the publications of the applicant.
5. Interview of the applicant by a committee organized by the supervisor of that PPS that the applicant is applying for.
6. In addition, there might be additional admission criteria and examinations for each PPS that must be mentioned in detail in the bylaws of each PPS.

The list of successful applicants of every PPS is discussed in PC and is approved in the GA.

The PSP registrars's office announces the list of the admitted and non-admitted applicants. In addition it notifies by an official letter the admitted applicants who should reply in writing within 15 days if they accept the offer of PSP. No reply within these 15 days translates to final denial of the offer for that position.

In case of an applicant declining the offered position then that position is covered by the first applicant in the waiting list, if there is one, or it remains vacant depending on the will of the PPS supervisor.

For each PS that becomes accepted in a PPS a mentor is nominated by the PPS supervisor. The mentor is approved by GA.

7. POSTGRADUATE COURSES OF THE FIRST STAGE STUDIES-CREDIT HOURS

The PS should earn the necessary for each program Credit Hours (CH) in order to graduate.

Postgraduate courses of PPS are divided into the following categories:

1. **Core Curriculum Courses**: These courses are revolving around Basic Dental and Biomedical Sciences. Attendance is mandatory for PS of the PSP. Postgraduate Students of the clinical PPS should attend selected such courses, eventually earning 10-16 CH.
2. **Special Courses:** Attendance of elective special courses is mandatory for PS of the Basic Sciences PPS. These courses may be also elected by PS of the clinical PPS. Postgraduate Students of the clinical PPS should attend such courses to earn 6-11 CH.
3. **Clinical Courses:** Postgraduate students of the three-year clinical PPS must attend all courses (clinical seminars, literature reviews, clinics, laboratories and preclinical) that are included within each clinical specialty. Such courses can account for 55-61 CH.

In addition, earning a Postgraduate Specialty Certificate (PSC) requires working towards and defending a thesis that earns 10 more CH for the PS.

Two-year programs of the Basic Sciences and the two-year program of the Oral Pathology directed to Oral Surgery require 60 CH while the 3-year clinical programs require 90 CH.

8. POSTGRADUATE THESIS

The thesis subject should be research based (laboratory study, clinical study, case studies, epidemiologic study, systematic literature review) relative to the knowledge field of the applicant.

The supervisor of each PPS notifies in writing the PSP registrar's office at the end of the first year of studies regarding the advisor, a faculty member, which will be assigned to oversee the thesis work of the PS. The student's mentor can be his advisor.

The PS may apply to earn 10 CH from working towards his thesis by submitting his written thesis in the PPS registrar's office. His application should have an attached verification of his advisor that he has read and approved the thesis as submitted.

Following that, the PC selects a three-member committee to evaluate the thesis that is compiled by faculty members whose field is relative to the subject of the thesis. Furthermore, it sets a thesis defense date that is announced on time to all laboratories and clinics of the Dental School. The PPS registrar's office supplies the 3-member committee with the thesis.

The PS defends publicly his thesis in front of the above three-member committee, his advisor and his mentor. At that point he is accepting relevant questions.

The three-member committee completes an evaluation form for the thesis of the PS. In case the suggested revisions are of such extent that prevents the approval of the thesis then the PS is notified in writing of the corrections and he assumes the responsibility to make the changes within 6 months. His advisor will supervise the thesis correction phase and will sign the submission form for the finalized thesis to the PPS registrar's office. Every thesis should include an at least 1,000 word English abstract in which there is description of the aim, methods and materials, results and conclusions of the study.

Two copies of the approved thesis are submitted to the PSP registrar's office, one of which is transferred to the Dental School Library while the other one stays in the student's record. Every thesis should be submitted also electronically so that it is included in the electronic thesis archive that will be kept in the Dental School website.

9. FACULTY OF POSTGRADUATE COURSES OF THE FIRST STAGE OF STUDIES

Teaching responsibilities can assume all faculty members of the Dental School or of other Greek or international University departments that belong to the ranks of the Professor, Associate Professor, Assistant Professor as well as full time Lecturers or these that their position has been renewed. It is not allowed for faculty members to be exclusively utilized in the PSP according to article 12, §3b of Act 2083/92.

Furthermore teaching responsibilities can be delegated to Honorary Professors, Visiting Professors as well as Specialized Scientists of known caliber according to article 12, §3a of Act 2083/92.

Teaching responsibilities are assigned to the above members after they are nominated by the PPS supervisors in the CPC, every academic year. These nominations are approved by the GA.

10. EVALUATION OF POSTGRADUATE STUDENTS OF THE FIRST STAGE

Evaluation of the PS is achieved in all courses by different means (written essay examinations, multiple choice exams, projects, publications etc.) as this is defined for each course by the bylaws of each PPS. Grades are forwarded to the registrar's office of the department by the PSS supervisor within three weeks of the expiration of the semester by filling in the respective computerized form.

The PS has completed successfully a course and he can earn the respective credit hours when he earns a grade of 7 or higher in a scale of 0-10. Simultaneously he must not be absent more than 20% of the total attendance. If he doesn't present to the examinations or if he is graded with a grade of 5 or 6, he will have to be evaluated again without having to take the course again.

If the PS is graded with a grade between 0-4 then the PS has failed the course and he is obliged to register again for that course in the next academic year and be reevaluated.

Second failing grade or second no show in the exams constitute reason of expelling the PS from the PSP. That should be done after suggestion of the PPS supervisor in the PC and discussed and agreed in the GA.

11. DURATION OF POSTGRADUATE STUDIES OF THE FIRST PHASE OF STUDIES

PPS in the four Basic Sciences of Dentistry are 2 year programs (4 semesters) while PPS in Clinical Specialties are 3 year programs (6 semesters) with the exception that of the Oral Pathology with direction to Oral Surgery which is a 2 year program.

The PS who does not complete his program within the scheduled time (successful pass of all courses and submission of his thesis), must submit during the first month of his extension, a request for extension of certain duration stating the reason for extension. That request should be signed also by his PPS supervisor and his mentor.

The extension can not be granted for more than 2 semesters for 2 year programs and 3 semesters for 3 year programs. If the PS has not completed the program within the granted extension then he is expelled without a written warning.

The PS can discontinue his studies after his request for serious personal matters. In order to return to PSP, the PS would have to submit a request to PC which will decide continuation or not of his studies as well as the starting time depending on the feedback given by the PPS supervisor of the PS.

All above decisions are approved in the GA.

12. RESPONSIBILITIES AND RIGHTS OF POSTGRADUATE STUDENTS OF THE FIRST STAGE OF STUDIES

1. The PS ought to attend all courses with no absences. For each course the PS should earn all CH as required.
2. The PS of Basic Sciences (Community Dentistry, Oral Biology, Dental Biomaterials and Oral Pathobiology) are required to proceed to the registrar's office every semester before the start of the courses and register for the courses that they will either take or sit for an examination. PS of the clinical PPS can take elective courses not included in the ordinary program curriculum.
3. PS ought to notify the secretary for their home address and contact information including phone numbers. Any change of address or contact information should be given in writing in PSP registrar's office.
4. PS should follow the announcement board of the registrar's office of their PPS as well as the respective website.
5. PS should pay tuition according to the terms that are set in article 13.
6. PS should comply to the internal regulation of the PPS that they are following and they should work closely with their mentor.

7. PS, after completing the first year of their studies, should contribute to predoctoral education by adopting the task that is assigned to them.
8. PS should cooperate with their supervisor for selecting a mentor and an advisor of their thesis.
9. PS has the right to ask from CPC in writing to change his mentor and his advisor after stating the reasons.
10. PS has the right of reimbursement and student loans during the duration of his studies (article 14).

13. TUITION OF THE FIRST STAGE OF STUDIES

PS should pay tuition at the rate set during their enrollment in the first semester. Changes in tuition that occur during their studies do not affect the active students. Students who are in a temporary discontinuation status are an exception. These students once they return to the program they will pay the current rate. Students that are extending their studies are paying ½ of the semester tuition if they have not successfully passed at least one course. They don't pay tuition if the extension accommodates only the completion of their thesis.

Tuition should be paid until the 30th of September for each winter semester and until the 30th of January for each spring semester. The tuition is paid in every branch of Emporiki Bank under account number 81706531 payable to University of Athens Special Account of Research Grants. The PS brings the receipt to the PPS registrar's office in order to receive a receipt and bring his records current. The registrar's office notifies the PPS supervisors in case a PS has not paid tuition so that he won't be allowed to continue his studies.

No payment in two consecutive semesters constitutes reason for expelling the student. The student notified ahead in writing for his financial responsibilities.

The GA can adjust tuition as necessary.

14. POSTDOCTORAL STUDENTS STIPEND AND LOANS

There are four different types of student reimbursement during their studies as well as the possibility of financial support by means of student loans.

a. According to article 28, §7, of act 2083/92 and to article 15, §1 of act 2327/95, "Postgraduate students may be employed by Universities on a hourly employment basis in order to assist faculty members in education, seminars, laboratory exercises, proctoring and grading".

The necessary funding will be secured directly from the Ministry of Finances as well as that of Education. The Executive Committee will divide the working hours per department after evaluating their suggestions.

The reimbursement of PS will be approved after suggestion by PC and approval by the GA and it is valid for 1 year.

b. According to act 1268/82, article 29, §4 and to act 2083/92, article 12, §6 article 23 as those have been replaced by act 2413/96, article 41, top ranked students are entitled stipends from the Institute of National Scholarships. More information is provided by the PSP registrar's office.

c. Stipends are given by the Dental School to the top ranked students per class. Stipends will be in the form of tuition reduction and will be up to a sum that will be determined by PC depending by the financial capabilities.

d. As a member of research groups running programs awarded research grants according to the bylaws of each program.

According to act B7/411 FEK659/31.7.1996, PS are entitled to student loans. More information is available in the PSP registrar's office.

15. RESPONSIBILITIES OF FACULTY MEMBERS THAT ARE PARTICIPATING IN PSP

1. Director of Postgraduate Studies
    - He is responsible for observing the PSP bylaws in every PPS of the first or second Stage and he cooperates with the three PPS coordinators.
    - He intervenes and offers solutions together with the three PPS coordinators and he assists the PPS registrar's office in all administrative issues relative to all PSP programs.
    - He assembles the PC and introduces the topics for discussion together with the three coordinators.
    - He participates in the GA and he relates to its members all the PC decisions that must pass the GA approval.
2. Coordinators of both PPS groups of the first phase of studies
    - They participate in PC with the right to vote

- They cooperate with the Director of Postgraduate Studies, the coordinator of the second phase of studies as well as with the PPS supervisors of their group.
- The coordinator of the Basic Sciences PPS is cooperating with the coordinator of the Clinical Specialties PPS in order to structure the core curriculum as well as the special courses that the PS of the Clinical Specialties will attend.
- They assign-along with the PPS supervisors- the core curriculum courses, the special courses for each PPS and their directors. They ensure their function and solve any problems.

3. Coordinator of second phase of studies
    - He is responsible for observing the bylaws regarding the writing of a doctoral thesis
    - He participates to the selection committee of the thesis applicants
    - He is a member of the PC with a right to participate and vote at every meeting.
    - He cooperates with the Director of Postgraduate Studies as well as with the doctoral thesis faculty members for evaluation of the doctoral candidates.
    - He cooperates with PPS coordinators of both groups
    - He introduces to PC issues that relate to the function of doctoral thesis as well as the doctoral candidates.
4. PPS Supervisor
    - He is responsible for observing the bylaws of the respective PPS
    - He assigns in cooperation with PS their mentors and thesis advisors.
    - He is responsible for all postgraduate students of its PPS. He monitors their development, consults with their mentors and advisors and with the PPS coordinator of his group for negotiation of all administrative issues.
    - He participates in PC, introduces issues of its program and votes in the GA.
    - He signs all PPS documents that are directed to the registrar's office, the coordinators or the Director of Postgraduate Studies.
    - He assigns the substitute PPS supervisor for the PC.
    - He addresses to the PC the designation of instructors, faculty and other teaching personnel to the courses of his PPS.

5. Associate PPS supervisor
    - He substitutes the PPS supervisor in the PC with the right to participate in discussion and vote. He can be present in all meetings of the PC.
6. Postgraduate student mentor
    - He monitors the adherence of his PS to the curriculum as well as his achievements in all educational activities.
    - He troubleshoots for his PS along his studies working with the supervisor and the coordinator.
    - He advises and directs the PS during his studies.
    - He explores possibilities of funding of the research activities of his PS.
7. Thesis Advisor
    - He decides along with the PS the thesis theme.
    - He monitors, advises and directs the PS along his thesis work.
    - He signs the submission of thesis to the secretary.
    - He is responsible for supervising the thesis correction phase after the suggestions to the PS by the three-member committee.
    - He is responsible for all future issues of the thesis.

16. EARNING THE POSTGRADUATE SPECIALTY CERTIFICATE

After successful completion of all responsibilities of the PS as these are defined by the bylaws of PPS and PSP and after submission of his thesis, the PS has completed his studies in the first phase of postgraduate studies and he is granted the Postgraduate Specialty Certificate in a graduation ceremony.

First Cycle Graduate Studies

1. COMMUNITY DENTISTRY

Aim of the program is the specialization in Community Dentistry which includes the scientific fields of public dental health, preventive dentistry, epidemiology and health behavior.

1. CORE CURRICULUM COURSES (16 Credit Hours)

CODE	COURSE	SEMESTER	CH

MK 300	Molecular Biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head & Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology-Biostatistics	4th	2
MK 308	Information Technology	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (9 CH)

CODE	COURSE	SEMESTER	CH
KO 322	Etiology and prevention of oral diseases	1st	2
KO 326	Oral health education	1st	1
KO 321	Epidemiology of oral diseases	2nd	1
KO 333	Oral health care systems	2nd	1
KO 324	Prevention of oral diseases – Organization and implementation of public health programs	3rd	2
BS 347	Composition and metabolism of mineralized tissues	4th	2

3. RESEARCH TOPICS AND METHODS (8 CH)

CODE	COURSE	SEMESTER	CH
KOETH 1	Research Topics – Methods	1st	2
KOETH 2	Research Topics – Methods	2nd	2
KOETH 3	Research Topics – Methods	3rd	2
KOETH 4	Research Topics – Methods	4th	2

4. LITERATURE REVIEW (4 CH)

CODE	COURSE	SEMESTER	CH
KOVE 1	Literature Review	1st	1
KOVE 2	Literature Review	2nd	1
KOVE 3	Literature Review	3rd	1
KOVE 4	Literature Review	4th	1

5. PRESENTATION OF SPECIFIC SCIENTIFIC TOPICS (8 CH)

CODE	COURSE	SEMESTER	CH
KOEP 1	Scientific presentation	1st	2
KOEP 2	Scientific presentation	2nd	2
KOEP 3	Scientific presentation	3rd	2
KOEP 4	Scientific presentation	4th	2

6. The post-graduate student selects any course from a clinical specialization (1 CH).

7. Preparation and publication of a scientific article in a local or international scientific journal (4 CH).

8. Completion of a research based study and preparation of a Postgraduate Thesis in the Basic Sciences of Community Dentistry (10 CH).

2. ORAL BIOLOGY

The aim of the program is to develop research academic teachers and researchers who have broad knowledge in the field of tooth biology, histology, embryology, physiology and pathology, as well as in the biology of the periodondium and the oral cavity.

1. CORE CURRICULUM COURSES (16 CREDIT HOURS)

CODE	COURSES	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology - Biostatistics	4th	2
MK 308	Computer Science	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES

CODE	COURSE	SEMESTER	CH
BS 340	Morphogenesis of craniofacial complex	1st	1
BS 342	Biology of pulp and periodontium	1st	1
BS 351	Occlusion	2nd	2
BS 341	Dysmorphogenesis of craniofacial complex	2nd	1
BS 347	Composition and metabolism of	4th	2

	calcified tissues		

3. RESEARCH TOPICS- TECHNIQUES

(they will be taught in the laboratories of Basic Sciences, Community Dentistry, Biomaterials, Stomatology and Microbiology, depending on the topic)

CODE	COURSE	SEMESTER	CH
BSETH 1	Basic laboratory principles	1st	2
BSETH 2	Basic research techniques I & II	2nd	2
BSETH 3	Basic techniques in Microbiology	3rd	2
BSETH 4	Principles and instruments of mechanics biomaterials	4th	2

4. ELECTIVE COURSES FROM CLINICAL SPECIALIZATIONS (1st to 4th semester) (15 CH)

The students are asked to attend lessons provided by the various Clinical Specifications of the Program that are relevant to Oral Biology. At least 4 of the required credit hours must be obtained through attending literature seminars. Each student is encouraged to make a personalized program of courses in this category.

5. OTHER ACTIVITIES (participation in scientific meetings, writing an article, etc) (4 CH)

6. Rsearch and MSc thesis completion (10 CH)

3. DENTAL BIOMATERIALS

The aim of the program is to provide to the students a sound theoretical and experimental background on the field of dental biomaterials (physical, chemical, structural and biological properties and performance) and their applications in various fields of Clinical Dentistry.

1. CORE CURRICULUM COURSES (16 CH)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head & Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2

MK 307	Epidemiology - Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (9 CH)

CODE	COURSE	SEMESTER	CH
OB 360	Mechanics of Materials	1st	1
OB 361	Electrochemical behavior	1st	1
OB 362	Polymers	1st	1
OB 363	Ceramics	2nd	1
OB 364	Metallurgy	2nd	1
OB 365	Prosthodontic Alloys	3rd	1
OB 366	Orthodontic wires/Dental amalgam	3rd	1
OB 367	Specifications/Standardisation of Biomaterials	4th	1
OB 369	Dental Ceramics	4th	1

3. RESEARCH COURSES-TECHNIQUES (21 CH)

CODE	COURSE	SEMESTER	CH
OBETH 1	Principles and Instrumentation of Mechanical Testing	1st	2
OBETH 2	Optical Microscopy/Scanning Electron Microscopy and X-ray Elemental Microanalysis	2nd	4
OBETH 3	Infrared and UV-Visible Spectroscopy, Molecular Characterization and Imaging, Colorimetry	3rd	4
OBETH 4	X-ray Microtomography	3rd	4
OBETH 5	Specimen Handling (storage, preparation, accelerated aging)	4th	3
OBETH 6	Surface Characterization	4th	2
OBETH 7	Non Destructive Testing – Principles/Applications	4th	2

4. OTHER ACTIVITIES (presentations, publications etc.). (4 CH)

5. Research and Thesis submission in the field of Dental Biomaterials. (10 CH)

4. ORAL PATHOBIOLOGY

The aim of this program is to offer the specialization which is included in the scientific field of the study, diagnosis and treatment of diseases of the jawbones, oral mucosa, salivary glands, maxillary sinus and temporo -mandibular joint.

1. CORE CURRICULUM COURSES (16 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy/Physiology	2nd	2
MK 305	Research Methology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology-Biostatistics	4th	2
MK 308	Computer science	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (11 CH)

CODE	COURSE	SEMESTER	CH
PS 380	Basic Oral Pathology I	1st	2
PS 381	Basic Oral Pathology II	2nd	2
PS 382	Basic Histopathology	1st	1
PS 383	Diagnostic methology of oral disease	1st	1
PS 386	Diagnostic oral histopathology	4th	2
PS 391	Imaging techniques in oral pathology and surgery	2nd	1
PS 392	Basic oral surgery	3rd	1
PS 393	Pharmacology in oral surgery	4th	1

3. RESEARCH TOPICS-TECHNIQUES(1st -4th semester) (8 CH)

CODE	COURSE	SEMESTER	CH
PSETH 1	Research Techniques (*in the laboratory of oral histopathology)*	1st	1
PSETH 2	Attendance/ Clinical practice in the Dental Oncology Unit or the Oral Medicine Clinic	2nd	2
PSETH 3	Attendance/ Clinical practice in the Dental Oncology Unit or the	3rd	2

	Oral Medicine Clinic		
STOM 486	Oral Histopathology	4th	3

4. **SELECTION FROM CLINICAL COURSES (1st to 4th Semester) (11 CH)**

Clinical Courses from different Graduate Programs, which will be related to Oral Pathobiology, will be selected. At least 4 CH will refer to Seminars of Literature Review. An individualized program will be formed for each graduate student.

4a. The attendance of the following courses is suggested for the Seminars of Literature Review:

- Seminar of Oral Medicine & Pathology (OP 485), 1st to 4th semester, **2 CH**.
- Seminar of the Clinic of Orofacial Pain (KASP?) 112.3, 3rd semester and (KASP?) 112.4, 4th semester, **2 CH**.

4b. The attendance of the following is suggested for the Clinical Courses:

- "Practical Implantology", Code (STOX?) 408, 3rd and 4th semester, **2 CH**.
- "Biopsy Seminar", COP 481, 1st to 4th semester, **2 CH**.
- "Seminar in Oral Histopathology", STOM 480, 1st and 2nd semester, **3 C**H.

5. OTHER ACTIVITIES (presentations in Scientific Meetings, publications in scientific journals, ect) (4 CH).

6. Working towards and defending a Thesis in the Basic Science of Oral Pathobiology (10 CH).

5. ORTHODONTICS

The aim of the graduate program in Orthodontics is to provide intensive advanced training in the biological and clinical sciences related to the art and science of Orthodontics and to satisfy all requirements of eligibility for the specialty board in Orthodontics.

The target of the graduate program is to provide the resident with a broad base of theoretical and practical knowledge enabling him

1. to present a thorough and correct diagnosis based on the estimation, analysis and synthesis of the various functional and morphologic problems of clinical Orthodontics.
2. to organize and present the clinical problem of an individual case and to provide a documented corresponding treatment plan.

3. to elaborate, during all different treatment stages, the most appropriate treatment plan for each case as well as to apply it successfully, estimating all of the involved biologic parameters, in cooperation with any other dental specialty needed for the specific case.
4. to be able to evaluate the related literature and to be able to plan and conduct research in the broader area of Orthodontics.

1. CORE CURRICULUM COURSES (11 CREDIT HOURS)

CODE	COURSE	SEMESTE	CH
MK 300	Molecular Biology	1st	2
MK 301	Biochemistry	1st	2
MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy /Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 307	Epidemiology - Biostatistics	4th	2
MK 308	Informatics	4th	1

2. SPECIAL COURSES (8 CH)

CODE	COURSE	SEMESTE	CH
BS 340	Morphogenesis of the Craniofacial Complex	1st	1
BS 342	Biology of the pulp and periodontal tissues	1st	1
BS 341	Dysmorphogenesis of the Craniofacial Complex	2nd	1
BS 351	Occlusion	2nd	2
BS 347	Structure and metabolism of mineralized tissues	4th	2
KO 326	Oral health education	1st	1

3. CLINICAL COURSES (61 CH)

CODE	COURSE	SEMESTER	CH
ORTHO 420	Orthodontic Laboratory	1st	3
ORTHO 421.1	Craniofacial Growth and Development I	1st	2
ORTHO 421.2	Craniofacial Growth and Development II	2nd	2
ORTHO 422	Cephalometry	1st	3
ORTHO 423	Development of the dentition	3rd	2
ORTHO 424	Biology of tooth movement	1st	3
ORTHO 425	Orthodontic Materials	1st	2
ORTHO 426	Bio-mechanics	1st	3
ORTHO 427.1	Clinical Seminar I	1st & 2nd	2
ORTHO 427.2	Clinical Seminar II	3rd & 4th	3

ORTHO 427.3	Clinical Seminar III	5th & 6th	3
ORTHO 428.1	Clinical Training 1st Semester	1st	2
ORTHO 428.2	Clinical Training 2nd Semester	2nd	4
ORTHO 428.3	Clinical Training 3rd Semester	3rd	4
ORTHO 428.4	Clinical Training 4th Semester	4th	4
ORTHO 428.5	Clinical Training 5th Semester	5th	5
ORTHO 428.6	Clinical Training 6th Semester	6th	6
PAEDO 439.1	Patients with special needs I	3rd	2
PAEDO 432	Behavioural management with psychologic techniques	2nd	2
PAEDO 434	Dental Traumatology	2nd	2

4. Research and writing of the master's thesis in the discipline of Orthodontics (10 CH)

6. PAEDIATRIC DENTISTRY

Specific aims of the program

Upon graduation from this program, specialists will have:

1. the ability and dexterity to render a comprehensive treatment for toddlers, children, adolescents and special needs patients.
2. the ability to design and apply an individualized preventive program for each of their patients according to their needs.
3. theoretical and clinical education in pharmacological sedation (inhalation and per os) and parenterally, for the behavior management of uncooperative patients.
4. satisfactory knowledge of the growth and the development of the craniofacial complex, diagnosis of the occlusion disorders and preventive and interceptive orthodontic treatment in the deciduous and permanent dentition.
5. satisfactory education and experience for the treatment of special needs patients (physical or mental disabilities, emotional disorders and medical problems).
6. satisfactory education and experience in the dental treatment under general anesthesia.
7. satisfactory education in temporomandibular disorders in children.
8. satisfactory education in the critical analysis of the international literature, methods and techniques.
9. the ability to design conduct and write a research project.
10. the ability to collaborate/ cooperate with other health professionals for the treatment of cases that necessitate a multidisciplinary approach.

1. CORE CURRICULUM COURSES (12 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 302	Microbiology	2nd	2

MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy/Physiology	2nd	2
Mk 305	Research Methodology	3rd	1
Mk 307	Epidemiology-Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (7 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
BS 340	Prenatal Craniofacial Growth and Development	1st	1
BS 342	Biology (Pulp-Periodontium)	1st	1
BS 347	Composition and Metabolism of Calcified Tissues	4th	2
KO 326	Oral Health Education	1st	1
BS 351	Occlusion	2nd	1
PS 391	Imaging Techniques for Oral Diagnosis and Surgery	2nd	1

3. CLINICAL COURSES (62 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
PAEDO 430	Introduction to Advanced Paediatric Dentistry	1st & 2nd	3
ORTHO 421.1	Craniofacial Growth and Development I	1st	2
PAEDO 431	Pulp Pathology	1st	2
PAEDO 432	Behavior Sciences and Patient Management	2nd	2
PAEDO 434	Dental Traumatology	2nd	2
PAEDO 438	Development of the Occlusion	2nd	2
PAEDO 437	Cariology and Prevention	3rd	1
PAEDO 435	Preventive and Interceptive Orthodontics	2nd	2
PAEDO 439.1	Special Needs Patients I	3rd	2
PAEDO 439.2	Special Needs Patients II	4th	2

PAEDO 440	Oral Medicine / Oral Pathology / Oral Surgery	5th	2
PAEDO 436	Sedation and General Anaesthesia	3rd	2
PAEDO 441	Practice Management	6th	1
PAEDO 444.7	Case Reports	1st -7th	1
PAEDO 433	Literature Review	1st, 5th , 6th	6
PAEDO 442	Rotation in Paediatrics	6th	1
PAEDO 443	Rotation in Anesthesiology	6th	1
PAEDO 444.1	Clinical training	1st	1
PAEDO 444.2	Clinical training	2nd	4
PAEDO 444.3	Clinical training	3rd	4
PAEDO 444.4	Clinical training	4th	5
PAEDO 444.5	Clinical training	5th	5
PAEDO 444.6	Clinical training	6th	5

4. Research and writing of the master's thesis in the discipline of Paediatric Dentistry (10 CH)

7. OPERATIVE DENTISTRY

The graduate programme in **Operative Dentistry** is a three-year programme.

The aim of the programme is to develop clinical academic teachers and clinicians who have broad knowledge in the biological sciences and in depth understanding of the development of disease processes and functional disturbances of the hard dental tissues.

Graduates are trained to demonstrate theoretical and clinical expertise in the prevention, diagnosis, treatment planning and comprehensive restorative management of disease and disorders of the teeth.

The objectives of the program are:

- the acquisition of theoretical and clinical knowledge in:
  - the pathogenesis, diagnosis and management of dental caries,
  - oral healthcare prevention,
  - direct and indirect restorative techniques,
  - the replacement of single missing tooth, using traditional and implant techniques,

- the application of conservative procedures to change the appearance of teeth and smile and the interdisciplinary role of operative dentistry
- the acquisition of advanced knowledge in applied dental materials science
- the application of preventive and minimal invasive techniques for the management of hard tissue lesions
- to enhance student's capability to critically evaluate the literature and become competent in preparing and defending case presentations and seminars
- to develop student's scientific inquiry and research

1. CORE CURRICULUM COURSES (14 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology - Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (11 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
OB 342	Pulp and Periodontium Biology	1st	1
OB 360	Mechanics of Biomaterials	1st	1
OB 361	Electrochemical Behaviour of Dental Materials	1st	1
OB 362	Polymers	1st	1
OB 351	Fundamentals of Occlusion	2nd	2
OB 363	Ceramics	2nd	1
OB 364	Metallurgy	2nd	1
OB 365	Alloys in Prosthetic Dentistry	3rd	1
OB 366	Orthodontic wires – Dental Amalgam	3rd	1
OB 367	Specification – Standardization of Biomaterials	4th	1

3. CLINICAL COURSES (56 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
OH 440	Literature Review I Basic Principles – Techniques – Materials of Direct Restorations	1st	2
OH 441	Literature Review II Advanced Principles –Techniques – Materials of Direct Restorations	2nd	2

OH 442	Literature Review III Basic Principles – Techniques – Materials of Indirect Restorations	3rd	2
OH 443	Literature Review IV Advanced Principles –Techniques – Materials of Indirect Restorations	4th	2
OH 444	Literature Review V Applied Principles – Techniques – Materials of Direct Restorations	5th	2
OH 445	Literature Review VI Applied Principles – Techniques – Materials of Indirect Restorations	6th	2
OH 446	Seminar I. Basic Principles –Techniques – Materials of Direct Restorations	1st	1
OH 447	Seminar II Advanced Principles – Techniques – Materials of Direct Restorations	2nd	1
OH 448	Seminar III Basic Principles –Techniques – Materials of Indirect Restorations	3rd	1
OH 449	Seminar IV Advanced Principles – Techniques – Materials of Indirect Restorations	4th	1
OH 450	Seminar V Applied Principles –Techniques – Materials of Direct Restorations	5th	1
OH 451	Seminar VI Applied Principles – Techniques – Materials of Indirect Restorations	6th semester	1
OH 452.1	Case presentation seminar	1st & 2nd	2
OH 452.2	Case presentation seminar	3rd & 4th	2
OH 452.3	Case presentation seminar	5th & 6th	2
OH 453	Advanced Operative Dentistry Laboratory (Course)	1st	4
OH 454.1	Advanced Clinical Operative Dentistry	2nd	3
OH 454.2	Advanced Clinical Operative Dentistry	3rd	4
OH 454.3	Advanced Clinical Operative Dentistry	4th	4
OH 454.4	Advanced Clinical Operative Dentistry	5th	5
OH 454.5	Advanced Clinical Operative Dentistry	6th	5
STOH 407	Seminar on Implantology	1st	1
PERPR	Perio-Prosthetic Seminar	1st–2nd	2

455.1			
PERPR 455.2	Perio-Prosthetic Seminar	3rd-4th	2
PERPR 455.3	Perio-Prosthetic Seminar	5th–6th	2

4. Research and Thesis completion (10 CH).

8. PERIODONTOLOGY

The goal of this postgraduate program is to provide dentists with the theoretical knowledge and clinical skills to treat patients with all forms and severities of periodontal diseases as well as those who require osseointegrated dental implants.

Objectives: After successful completion of the program, graduates will

a. be able to diagnose and treat all forms of periodontal diseases
b. be able to diagnose and treat periodontal disease in patients with systemic diseases
c. be able to diagnose and treat problems directly or indirectly related to craniofacial system, occlusion and temporomandibular joint disorders
d. be able to cooperate with other specialists in the treatment of complex cases (prosthodontists, orthodontists, endodontists etc)
e. have the theoretical knowledge and clinical experience for selection, preparation, placement and maintenance of osseointegrated dental implants
f. be able to treat all forms of peri-implant diseases
g. be able to maintain the therapeutic outcome by organizing the recall program for periodontally affected patients
h. be able to critically evaluate the literature related to Periodontology
i. have acquired basic knowledge and experience in research methodologies and have designed and implemented a research project related to periodontology
j. be able to write a scientific paper
k. have acquired teaching experience and be able to present a scientific topic in front of an audience

1. CORE CURRICULUM COURSES (14 CH)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1

MK 304	Head and Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK307	Epidemiology - Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (7 CH)

CODE	COURSE	SEMESTER	CH
BS 340	Cranio-Facial Complex Morphogenesis	1st	1
BS 342	Periodontium and Pulp Biology	1st	1
BS 351	Occlusion	2nd	2
PS 392	Principles of Surgery	3rd	1
BS 347	Structure and Metabolism of Mineralized Tissues	4th	2
STOH 407	Implant Seminar	1st	1
PERIO 450	Biology of Periodontium	1st–2nd	2
PERIO 451	Periodontology I	1st–2nd	2
PERIO 453.1	Literature Review Seminar	1st–2nd	2
PERIO 453.2	Literature Review Seminar	3rd-4th	2
PERIO 453.3	Literature Review Seminar	5th–6th	2
PERPR 455.1	Perio-Prosthetic Seminar	1st–2nd	2
PERPR 455.2	Perio-Prosthetic Seminar	3rd-4th	2
PERPR 455.3	Perio-Prosthetic Seminar	5th–6th	2
PERIO 456.1	Case Presentation	1st–2nd	1
PERIO 456.2	Case Presentation	3rd-4th	1
PERIO 456.3	Case Presentation	5th–6th	1
PERIO 457.1	Research Seminar	1st–2nd	1
PERIO 457.2	Research Seminar	3rd-4th	1
PERIO 457.3	Research Seminar	5th–6th	1
PERIO 458	Periodontium-Systemic Diseases	2nd	1
PERIO 452	Periodontology II	3rd-4th	2
PERIO 454	Periodontology III	3rd-6th	2
PERIO 459.1	Perio Clinic	1st	4
PERIO 459.2	Perio Clinic	2nd	4
PERIO 459.3	Perio Clinic – Implant Clinic	3rd	5
PERIO 459.4	Perio Clinic – Implant Clinic	4th	6
PERIO 459.5	Perio Clinic – Implant Clinic	5th	6
PERIO 459.6	Perio Clinic – Implant Clinic	6th	6

4. Research and Thesis completion (10 CH).

9. ENDODONTICS

The 3-year programme is a highly integrated selection of theoretical courses and clinical work, which emphasize the development of a strong basic science background together with advanced diagnostic and clinical skills. Its principal aim is to prepare the students for careers in a multitude of areas, including clinical practice, teaching and research.

Specific aims of the program

After successful completion of programme, the graduate should be able:

1. To recognize and describe the anatomical, histological and pathophysiological characteristics of the healthy and inflamed pulp and periapical tissues.
2. To recognize the signs and symptoms of the different diseases of the pulp and periapical tissues, perform differential diagnosis between other diseases with similar symptoms and be able to formulate the proper treatment rational.
3. To choose the proper armamentarium, materials and technique that will produce the best results for conditions that require endodontic treatment, irrespective of the treatment modality (conventional, retreatment, surgical Endodontics).
4. To evaluate the results of endodontic treatment and determine whether additional evaluation/treatment is required.
5. To evaluate, diagnose and manage traumatic injuries to teeth and their supporting structures.

1. CORE CURRICULUM COURSES (14 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK304	Head and Neck Anatomy /Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology - Biostatistics	4rth	2
MK 308	Informatics	4rth	1
MK 309	Biomaterials	4rth	1

2. SPECIAL COURSES (10 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
BS 342	Biology of the pulp and periodontal t.	1st	1
BS 347	Composition & metabolism of calcified tissues	4rth	2
BS 351	Occlusion	2nd	2
PS 383	Differential methodology of oral lesions	1st	1
PS 391	Imaging techniques in Oral Pathology and Oral Surgery	1st	1
PS 392	Principles in Oral Surgery	1st	1
PS 393	Use of drugs in Oral Surgery	4rth	1
OB 367	Specifications – Standardization of dental materials	4rth	1

3. CLINICAL COURSES (56 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
ENDO 460	Pulpal and Periapical	1st	1
ENDO 461	Endodontics I	2nd	2
ENDO 462	Endodontics II	3rd , 4rth	2
ENDO 463	Endodontic Literature Review I	1st , 2nd	4
ENDO 464	Endodontic Literature Review II	3rd , 4rth	4
ENDO 465	Traumatic Injuries	5th	1
ENΔO 466	Case Presentations	1st,2nd, 3rd, 4rth	3
ENDO 467	Research methodology	5th	1
ENDO 468	Special problems in Endodontics	5th	1
PAEDO 434	Dental Traumatology	2nd	2
ENDO 469.1	Clinical training	1st	4
ENDO 469.2	Clinical training	2nd	4
ENDO 469.3	Clinical training	3rd	6
ENDO 469.4	Clinical training	4rth	6

ENDO 469.5	Clinical training	5th	8
ENDO 469.6	Clinical training	6th	8

4. MDSc Thesis in the Discipline of Endodontics (10 CH)

Each student is required to submit a thesis based on laboratory experiments or clinical investigations. Prior to the defence, part of the results should have been published or accepted for publication in a refereed Journal.

10. PROSTHODONTICS

The aim of the program is to educate the students how to maintain the function and esthetics of the stomatognathic system and to restore loss of soft and hard tissues using natural and artificial substitutes.

AIMS. Upon graduation the graduate student should be able to:

1. Know the acceptable clinical form of each restoration and its influence in the stomatognathic system.
2. Recognize the problems that may arise from the existing restorations and offer solutions.
3. Design a treatment plan that addresses the existing pathology and offers restorations to heal problems and restore missing tissues.
4. Be able to adjust the treatment plan according to age, general health and socioeconomic status of the patient.
5. Approach a treatment plan that focuses at the prevention of new pathological situations and the longevity of the proposed restorations.
6. Inform the patient clearly concerning the situation of his/her oral health and the proposed treatment plan.
7. Restore pathology and missing soft and hard tissues by applying biological rules, aiming to restore basic functions of the stomatognathic system.
8. Know the laboratory steps for the fabrication of each restoration along with the indications and contraindications.
9. Evaluate the complexity of some cases and being able to seek the help of and work together with other specialists.
10. Know the indications of implant prosthodontics and its clinical application in dental restoration.

11. Guide and cooperate with the dental technicians and be able to check the quality of the restorations made by the laboratory.
12. Know how to evaluate papers of the bibliography and form a scientific way of thinking and evaluating future methods and materials.
13. Create the base for continuing education as a way for scientific progress.

1. CORE CURRICULUM COURSES (14 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and neck anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology-Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2.SPECIAL COURSES (9 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
OB 360	Material Engineering	1st	1
OB 361	Mechanical properties	1st	1
OB 362	Polymers Materials	1st	1
OB 363	Ceramics	2nd	1
OB 364	Principles of Metals	2nd	1
OB 365	Dental Alloys	3rd	1
OB 366	Orthodontic wires/dental amalgam	3rd	1
OB 367	Biomaterials Standards	4th	1
OB 369	Dental ceramics	4th	1

3. CLINICAL COURSES (57 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
PROS 475	Prosthodontics Dpt	1st	4
STOH 407	Implant Seminar	1st	1
PROS 470.1	Fixed Prosthodontics Seminar 1st Semester	1st	1
PROS 470.2	Fixed Prosthodontics Seminar 2nd Semester	2nd	1
PROS 470.3	Fixed Prosthodontics Seminar 3rd Semester	3rd	1
PROS 470.4	Fixed Prosthodontics Seminar 4th	4th	1

	Semester		
PROS 470.5	Fixed Prosthodontics Seminar 5th Semester	5th	1
PROS 470.6	Fixed Prosthodontics Seminar 6th Semester	6th	1
PROS 471.1	Removable Prosthodontics Seminar 1st Semester	1st	1
PROS 471.2	Removable Prosthodontics Seminar 2nd Semester	2nd	1
PROS 471.3	Removable Prosthodontics Seminar 3rd Semester	3rd	1
PROS 471.4	Removable Prosthodontics Seminar 4th Semester	4th	1
PROS 471.5	Removable Prosthodontics Seminar 5th Semester	5th	1
PROS 471.6	Removable Prosthodontics Seminar 6th Semester	6th	1
PROS 472.1	Literature Review 1st Semester	1st	1
PROS 472.2	Literature Review 2nd Semester	2nd	1
PROS 472.3	Literature Review 3rd Semester	3rd	1
PROS 472.4	Literature Review 4th Semester	4th	1
PROS 472.5	Literature Review 5th Semester	5th	1
PROS 472.6	Literature Review 6th Semester	6th	1
PROS 473.1	Perio-Prosthodontics Seminar 1st Semester	1st	1
PROS 473.2	Perio-Prosthodontics Seminar 2nd Semester	2nd	1
PROS 473.3	Perio-Prosthodontics Seminar 3rd Semester	3rd	1
PROS 473.4	Perio-Prosthodontics Seminar 4th Semester	4th	1
PROS 473.5	Perio-Prosthodontics Seminar 5th Semester	5th	1
PROS 473.6	Perio-Prosthodontics Seminar 6th Semester	6th	1
PROS 474	Implant Seminar	5th	2
PROS 476.2	Clinical Practice 2nd Semester	2nd	3
PROS 476.3	Clinical Practice 3rd Semester	3rd	4
PROS 476.4	Clinical Practice 4th Semester	4th	5
PROS 476.5	Clinical Practice 5th Semester	5th	7
PROS 476.6	Clinical Practice 6th Semester	6th	7

4. Research and master dissertation write up. (10 CH)

11. ORAL MEDICINE AND PATHOLOGY

The purpose of this postgraduate program is to train the students in the examination, diagnosis and treatment of diseases affecting the oral mucosa, salivary glands and jawbones using clinical, radiographic, histopathologic, biochemical and other laboratory data.

The goals of this postgraduate program are:

1. To provide the postgraduate students with the adequate clinical and laboratory knowledge necessary for the diagnosis and treatment of oral diseases.
2. To provide the postgraduate students with the adequate knowledge on biomedical sciences necessary to understand the pathogenesis of oral diseases and to familiarize with current molecular techniques.
3. To produce scientists capable of designing research protocols and conducting research programs.
4. To produce scientists capable of analyzing and evaluating current literature.
5. To produce scientists capable of teaching, writing and presenting their scientific work in dental and medical meetings and congresses.

1. CORE CURRICULUM COURSES (11 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1	2
MK 301	Biochemistry	1	2
MK 303	Immunology	2	1
MK 305	Research methodology	3	1
MK 306	Pharmacology	3	2
MK 307	Epidemiology- Biostatistics	4	2
MK 308	Informatics	4	1

2. SPECIAL COURSES (9 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
PS 380	Basic Oral Pathology I	1	2
PS 382	Principles in Pathology	1	1
PS 383	Diagnostic methodology of oral diseases	1	1
PS 381	Basic Oral Pathology II	2	2
PS 391	Imaging Techniques in Oral Pathology & Surgery	2	1
PS 392	Principles in Oral Surgery	3	1
PS 393	Use of drugs in Oral Surgery	4	1

3. CLINICAL COURSES (60 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
STOM 480	Histopathology of Oral Diseases	1&2	3
STOM 482	Internal Medicine	2	3
STOM 481	Biopsy Seminar	l-6	4
STOM 483	Clinical Presentation	l-6	3
STOM 484	Specific topics	l-6	3
STOM 485	Literature Review	l-6	3
STOM 487	Advanced Histopathology of Oral Diseases	3-6	8
STOM 486	Diagnostic Oral Histopathology	4	3
STOM 488.1	Clinical Training in Oral Medicine	1	5
STOM 488.2	Clinical Training in Oral Medicine	2	5
STOM 488.3	Clinical Training in Oral Medicine	3	5

STOM 488.4	Clinical Training in Oral Medicine	4	5
STOM 488.5	Clinical Training in Oral Medicine	5	5
STOM 488.6	Clinical Training in Oral Medicine	6	5

4. Clinical or laboratory research in a topic related to Oral Medicine and Pathology including literature search, data analysis, synthesis and writing of a thesis (10 CH).

12. ORAL DIAGNOSIS AND RADIOLOGY

The postgraduate students who finish the program will be specialized in the field of oral diagnosis and in the oral and maxillofacial radiology.

After having completed the postgraduate program, the specialized dentist should:

1. be able to diagnose the pathological lesions of the jaws and the maxillofacial region, the oral cavity, the salivary glands, the maxillary sinus and the temporomandibular joint.
2. be able to select the proper laboratory tests and radiographic examinations based on the history and clinical findings.
3. be able to perform different types of intraoral and extraoral radiographic techniques
4. be familiar with and perform alternative and specialized imaging modalities, such as digital radiography and Cone Beam CT
5. be familiar with other medical imaging modalities , such as MRI and ultrasound
6. follow a systematic approach to describing clinical, radiographic and other imaging features in order to formulate differential diagnosis, definitive diagnosis and treatment plan.
7. be aware of the principles and regulations on radiation protection in the dental facility and take proper precautions.
8. be able to implement a well-designed radiological Quality Assurance program in the dental facility.
9. evaluate and carry out scientific work.
10. be familiar with the basic principles of Forensic Dentistry

1. CORE CURRICULUM COURSES (10 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular biology	1st	2
MK 304	Head and neck anatomy / Physiology	2nd	2
MK 305	Research methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology – Biostatistics	4th	2
MK 308	Informatics	4th	1

2. SPECIAL COURSES (9 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
PS 382	General principles of Pathology	1st	1
PS 383	Diagnostic methodology of oral lesions	1st	1
PS 380	Oral Pathology I	1st	2
PS 381	Oral Pathology II	2nd	2
PS 391	Imaging techniques in Oral Pathology and Surgery	2nd	1
PS 392	Basic principles of Oral Surgery	3rd	1
PS 393	Medication in Oral Surgery	4th	1

3. CLINICAL COURSES (61 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
DIAK 410	Diagnostic methodology	1st	1
DIAK 411	Radiographic techniques	1st	2
DIAK 412	Radiation protection	3rd	1
DIAK 413	Radiation physics	2nd	1
DIAK 414	Digital imaging techniques	3rd	2
DIAK 415	Alternative and specialized imaging modalities	3rd & 5th	2
DIAK 416	Radiological diagnosis	3rd	2
DIAK 417	Forensic dentistry	4th & 6th	1
DIAK 418	Literature review	2nd, 4th & 6th	6
DIAK 419	Case presentation	2nd, 4th & 6th	6
DIAK 420	Research project	5th	1
DIAK 421.1	Clinical training	1st	6
DIAK 421.2	Clinical training	2nd	6
DIAK 421.3	Clinical training	3rd	6
DIAK 421.4	Clinical training	4th	6
DIAK 421.5	Clinical training	5th	6
DIAK 421.6	Clinical training	6th	6

4. REPORT (10 CH)

Submission of a thesis on a research project within the field of Oral Diagnosis and Radiology.

13. OROFACIAL PAIN MANAGEMENT CLINIC

The aim of the program is to provide the postgraduate students the theoretical knowledge and the clinical experience on the management and therapy of craniofacial pains (both acute and chronic) and syndromes, which affect the Stomatognathic System and the adjoined areas.
At the end of the program, the graduates should:

11. know the epidemiological facts that concern the Orofacial pain and the functional disturbances of the Stomatognathic System
12. Posses exceptional knowledge of the anatomy and function of the head and neck
13. have solid knowledge of the physiology and pathology of the above mentioned areas, and especially those of the Stomatognathic System
14. Understand the pain genesis mechanisms in depth, both in dental and medical patients with general conditions, that refer to the Stomatognathic system and the adjacent area.
15. Differentiate orofacial pain from other dental or medical pathological conditions, which could give orofacial pain as concomitant symptom
16. Take the patient`s history efficiently and appraise the data from the clinical examination
17. Organize and accomplish a treatment therapy plan, and appraise accurately the prognosis. Also, to inform the patient about the nature of his problem with clarity
18. Be able to refer accurately to other dental or medical specialists, if the patient`s problem either is diagnostically involved or co-existant
19. Be in position to clarify which case should be surgically treated, and to inform the patient with clarity about the need, the advantages and the possible implications of such a non-reversible procedure
20. Know in depth the use and the side-effects of the drugs used in the orofacial pain management
21. Be able to apply the whole therapeutic armamentarium in their clinical practice eg:

- fabrication and use of the various types of intraoral splints
- Various methods of physical therapy
- Cognitive psychology therapy

- Pharmakotherapy
- Intra-articular injection into the tempormandibular joint
- Intra-muscular injection of drugs or anesthetics in to the stomatognathic system`s muscles.

1. CORE CURRICULUM COURCES (15 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and neck anatomy/Physiology	2nd	2
MK 305	Research methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology-Biostatistics	4th	2
MK 308	Informatics	4th	1

2. SPECIAL COURSES (8 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
BS 351	Occlusion	2nd	2
PS 380	Basic oral pathology I	1st	2
PS 383	Diagnostic methodology of oral diseases	1st	1
PS 381	Basic oral pathology II	2nd	2
PS 382	General principles of pathologic anatomy	1st	1

3. **CLINICAL COURSES (57 CREDIT HOURS)**

CODE	COURSE	SEMESTER	CH
KASP 101	Physiology & pathology of stomatognathic system	2nd	2
KASP 102	Orofacial surgery	4th	2
KASP 103	Clinical practice in maxillofacial surgery	4th	1
DIAK 415	Seminar x-ray techniques	3rd	2
DIAK 416	Seminar- xray diagnostics	4th	2
KASP 104	ENT	6th	3
KASP 105	Neurology	5th	3
KASP 106	Anaesthisiology- pain	6th	2
KASP 107	Cognitive psyciatrics I	5th	2

KASP 108	Cognitive psyciatrics II	6th	2
KASP 109	Rheumatology	5th	3
KASP 110	Case presentation	3rd – 4th	1
KASP 111	Case presentation	5th - 6th	2
KASP 112.1	Literature review	1st	1
KASP 112.2	Literature review	2nd	1
KASP 112.3	Literature review	3rd	1
KASP 112.4	Literature review	4th	1
KASP 112.5	Literature review	5th	1
KASP 112.6	Literature review	6th	1
KASP 113.1	Clinical practice	1st	3
KASP 113.2	Clinical practice	2nd	3
KASP 113.3	Clinical practice	3rd	4
KASP 113.4	Clinical practice	4th	4
KASP 113.5	Clinical practice	5th	5
KASP 113.6	Clinical practice	6th	5

4. Research and writing of a scientific paper in Orofacial Pain Management (10 CH)

14. ORAL PATHOBIOLOGY WITH DIRECTION TO ORAL SURGERY

The **purpose** of the program is to provide to post graduate students, mainly basic theoretical knowledge in Oral Pathobiology, and secondary practical knowledge in Oral Surgery.

Target: The post graduate student should be able:

1. To have knowledge about the imaging methods of the maxilla and mandible and the oral cavity.
2. To have knowledge of diagnostic methodology on Oral Pathology.
3. To have knowledge of basic Histopathology.
4. To have knowledge of basic Oral Pathology.
5. To have knowledge and to practice simple and surgical teeth extractions.
6. To obtain knowledge of surgical removal of impacted teeth.
7. To obtain knowledge of surgical operations in the oral cavity that can be performed in a Dental office.
8. To obtain knowledge of surgical placement of osseointegrated dental implants.
9. To have knowledge of methods preserving the volume of the alveolar crest and to practice simple surgical operations for this purpose.

1. CORE CURRICULUM COURSES (16 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
MK 300	Molecular Biology	1st	2
MK 301	Biochemistry	1st	2
MK 302	Microbiology	2nd	2
MK 303	Immunology	2nd	1
MK 304	Head and Neck Anatomy/Physiology	2nd	2
MK 305	Research Methodology	3rd	1
MK 306	Pharmacology	3rd	2
MK 307	Epidemiology-Biostatistics	4th	2
MK 308	Informatics	4th	1
MK 309	Biomaterials	4th	1

2. SPECIAL COURSES (9 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
PS 382	General Principles of Anatomic Pathology	1st	1
PS 380	Basic Oral Pathology I	1st	2
PS 383	Diagnostic Methodology of Oral Diseases	1st	1
PS 381	Basic Oral Pathology II	2nd	2
PS 391	Imaging Methods in Oral Pathology and Surgery	2nd	1
PS 392	Basic Principles of Surgery	3rd	1
PS 393	The use of Drugs in Oral Surgery	4th	1

3. CLINICAL COURSES (25 CREDIT HOURS)

CODE	COURSE	SEMESTER	CH
STOH 400	Practical Seminar on Oral Surgery	1st - 2nd	1
STOH 401	Seminar on Oral Surgery	1st – 4th	1
STOH 402	Seminar on Oral Surgery – Clinical cases Analysis	1st – 4th	1
STOH 403	Literature Review	1st – 4th	1
STOH 404	Clinic of Oral & Maxillofacial Surgery I	1st – 4th	2
STOH 405	Implantology Clinic	1st – 4th	1
STOH 406.1	Clinic of Oral & Maxillofacial Surgery II- Examination Room	1st – 4th	1
STOH 406.2	Department of Oral & Maxillofacial Surgery II- Operating Room	1st – 4th	2
STOH 407	Seminar on Implantology	1st	1

STOH 408	Practical Implantology	3rd - 4th	2
STOH 409	Biomaterials in Oral Surgery	1st	2
DIAK 414	Seminar on Digital Imaging Techniques	3rd	2
DIAK 415	Seminar on Other Imaging Techniques	3rd and 5th	2
DIAK 416	Seminar on Diagnostic Radiology	4th and 6th	2
PERPR 455.1	Perio-Prosthetic Seminar	1st - 2nd	2
PERPR 455.2	Perio-Prosthetic Seminar	3rd - 4th	2

4. Research and master dissertation write up. (10 CH)

SECOND STAGE OF POSTGRADUATE STUDIES (Ph.D program)

A. CANDIDATES

Candidates for a doctoral dissertation (DD) in the Dental School belong to the following three groups:

a. Those who have attained a Postgraduate Specialization Certificate (PSC) of the first stage of studies in one PPS of the NKUA. The candidate can qualify for admission if he has completed the PPS program.

b. Those who have attained a PSC (see a) by another Greek University or by an accredited international institution.

c. Those that are graduates of the Dental and the Medical School and are in the process or have already completed the Oral Surgery Specialty Program.

B. APPLICATIONS

Applications are accepted every year from the 1st of September until the 30th of April and they are evaluated twice annually with the deadlines being the 15th of January and the 15th of June. The candidate, in his application, states in which one of the four Dental Basic Sciences would like to work for his dissertation.

C. ADMISSIONS

The following are the qualifications for admission:

1. The predoctoral Grade Point Average (GPA),
2. The PSC GPA,

3. The achievements and the activities of the PS during his studies for earning his PSC (ie. the necessary semesters to complete his studies, any fail courses or exams, initiatives, grades),
4. Curriculum Vitae,
5. Personal Interview,
6. Three recommendation letters.

In general the applicant must prove by means of his previous educational endeavors that he can advance his postgraduate studies to the highest level in order to earn a doctor of philosophy degree. A committee that is appointed by the PC and that is composed of PC members and necessarily the Coordinator of the doctoral degree program confers every February and July and recommends the qualified applicants to the GA that finally decides who will be admitted into the doctoral program.

In case that applicants of the second group are admitted, the PC decides if they will have to attend additional courses from the first stage of postgraduate studies before they start working toward their doctoral dissertation. The evaluation depends on the curriculum of the program that the new doctoral student has completed as well as the basic sciences field that he has selected for his doctoral degree.

In case that applicants of the third group are admitted, the PC must incorporate in their coursework courses that belong to the basic core and that of the special courses of the PPS of the Oral Biology. These courses should account for 20 credit hours. The doctoral candidate will take these courses as he will be working towards his doctoral dissertation.

D. ACADEMIC PROCEDURES

The minimum duration of a Doctoral Degree Program is 6 semesters and the maximum 9 semesters. If the Doctoral Candidate (DC) becomes admitted to the doctoral program he will go through the following program procedures:

1. The DC must submit to the registrar's office an application to enter the program and also to select three faculty members from the rank of the Professor, Associate Professor and Assistant Professor (who will be in the basic science field of the DC). From the above three faculty members one will be the advisor of the DC. The PC will appoint as an advisor that faculty member who has close relationship to the basic science selected by the DC. The PC will evaluate all potential advisors' qualifications, activities and responsibilities to other DC.

2. After the appointment of the advisor, he and the DC must explore different ways for the DC to acquire knowledge in the basic science that the DC has chosen to work on. The advisor must recommend two more members who will become along with him part of the three-member doctoral committee (TDC). One of

the new members must be directly related to the field of the basic science of the DC while the other may belong to a different department or even school. The GA must approve the appointment of the TDC after recommendation by the PC.

3. Every DC has an individualized curriculum that is designed for the scientific field of the basic science that he has selected and must account for 90 credit hours. The DC should be making progress towards his degree on his own under the guidance of his TDC. His education is facilitated by i. writing reports relevant to the subject of his doctoral dissertation based on all 4 basic sciences fields, ii. taking specialized seminars in the graduate level and iii. all other methods that the TDC might judge necessary in cooperation with the DC. The customized coursework of every DC along with the titles of the reports and their deadlines are submitted every semester to the registrar's office and it is approved by the CPC.

The customized curriculum of the DC has a set of coursework selected from the following 4 groups that will facilitate the training of the DC and his Doctoral Dissertation work.

A. Basic Science of Community Dentistry

1. CD 520 Topics in Community Dentistry (4 CH)
2. CD 521 Topics in Behavioral Sciences (4 CH)
3. CD 522 Topics in Epidemiology (4 CH)
4. CD 523 Topics in Sociology (4 CH)
5. CD 524 Topics in Psychology (4 CH)
6. CD 525 Literature Review in Community Dentistry (3 CH)
7. CD 526 Literature Review in Sociology (3 CH)
8. CD 527 Literature Review in Epidemiology (3 CH)
9. CD 528 Literature Review in Psychology (3 CH)
10. CD 529 Doctoral Dissertation in Community Dentistry (40 CH)

B. Basic Science of Oral Biology

1. OB 540 Topics in Oral Biology (4CH)
2. OB 541 Topics in Biological Chemistry (4 CH)
3. OB 542 Topics in Immunology (4 CH)
4. OB 543 Topics in Microbiology (4 CH)
5. OB 544 Topics in Molecular Biology (4 CH)
6. OB 545 Literature Review in Oral Biology (3 CH)
7. OB 546 Literature Review in Biological Chemistry (3 CH)
8. OB 547 Literature Review in Immunology (3 CH)
9. OB 548 Literature Review in Microbiology (3 CH)
10. OB 549 Literature Review in Molecular Biology (3 CH)

11. OB 550 Doctoral Dissertation in Oral Biology (40 CH)

C. Basic Science of Dental Biomaterials

1. DB 560 Topics in Dental Biomaterials (4CH)
2. DB 561 Topics in Chemistry and Technology of Metals (4 CH)
3. DB 562 Topics in Polymers (4 CH)
4. DB 563 Topics in Ceramics (4 CH)
5. DB 564 Topics in Materials (4 CH)
6. DB 565 Topics in Toxicology (4 CH)
7. DB 566 Literature Review in Dental Biomaterials (3 CH)
8. DB 567 Literature Review in Chemistry and Technology of Metals(3 CH)
9. DB 568 Literature Review in Polymers (3 CH)
10. DB 569 Literature Review in Ceramics(3 CH)
11. DB 570 Literature Review in Materials (3 CH)
12. DB 571 Literature Review in Toxicology (3 CH)
13. DB 572 Doctoral Dissertation in Dental Biomaterials (40 CH)

D. Basic Science of Oral Pathobiology

1. OP 580 Topics in Oral Medicine and Pathology (4CH)
2. OP 581 Topics in Histopathology (4 CH)
3. OP 582 Topics in Pharmacology (4 CH)
4. OP 583 Topics in Physiology (4 CH)
5. OP 584 Topics in Radiobiology (4 CH)
6. OP 585 Literature Review in Histopathology (3 CH)
7. OP 586 Literature Review in Pharmacology(3 CH)
8. OP 587 Literature Review in Physiology(3 CH)
9. OP 588 Literature Review in Oral Medicine and Pathology (3 CH)
10. OP 589 Literature Review in Radiobiology (3 CH)
11. OP 590 Doctoral Dissertation in Oral Pathobiology (40 CH)

Furthermore, during his Doctoral Dissertation, every DC should gain deep knowledge in the fields of Teaching Methods (MK 501, 2 CH) and Advanced Biostatistics (MK 502, 5 CH).

The customized curriculum of DC may include cognate courses provided by accredited postgraduate programs of other dental departments or other University departments if they have been approved by CPC after suggestion of the DC's TDC. The customized curriculum of DC can be modified after petition of his TDC.

DC works on the courses and writes a 20-30 page report for each course that he submits to his TDC. TDC evaluates the report and either approves it, or approves it with revisions, or rejects it. If the report is rejected then the DC would have to report again on the same subject. If the report is approved by his committee then it is forwarded to the administrator's office of the postgraduate program, approved by PC and DC earns the respective CH.

Alternatively and in the scope of practicing for the course of Teaching Methods (501), DC has the opportunity to become a teaching assistant earning by that means 12 CH. Teaching Assistantship will require at least two hours work every week for two semesters and can relate to laboratory, clinical or other educational activities under the supervision of the director of the respective laboratory or clinic. The CH can be accumulated to the customized curriculum of the student. The director of the laboratory or the clinic that the DC is a teaching assistant should provide to the Coordinator of the Doctoral Program a verification before the CH are added to the candidate's record.

The DC should publish as the first author in renowned Greek or international journals at least one research paper originating from his doctoral dissertation. Publishing in Greek journals will award him 4 CH while publishing in international journals 8 CH. DC will earn the CH once the journal accepts the paper for publication. These publications should be incorporated in the customized curriculum that the candidate is submitting for approval. DC can include 2 publications to his curriculum. In case that he can not publish one of them he should substitute this with courses at the 500 level awarding the same total of CH.

4. The topic of the Doctoral Dissertation will be decided one year after entering the program and earning 10 CH. The TDC in cooperation with the candidate will define the topic, select the Laboratory, School and University , allow the time necessary and finally structure the research protocol. If the doctoral dissertation includes clinical research involving human subjects then the approval by the institutional research review board is necessary (see www.dent.uoa.gr). The GA should approve the topic and the methods and materials of the Dissertation after petition by the PC.

5. During the Doctoral Dissertation:

- The advisor should submit to the coordinator of Doctoral Studies annual progress reports of the doctoral study of the DC stating the coursework completed or under completion in regards to the timeline initially submitted as well as the progress of the research project.

- In case there is delay in the coursework at the end of the 2 first years then the DC is notified by written notice. Another written notice is forwarded to the DC in case of delays at the end of the 3rd and 4th year.
- In case DC exceeds the maximum allowed 4 ½ years without completing his DD, then after recommendation of the coordinator of doctoral studies to the CPC he is expelled, a decision that must be validated by the GA.
- After completion of the writing of the dissertation, the DC submits a copy to the administrator's office of the Postdoctoral studies accompanied by a written notice of the TDC verifying the completion and requesting the assembly of the seven-member committee that will finally evaluate the dissertation. DC earns the 40 CH at that point. The seven-member committee includes the three members of the TDC. The seven-member committee should include 3 members of the rank of the professor. If a faculty member of the three-member committee retires or withdraws it is replaced in the seven member committee after suggestion by the CPC and decision of the GA. Every DD should include an 1,000 word English abstract in which the aim, methods, results and conclusions are described.

6. The oral defense of the Dissertation is presented to the members of the seven-member committee by DC. It is open to the public. It requires at least 5 members of the seven-member committee to concur for the committee to approve the dissertation.

7. DC is required before he is declared doctor of philosophy to submit 33 copies of his doctoral dissertation to the different Laboratories and Clinics of the Dental School. The director of each Laboratory must make the dissertation available to all faculty members so that they can take an informed decision before the vote for declaring him doctor of philosophy in the GA. That function should be completed 15 days before declaring him a doctor of philosophy in the GA.

8. DC is declared a doctor of philosophy only after DC has completed successfully all procedures and examinations and has satisfied his financial responsibilities. The proposal for declaring DC a doctor of philosophy is done by the PC and it is approved by the GA.

E. TUITION

DC pay tuition to the amount that is defined by SMGA at the time of application to the program (more information at the registrar's office). This amount

is received in three equal amounts. The first pay is submitted when the customized curriculum of the DC is submitted, the second after 3 semesters and the last one after 4 semesters. In case of payments not received the credit hours of completed coursework are not registered to the student's record.

Tuition is payable to account number 81706531 at every Emporiki Bank branch. DC should forward the receipt to the registrar's office in order to receive a receipt.

Stipends by means of tuition reduction might be available to DCs that are making successful progress towards their degree. The petition will be submitted annually by the PC after evaluation of the progress of all DC.

For every other issue regarding first or second stage of postgraduate studies that is not addressed by the above bylaws, the GA decides after recommendations by the PC.

APPENDIX 3

UNDERGRADUATE COURSES ASSESSMENT

Grades: 1 (low) – 5 (high)

A. THEORETICAL TRAINING

CODE	YEAR	TYPE	COURSE	The objectives of the course were clear	lessonThe material that was covered addressed the aims of the	The material that was taught was well organized in the lectures/seminars	The educational material used aided in the better understanding of the lesson	How adequate do you consider the primary text book to be	How adequate do you consider the study aids (notes, electronic material, etc.) (if available) to be	Is there an overlap of the material with that of other courses	The teachers, at a rate over 70%, present their lesson in an understandable manner	The teachers, at a rate over 70%, encouraged the students to voice their questions and to develop their critical thinking	The teachers, at a rate over 70%, were punctual towards their responsibilities (presence in the lesson, discussion time with the students)	The teachers, at a rate over 70%, were generally accessable by the students	MEAN SCORE FOR THE THEORETICAL TRAINING
51085A-51085	3	D	Fixed Prosthodontics I	3.93	3.78	3.48	3.56	4.28	3.41	3.52	3.80	3.74	4.12	3.88	3.77
51085A	2	D	Fixed Prosthodontics IA	4.57	4.29	4.55	4.36	4.39	3.81	3.24	4.51	4.38	4.60	4.51	4.29
51095Γ-51095	5	D	Fixed Prosthodontics II	3.97	3.78	3.84	3.91	4.26	3.38	3.53	4.06	4.01	4.18	3.95	3.90
51095A-51095B	4	D	Fixed Prosthodontics IIA-IIB	3.54	3.44	3.32	3.42	3.98	3.00	2.60	3.62	3.70	3.32	3.68	3.42
51021	1	B	Biology and Genetics	3.49	3.54	3.56	3.46	3.66	3.35	2.78	3.59	3.81	3.86	3.72	3.53
51059-51065	2	BM	Biochemistry I & II	2.86	3.04	2.94	2.70	2.94	2.66	2.82	2.82	2.86	3.55	3.04	2.93

51202	1	BM	Biostatistics	3.77	3.73	4.00	3.72	3.65	3.46	2.71	3.92	3.90	3.92	3.64	3.67
51057	1	BM	General Histology - Embryology	2.89	3.08	2.90	3.23	3.15	2.96	3.07	2.90	2.93	3.44	3.06	3.06
51190	2	BM	General Microbiology - Immunology	3.28	3.18	3.14	3.08	2.89	2.46	2.53	3.14	3.05	3.65	3.20	3.05
51194	4	BM	General Surgery	3.02	2.73	2.82	2.56	3.62	2.41	2.79	3.30	3.40	3.28	3.38	3.03
51093	4	D	Maxillofacial surgery I	3.19	3.12	3.03	3.14	3.68	2.92	2.68	3.32	3.58	3.70	3.51	3.26
51209A-51209	5	D	Maxillofacial surgery II	3.78	3.79	3.76	3.68	3.92	3.51	3.52	3.87	3.83	3.99	3.86	3.77
51203	2	D	Oral Diagnosis and Radiology I	4.46	4.37	4.31	4.34	4.39	3.70	3.33	4.29	4.12	4.51	3.98	4.16
51207Γ-51207	5	D	Oral Diagnosis and Radiology II	3.99	4.05	4.00	3.80	4.11	3.68	3.83	3.99	3.91	4.13	3.95	3.95
51207A-51207B	4	D	Oral Diagnosis and Radiology IIA-IIB	3.22	3.24	3.32	3.17	3.56	3.00	2.94	3.46	3.54	3.96	3.54	3.36
51079	3	BM	Internal Medicine	3.02	3.26	3.16	2.90	3.19	2.75	2.93	3.35	3.56	3.47	3.35	3.18
51220	5	D	Basic Implantology	3.69	3.50	3.63	3.46	3.59	3.22	3.14	3.83	3.88	4.00	3.86	3.62
51054	1	D	Introduction to Dentistry and Behavioral Sciences	2.79	2.98	2.95	2.71	2.66	2.71	2.29	2.93	3.12	3.38	2.95	2.86
51215Δ-51215	5	D	Endodontics II	3.86	3.58	3.86	3.61	2.67	3.42	3.20	4.01	3.86	4.19	3.92	3.65
51215B-51215Γ	4	D	Endodontics IIB-IIC	3.80	3.68	3.66	3.33	2.25	2.74	2.46	3.64	3.56	4.12	3.72	3.36
51182-51215A	3	D	Endodontics I & IIA	4.39	4.36	4.14	4.09	3.16	3.64	3.44	4.27	4.18	4.45	4.29	4.04
51204	2	BM	Epidemiology	3.89	4.07	3.95	3.65	3.39	3.28	2.63	3.26	4.07	4.55	4.17	3.72
51047	1	B	Medical Physics	2.54	2.69	2.54	2.49	2.33	2.65	2.26	2.45	2.75	3.49	2.90	2.64
51046-51246	1	B	Medical Chemistry I & II	3.32	3.31	3.56	3.01	3.22	3.52	2.67	3.47	3.56	3.83	3.51	3.36
51158	1	D	Oral Histology and Embryology	4.05	4.05	3.92	3.95	3.82	3.98	3.57	4.12	4.13	4.15	4.00	3.98

51077A-51077	3	D	Removable Prosthodontics I	2.94	3.20	2.99	2.87	3.16	2.87	2.66	2.81	3.16	3.89	2.94	3.05
51219Γ-51219	5	D	Removable Prosthodontics II	3.64	3.63	3.53	3.49	3.54	3.22	3.22	3.87	3.78	4.06	3.82	3.62
51219A-51219B	4	D	Removable Prosthodontics IIA-IIB	3.62	3.40	3.44	3.29	3.12	3.28	2.52	3.52	3.64	4.22	3.72	3.43
51221	5	D	Clinical application of Dental Biomaterials	3.49	3.59	3.52	3.47	3.22	3.21	3.55	3.67	3.68	3.88	3.73	3.55
51186	4	D	Community Dentistry	1.55	1.90	2.16	1.75	1.80	1.45	2.20	1.76	1.76	3.14	1.63	1.92
	5	D	Total Patient Care Clinic												
51156	1	D	Dental Materials	3.59	3.20	3.15	3.08	2.92	2.96	2.89	3.15	3.14	3.81	3.34	3.20
51160	3	D	Dental Anaesthesia	4.04	4.02	3.88	3.77	4.33	3.59	3.48	4.08	4.04	3.88	4.07	3.92
51051	1	D	Tooth morphology	4.40	4.27	4.12	4.25	4.10	3.98	3.41	4.18	4.10	4.20	4.13	4.10
51218Δ-51218	5	D	Operative Dentistry II	4.08	3.91	4.09	3.96	2.96	3.79	3.43	4.25	4.18	4.40	4.17	3.93
51218B-51218Γ	4	D	Operative Dentistry IIB-IIΓ	4.18	4.18	4.02	3.94	2.78	3.47	2.85	4.10	4.00	4.34	4.02	3.81
51210-51218A	3	D	Operative Dentistry I & IIA	4.59	4.54	4.40	4.38	3.36	4.19	3.72	4.35	4.35	4.47	4.47	4.26
51069	2	D	Orthodontics I	2.34	1.87	1.93	2.35	2.42	2.43	2.45	2.55	2.72	1.40	2.40	2.26
51216Γ-51216B	5	D	Orthodontics II	3.24	3.28	3.09	3.25	3.24	3.18	2.75	3.50	3.32	3.55	3.35	3.25
51216A-51216B	4	D	Orthodontics IIA-IIB	3.08	2.94	3.04	2.92	3.00	2.97	2.43	3.43	3.27	3.39	3.37	3.08
51067	2	D	Pathology of Dental Hard Tissue	3.78	3.75	3.56	3.36	3.48	2.91	2.91	3.59	3.42	3.92	3.40	3.46
51206	2	BM	Pathology	3.69	3.55	3.46	3.38	3.46	2.61	2.89	3.44	3.33	3.92	3.36	3.37
51177-51177A	4	D	Paediatric Dentistry I	3.61	3.78	3.67	3.39	2.86	3.16	2.74	3.69	3.31	4.02	3.20	3.40

51217A-51217	5	D	Paediatric Dentistry II	3.82	3.72	3.58	3.56	3.30	3.54	3.36	3.91	3.85	4.03	3.86	3.68
51058-51064	2	BM	Experimental Physiology I &II	2.39	2.61	2.46	2.37	2.04	2.08	2.51	2.43	2.58	3.22	2.72	2.49
51060-51066	1	BM	Descriptive anatomy I & II	3.51	3.48	3.34	3.38	3.31	2.98	3.08	3.52	3.22	3.60	3.22	3.33
51211-51213A	3	D	Periodontology I & IIA	4.53	4.55	4.56	4.34	4.56	4.29	3.73	4.28	3.92	4.60	3.59	4.27
51213Δ-51213	5	D	Periodontology II	4.17	4.03	4.26	4.31	4.42	4.23	3.49	4.30	4.09	4.42	3.83	4.14
51213B-51213Γ	4	D	Periodontology IIB-IIC	4.28	4.30	4.26	4.12	4.42	3.77	2.79	4.20	4.12	4.42	3.90	4.05
51080	3	D	Preventive Dentistry	3.77	4.05	3.87	3.61	3.05	3.07	3.24	3.77	3.65	4.20	3.60	3.63
51205	3	D	Oral Surgey I	3.84	3.79	3.66	3.72	4.08	3.35	3.46	3.92	3.93	3.48	3.96	3.74
51208Γ-51208	5	D	Oral Surgey II	3.93	3.84	3.79	3.75	4.00	3.53	3.53	3.88	3.87	4.03	3.94	3.83
51208A-51208B	4	D	Oral Surgey IIA-IIB	3.60	3.46	3.44	3.34	3.70	2.89	2.51	3.46	3.64	3.86	3.60	3.41
51173A-51173	4	D	Oral Medicine and Pathology I	4.00	4.02	3.98	3.75	4.15	3.39	2.31	3.66	3.87	4.17	3.64	3.72
51094A-51094	5	D	Oral Medicine and Pathology II	4.09	4.09	4.19	4.01	4.04	4.01	3.67	4.08	4.16	4.27	4.03	4.06
51073	3	BM	Pharmacology I & II	2.78	2.91	2.65	2.51	3.09	2.63	2.64	2.83	2.90	3.29	3.01	2.84
51187	3	D	Physiology of the Stomatognathic system A	3.30	3.55	3.30	3.23	3.30	2.92	3.05	3.15	3.38	3.91	3.37	3.32
	4	D	Physiology of the Stomatognathic system												
	5	D	Physiology of the Stomatognathic system												

51180	4	BM	Otorynolarygology	3.17	3.22	2.96	2.79	3.19	2.31	2.43	3.20	3.24	3.41	3.16	3.01
AVERAGE FOR ALL COURSES				3.59	3.57	3.53	3.43	3.43	3.21	3.00	3.59	3.60	3.89	3.59	3.49
AVERAGE FOR BASIC SCIENCE COURSES (B)				3.12	3.18	3.22	2.99	3.07	3.17	2.57	3.17	3.37	3.72	3.38	3.18
AVERAGE FOR BIOMEDICAL COURSES (BM)				3.19	3.24	3.15	3.02	3.16	2.72	2.75	3.18	3.25	3.61	3.28	3.14
AVERAGE FOR DENTAL COURSES (D)				3.73	3.69	3.65	3.57	3.52	3.33	3.09	3.73	3.71	3.97	3.68	3.60

B. PRACTICAL TRAINING

CODE	YEAR	TYPE	COURSE	The overall necessity of the specific practical exercise	The specific exercises were well organized	The hours alloted to the practical exercises were enough	The basic tenets of each exercise/ experiment were cleary explained	The educational material given (guides, electronic material, etc.) was sufficient	The equipment used was sufficient	The theoretical knowledge was linked with the practical aspects	The teachers, at a rate over 70%, encouraged the students to voice their questions and to develop their critical thinking	The teachers, at a rate over 70%, were punctual towards their responsibilities (presence in the lesson, discussion time with the students)	The teachers, at a rate over 70%, were generally accessable by the students	The teachers, at a rate over 70%, imparted effectively the necessary knowledge and dexterities	MEAN SCORE FOR THE PRACTICAL TRAINING
51085A-51085	3	D	Fixed Prosthodontics I	4.73	3.96	3.74	3.94	3.65	4.05	4.07	4.13	4.23	4.13	3.95	4.05
51085A	2	D	Fixed Prosthodontics IA	4.81	4.22	3.60	4.29	4.11	3.31	4.44	4.34	4.38	4.41	4.27	4.20
51095Γ-51095	5	D	Fixed Prosthodontics II												
51095A-51095B	4	D	Fixed Prosthodontics IIA-												

			IIB												
51021	1	B	Biology and Genetics												
51059-51065	2	BM	Biochemistry I & II												
51202	1	BM	Biostatistics	3.77	3.90	3.67	3.90	3.55	3.62	3.81	3.86	3.96	3.76	3.68	3.77
51057	1	BM	General Histology - Embryology	2.96	3.04	3.00	3.21	2.95	3.22	3.24	3.07	3.38	3.04	3.00	3.10
51190	2	BM	General Microbiology - Immunology	3.46	3.57	3.73	3.68	3.21	3.63	3.47	3.37	4.04	3.52	3.36	3.55
51194	4	BM	General Surgery												
51093	4	D	Maxillofacial surgery I												
51209A-51209	5	D	Maxillofacial surgery II												
51203	2	D	Oral Diagnosis and Radiology I	4.59	4.22	3.83	4.08	4.00	4.18	4.27	4.15	4.48	4.20	4.24	4.20
51207Γ-51207	5	D	Oral Diagnosis and Radiology II												
51207A-51207B	4	D	Oral Diagnosis and Radiology IIA-IIB												
51079	3	BM	Internal Medicine												
51220	5	D	Basic Implantology												
51054	1	D	Introduction to Dentistry and Behavioral Sciences	2.62	2.60	2.77	2.46	2.53	2.89	2.78	2.93	3.17	2.95	2.86	2.78
51215Δ-51215	5	D	Endodontics II												
51215B-51215Γ	4	D	Endodontics IIB-IIC												
51182-51215A	3	D	Endodontics I & IIA	4.82	4.34	4.07	4.44	3.80	4.19	4.38	4.51	4.65	4.55	4.41	4.38

51204	2	BM	Epidemiology	3.70	4.23	4.24	3.50	3.79	3.86	3.80	4.18	4.41	4.23	3.75	3.97
51047	1	B	Medical Physics	2.62	2.72	3.02	3.00	2.62	2.67	2.58	3.12	3.40	3.46	3.09	2.94
51046-51246	1	B	Medical Chemistry I & II												
51158	1	D	Oral Histology and Embryology	3.86	3.95	3.80	3.93	3.89	3.91	3.88	4.14	4.13	3.93	4.18	3.96
51077A-51077	3	D	Removable Prosthodontics I	3.24	2.94	3.74	2.78	3.23	3.33	3.24	3.18	3.86	3.01	2.90	3.22
51219Γ-51219	5	D	Removable Prosthodontics II												
51219A-51219B	4	D	Removable Prosthodontics IIA-IIB												
51221	5	D	Clinical application of Dental Biomaterials												
51186	4	D	Community Dentistry												
	5	D	Total Patient Care Clinic												
51156	1	D	Dental Materials	4.24	4.03	3.95	3.73	3.37	4.28	3.60	3.34	3.92	3.36	3.34	3.74
51160	3	D	Dental Anaesthesia	4.05	3.30	3.66	3.78	3.50	3.44	3.47	4.01	3.90	4.08	3.81	3.73
51051	1	D	Tooth morphology	4.40	4.25	4.17	4.14	4.14	4.16	4.24	4.10	4.09	4.14	4.05	4.17
51218Δ-51218	5	D	Operative Dentistry II												
51218B-51218Γ	4	D	Operative Dentistry IIB-IIΓ												
51210-51218A	3	D	Operative Dentistry I & IIA	4.91	4.65	4.42	4.46	4.32	4.48	4.48	4.49	4.60	4.51	4.46	4.53
51069	2	D	Orthodontics I	2.33	1.63	1.73	1.94	2.41	1.87	1.80	2.24	1.75	2.24	2.29	2.02
51216Γ-51216B	5	D	Orthodontics II												
51216A-51216B	4	D	Orthodontics IIA-IIB	3.18	2.68	3.10	2.94	2.57	2.85	2.78	3.18	3.37	3.55	3.29	3.05

51067	2	D	Pathology of Dental Hard Tissue												
51206	2	BM	Pathology	3.35	3.44	3.69	3.33	3.01	3.51	3.56	3.53	3.99	3.51	3.37	3.48
51177-51177A	4	D	Paediatric Dentistry I	4.08	3.90	3.58	3.76	3.42	3.67	3.72	3.34	3.82	3.56	3.62	3.68
51217A-51217	5	D	Paediatric Dentistry II												
51058-51064	2	BM	Experimental Physiology I &II												
51060-51066	1	BM	Descriptive anatomy I & II												
51211-51213A	3	D	Periodontology I & IIA	4.24	4.33	4.27	4.30	4.51	4.06	4.23	4.07	4.64	3.92	4.23	4.25
51213Δ-51213	5	D	Periodontology II												
51213B-51213Γ	4	D	Periodontology IIB-IIC												
51080	3	D	Preventive Dentistry	3.51	3.89	4.16	3.89	3.32	3.70	3.75	3.80	4.00	3.78	3.61	3.77
51205	3	D	Oral Surgey I	3.96	3.18	3.57	3.59	3.23	3.41	3.58	3.91	3.41	3.79	3.60	3.57
51208Γ-51208	5	D	Oral Surgey II												
51208A-51208B	4	D	Oral Surgey IIA-IIB												
51173A-51173	4	D	Oral Medicine and Pathology I	3.75	3.86	3.71	3.50	3.30	3.14	3.36	3.82	4.25	4.04	4.07	3.71
51094A-51094	5	D	Oral Medicine and Pathology II												
51073	3	BM	Pharmacology I & II												
51187	3	D	Physiology of the Stomatognathic system A												
	4	D	Physiology of the												

			Stomatognathic system												
	5	D	Physiology of the Stomatognathic system												
51180	4	BM	Otorynolarygology												
AVERAGE FOR ALL COURSES				3.80	3.62	3.64	3.61	3.43	3.56	3.60	3.70	3.91	3.74	3.64	3.66
AVERAGE FOR BASIC SCIENCE COURSES (B)				2.62	2.72	3.02	3.00	2.62	2.67	2.58	3.12	3.40	3.46	3.09	2.94
AVERAGE FOR BIOMEDICAL COURSES (BM)				3.39	3.49	3.52	3.53	3.18	3.50	3.52	3.46	3.84	3.46	3.35	3.48
AVERAGE FOR DENTAL COURSES (D)				3.96	3.66	3.66	3.66	3.52	3.61	3.67	3.76	3.92	3.79	3.73	3.72

C. CLINICAL TRAINING

CODE	YEAR	TYPE	COURSE	The clinical training was generally well organized	The method of circulation for the patient files was satisfactory	The infrastructure (dental units, service of equipment) was satifactory	The function of the sterilization and supply area (adequacy of material, service) were satifactory	The educational material given (guides, electronic material, etc.) was sufficient	The theoretical knowledge was linked with the practical aspects	The teachers, at a rate over 70%, imparted effectively the necessary knowledge and dexterities	The teachers, at a rate over 70%, encouraged the students to voice their questions and to develop their critical thinking	The teachers, at a rate over 70%, were punctual towards their responsibilities (presence in the lesson, discussion time with the students)	The teachers, at a rate over 70%, were generally accessable by the students	You learn to manage and deal with each patient efficiently	MEAN SCORE FOR THE CLINICAL TRAINING
51085A-51085	3	D	Fixed Prosthodontics I												
51085A	2	D	Fixed Prosthodontics IA												
51095Γ-51095	5	D	Fixed Prosthodontics II					3.52	3.71	3.74	3.58	3.62	3.88	3.86	3.70

51095A-51095B	4	D	Fixed Prosthodontics IIA-IIB	3.80	3.94	3.58	3.68	3.34	3.85	3.80	3.96	3.96	3.90	3.58	3.76
51021	1	B	Biology and Genetics												
51059-51065	2	BM	Biochemistry I & II												
51202	1	BM	Biostatistics												
51057	1	BM	General Histology - Embryology												
51190	2	BM	General Microbiology - Immunology												
51194	4	BM	General Surgery	2.31	1.71	2.44	2.08	2.71	2.67	2.87	3.37	2.67	3.33	2.14	2.57
51093	4	D	Maxillofacial surgery I												
51209A-51209	5	D	Maxillofacial surgery II	3.57	3.74	3.79	3.94	3.52	3.70	3.79	3.88	4.05	3.83	3.25	3.73
51203	2	D	Oral Diagnosis and Radiology I												
51207Γ-51207	5	D	Oral Diagnosis and Radiology II	3.92	4.00	3.95	3.98	3.75	3.81	3.84	3.80	4.14	3.85	3.82	3.90
51207A-51207B	4	D	Oral Diagnosis and Radiology IIA-IIB	3.69	3.56	3.63	3.60	3.00	3.46	3.43	3.43	3.78	3.49	3.49	3.50
51079	3	BM	Internal Medicine	2.71	2.54	2.57	2.54	2.32	2.67	3.02	3.23	3.08	3.25	2.65	2.78
51220	5	D	Basic Implantology												
51054	1	D	Introduction to Dentistry and Behavioral Sciences												
51215Δ-51215	5	D	Endodontics II					3.26	3.68	3.79	3.76	4.01	3.89	3.92	3.76
51215B-51215Γ	4	D	Endodontics IIB-IIC	3.80	3.60	3.58	3.64	3.00	3.69	3.80	3.60	3.86	3.76	3.62	3.63

51182-51215A	3	D	Endodontics I & IIA												
51204	2	BM	Epidemiology												
51047	1	B	Medical Physics												
51046-51246	1	B	Medical Chemistry I & II												
51158	1	D	Oral Histology and Embryology												
51077A-51077	3	D	Removable Prosthodontics I												
51219Γ-51219	5	D	Removable Prosthodontics II					3.34	3.51	3.60	3.50	3.66	3.84	3.61	3.58
51219A-51219B	4	D	Removable Prosthodontics IIA-IIB	3.62	3.71	3.69	3.74	3.44	3.65	3.66	3.66	3.74	3.70	3.28	3.63
51221	5	D	Clinical application of Dental Biomaterials												
51186	4	D	Community Dentistry												
	5	D	Total Patient Care Clinic	3.72	3.57	3.54	3.91								3.68
51156	1	D	Dental Materials												
51160	3	D	Dental Anaesthesia	3.56	3.80	3.57	3.91	3.33	3.76	3.79	3.83	3.72	3.72	3.50	3.68
51051	1	D	Tooth morphology												
51218Δ-51218	5	D	Operative Dentistry II					3.49	3.92	4.12	4.01	4.21	4.24	4.16	4.02
51218B-51218Γ	4	D	Operative Dentistry IIB-IIΓ	3.96	4.02	3.60	3.72	3.46	4.04	3.96	3.80	4.06	3.94	3.90	3.86
51210-51218A	3	D	Operative Dentistry I & IIA												
51069	2	D	Orthodontics I												
51216Γ-51216B	5	D	Orthodontics II	2.88	3.05	3.55	3.00	3.03	3.01	3.14	3.21	3.42	3.26	2.92	3.13

51216A-51216B	4	D	Orthodontics IIA-IIB												
51067	2	D	Pathology of Dental Hard Tissue												
51206	2	BM	Pathology												
51177-51177A	4	D	Paediatric Dentistry I	3.55	3.35	3.22	3.76	3.29	3.61	3.51	3.35	3.82	3.33	3.18	3.45
51217A-51217	5	D	Paediatric Dentistry II	3.86	3.71	3.71	3.53	3.56	3.83	3.82	3.81	3.91	3.74	3.73	3.75
51058-51064	2	BM	Experimental Physiology I &II												
51060-51066	1	BM	Descriptive anatomy I & II												
51211-51213A	3	D	Periodontology I & IIA												
51213Δ-51213	5	D	Periodontology II					4.09	3.94	4.10	4.00	4.08	4.12	4.11	4.06
51213B-51213Γ	4	D	Periodontology IIB-IIC	3.92	4.08	3.50	3.68	3.68	4.12	4.14	4.04	3.84	3.88	3.90	3.89
51080	3	D	Preventive Dentistry												
51205	3	D	Oral Surgey I	3.45	3.95	3.36	3.86	3.28	3.63	3.74	3.70	3.67	3.74	3.31	3.61
51208Γ-51208	5	D	Oral Surgey II	3.31	2.69	4.10	4.11	3.55	3.79	3.83	3.75	3.83	3.80	3.65	3.67
51208A-51208B	4	D	Oral Surgey IIA-IIB	3.08	2.23	3.89	3.87	2.81	3.30	3.47	3.43	3.57	3.66	3.13	3.31
51173A-51173	4	D	Oral Medicine and Pathology I												
51094A-51094	5	D	Oral Medicine and Pathology II	3.64	3.77	3.09	3.84	3.88	3.89	3.87	3.99	4.21	3.87	3.46	3.77
51073	3	BM	Pharmacology I & II												
51187	3	D	Physiology of the Stomatognathic												

			system A												
	4	D	Physiology of the Stomatognathic system	3.09	3.22	3.39	3.47	2.61	2.97	3.17	3.00	3.42	3.03	3.10	3.13
	5	D	Physiology of the Stomatognathic system					3.00	3.28	3.32	3.20	3.53	3.60	3.43	3.34
51180	4	BM	Otorynolarygology	2.55	1.85	2.00	1.92	2.22	2.32	2.89	3.22	3.14	3.07	2.26	2.50
AVERAGE FOR ALL COURSES				3.49	3.42	3.49	3.60	3.33	3.62	3.69	3.68	3.78	3.74	3.48	3.60
AVERAGE FOR BASIC SCIENCE COURSES (B)															
AVERAGE FOR BIOMEDICAL COURSES (BM)				2.53	2.03	2.34	2.18	2.42	2.55	2.93	3.27	2.96	3.22	2.35	2.62
AVERAGE FOR DENTAL COURSES (D)				3.51	3.49	3.59	3.71	3.30	3.61	3.67	3.62	3.80	3.71	3.51	3.63

D. I.

CODE	YEAR	TYPE	COURSE	Attend lectures at a rate of: 1=<20% 2=20-40% 3= 40-60% 4=60-80% 5=>80%	Systematically study the educational material of the course	Devote to the lesson on a weekly level: 1= <2 Hours 2=2-4 Hours 3=4-6 Hours 4=6-8 Hours 5= >8 Hours
51085A-51085	3	D	Fixed Prosthodontics I	3.19	3.45	2.36
51085A	2	D	Fixed Prosthodontics IA	4.71	3.91	2.54
51095Γ-51095	5	D	Fixed Prosthodontics II	4.75	3.63	2.28
51095A-51095B	4	D	Fixed Prosthodontics IIA-IIB	4.80	3.38	1.94
51021	1	B	Biology and Genetics	3.90	3.00	2.07
51059-51065	2	BM	Biochemistry I & II	2.12	2.18	1.72
51202	1	BM	Biostatistics	4.00	2.77	2.06
51057	1	BM	General Histology - Embryology	2.40	2.09	1.96
51190	2	BM	General Microbiology - Immunology	3.26	2.63	1.94
51194	4	BM	General Surgery	3.39	2.06	1.34
51093	4	D	Maxillofacial surgery I	2.51	1.93	1.56
51209A-51209	5	D	Maxillofacial	4.54	2.78	1.89

			surgery II			
51203	2	D	Oral Diagnosis and Radiology I	4.74	3.71	2.40
51207Γ-51207	5	D	Oral Diagnosis and Radiology II	4.57	2.86	1.85
51207A-51207B	4	D	Oral Diagnosis and Radiology IIA-IIB	4.86	2.38	1.58
51079	3	BM	Internal Medicine	2.72	2.03	1.75
51220	5	D	Basic Implantology	4.36	2.90	1.85
51054	1	D	Introduction to Dentistry and Behavioral Sciences	3.24	2.26	1.54
51215Δ-51215	5	D	Endodontics II	4.75	3.33	2.18
51215B-51215Γ	4	D	Endodontics IIB-IIC	4.78	3.17	1.76
51182-51215A	3	D	Endodontics I & IIA	3.42	3.48	2.33
51204	2	BM	Epidemiology	4.84	4.22	1.79
51047	1	B	Medical Physics	2.69	2.40	1.83
51046-51246	1	B	Medical Chemistry I & II	3.40	3.04	2.04
51158	1	D	Oral Histology and Embryology	4.12	3.31	2.47
51077A-51077	3	D	Removable Prosthodontics I	3.49	3.29	2.23
51219Γ-51219	5	D	Removable Prosthodontics II	4.66	3.48	2.20
51219A-51219B	4	D	Removable Prosthodontics IIA-IIB	4.86	3.21	1.80
51221	5	D	Clinical application of Dental Biomaterials	3.55	2.74	1.79

51186	4	D	Community Dentistry	4.80	1.92	1.43
	5	D	Total Patient Care Clinic			
51156	1	D	Dental Materials	4.44	3.21	2.25
51160	3	D	Dental Anaesthesia	3.60	3.07	2.32
51051	1	D	Tooth morphology	4.57	4.31	2.73
51218Δ-51218	5	D	Operative Dentistry II	4.76	3.33	2.07
51218Β-51218Γ	4	D	Operative Dentistry IIB-IIΓ	4.82	3.33	1.78
51210-51218Α	3	D	Operative Dentistry I & IIA	4.35	3.59	2.37
51069	2	D	Orthodontics I	3.97	2.63	1.72
51216Γ-51216Β	5	D	Orthodontics II	4.36	2.93	1.96
51216Α-51216Β	4	D	Orthodontics IIA-IIB	4.82	2.82	1.96
51067	2	D	Pathology of Dental Hard Tissue	3.62	2.92	1.80
51206	2	BM	Pathology	3.92	2.82	2.03
51177-51177Α	4	D	Paediatric Dentistry I	4.50	3.25	2.22
51217Α-51217	5	D	Paediatric Dentistry II	4.46	2.86	1.92
51058-51064	2	BM	Experimental Physiology I &II	1.96	2.01	1.69
51060-51066	1	BM	Descriptive anatomy I & II	3.50	3.07	2.63
51211-51213Α	3	D	Periodontology I & IIA	4.36	3.80	2.48
51213Δ-51213	5	D	Periodontology II	4.80	3.52	2.31
51213Β-51213Γ	4	D	Periodontology IIB-IIC	4.90	3.33	1.90
51080	3	D	Preventive	4.12	2.68	2.19

			Dentistry			
51205	3	D	Oral Surgey I	3.66	2.91	2.39
51208Γ-51208	5	D	Oral Surgey II	4.55	2.97	1.89
51208A-51208B	4	D	Oral Surgey IIA-IIB	4.78	2.51	1.74
51173A-51173	4	D	Oral Medicine and Pathology I	4.92	3.09	2.17
51094A-51094	5	D	Oral Medicine and Pathology II	4.58	3.08	2.03
51073	3	BM	Pharmacology I & II	2.16	1.87	1.54
51187	3	D	Physiology of the Stomatognathic system A	3.17	2.46	1.83
	4	D	Physiology of the Stomatognathic system	3.97	2.23	1.48
	5	D	Physiology of the Stomatognathic system	4.49	3.01	1.75
51180	4	BM	Otorynolarygology	4.30	2.02	1.37
AVERAGE FOR ALL COURSES				4.02	2.96	2.01
AVERAGE FOR BASIC SCIENCE COURSES (B)				3.33	2.81	1.98
AVERAGE FOR BIOMEDICAL COURSES (BM)				3.22	2.48	1.82
AVERAGE FOR DENTAL COURSES (D)				4.32	3.08	2.04

APPENDIX 4

FUNDED RESEARCH PROJECTS (since 2003)

LABORATORY OF BIOMATERIALS				
Title	**Scientific responsible member**	**Funding**	**Collaborating institutions/laboratories**	**Year of realization**
Corrosion resistance of implant retained superstructures cast by dental alloys and subjected to Electro Discharge Machining (EDM)	Eliades G.	IKY-DAAD	Dental and Biomaterial Res. Gr., Dental School, "Charité" Medical University of Berlin.	2008
Quantitative evaluation of teeth's enamel fluoride after orthodontic treatment	Eliades G.	Xatzistauvrou E. Orthodontist, Thessaloniki, Greece (APTH)		2008
A computerized X-ray microtomographic study of the geometrical characteristics of representative types of endodontic files	Eliades G.	Laios K. Endodontist, Athens, Greece		2008
Degree of cure on top and at 2.5 mm depth of 3 commercial resin based composites after 24h dark and dry storage at 37^{o}C	Eliades G	University of Erlangen Dental School, Germany		2008
Evaluation of the surface morphology and composition of Semados Titanium dental implant.	Eliades G	Bego Implant Systems GmbH	The University of Manchester, School of Dentistry, England,	2008
Evaluation of the interface between porcelain and Zirconia frameworks	Eliades G	Vita, Zahnfabrik, Bad Sackingen, Germany		2008
Study of the chemical synthesis of confronting submerged layers' materials	Eliades G	K. Chagier and SIA EE, Dafni, Athens		2007
A computerized X-Ray microtomographic study of Microsilver universal cream.	Eliades G	LR Health and Beauty Systems Ltd, Athens, Greece.		2007
Curing efficiency of light curing units on different resin composites	Eliades G	State University of Valparaiso, School of		2006

		Dentistry, Valparaiso Chile		
Study of the chemical synthesis of the metal substratum of a recovered fixed prosthetic restoration	Eliades G	Tsolis Ch. Individual dentist		2006
Comparative debris removal and characterization of root canal wall texture of Liberator vs. a conventional helically-fluted file	Eliades G	Miltex, Inc,York, PA USA		2006
Comparative failure incidence of Liberator vs. a conventional helically fluted file.	Eliades G	Miltex, Inc,York, PA USA		2006
A Pilot study on crack formation in a leucite reinforced glass ceramic (LF3)	Eliades G	Chemichl AG, Schaan, Liechtenstein		2005
Evaluation of the characteristics of three amalgam alloys and one composite resin	Eliades G	DMP Ltd Athens, Greece		2005
Research on recovered orthopedic implants of the hip and the knee	Eliades G	Emviomichaniki Ltd., Athens, Greece		2005
Non-destructive control sampling of the Unified Food Control Service (EFET) 305/04	Eliades G	EFET		2005
Assessment of microstructure and hardness of Mani NiTi files	Eliades G	Mani, Inc, Tochigi, Japan.	Laboratory of Metals, Department of Mine's Mechanics Metallourgist Mechanics, Technical Institute of Athens (EMP)	2005
Effect of time and pressure on the porosity of orthopedic cement	Eliades G	Apostolou K., Orthopedist, Athens, Greece		2004
Evaluation of Tikrom porcelain adherence on Ti substrate according to ISO 9693 specification and characterization of Ti-porcelain interface	Eliades G	Orotig, Verona, Italy		2004

In vitro evaluation of the marginal adaptation of a pressable ceramic system on metal and ceramic frameworks and evaluation of metal/ceramic bond strength of a pressable ceramic system processed on Ti frameworks	Eliades G	Chemichl AG, Schaan, Liechtenstein		2004
Evaluation of the characteristics of amalgam alloys PROALLOY 70 and MARVALLOY according to the international standard ISO 1559:1995	Eliades G	DMP Ltd Athens, Greece		2004
Effect of AdheSE Primers on the morphology of intact and ground enamel and the efficiency of AdheSE bonding agent	Eliades G	Ivoclar-Vivadent AG, Schaan , Liechtenstein		2004
A comparative evaluation of the marginal adaptation to dentin of restorative resin composites in a cylindrical cavity mode	Eliades G	SDS/Kerr, Orange, USA		2004
A comparative evaluation of the marginal adaptation of the resin composites in Class II cavities	Eliades G	SDS/Kerr, Orange, USA		2004
Evaluation of the chemical synthesis and homogeneity during industrialized preparation of PhicouHart Bio Alloy	Eliades G	Koutras Ltd., Pallini, Athens, Greece		2004
Evaluation of the mechanical characteristics of dental alloy Philidor 2, according to the international standard ISO 9693:1999	Eliades G	Koutras Ltd., Pallini, Athens, Greece		2004
Essay on the influence of thermical processes on the hardness of dental alloys GOLD 70 and GOLDPLAT 48	Eliades G	Koutras Ltd., Pallini, Athens, Greece		2004
Interfacial characterization of Cercon core material veneered with Cercon Porcelain S ceramic	Eliades G	DeguDent GmBH, Hanau, Germany		2003
Evaluation of the characteristics of an	Liades G	DMP Ltd, Athens,		2003

experimental and two market amalgam alloys (Proalloy 70, Marvalloy) according to the international standard ISO1559:1995		Greece		
Tensile bond strength of adhesive resin cements to dentin	Eliades G	Tokuyama, Tokyo, Japan.		2003
A comparative evaluation of the surface texture quality of anterior visible light – cured composite restoratives	Eliades G	Tokuyama, Tokyo, Japan.		2003
Evaluation f the superficial roughness of orthroplastic materials of the hip according to the international standard ISO 7206-2''	Eliades G	EKEVYL, Athens, Greece		2003
Evaluation of the chemical synthesis and sphericity of orthoplastic materials of the hip according to the International standard ISO 7206-2	Eliades G	EKEVYL, Athens, Greece		2003
Non-destructive control sampling of the Unified Food Control Service (EFET) 203/05	Eliades G	EFET,		2003
Evaluation of the characteristics of dental alloys according to the International Standard ISO 9693 1999	Eliades G	Koutras Ltd., Pallini, Athens, Greece		2003
Modern Biomaterials	Papadopoulos T	General Secretariat of Research and Technology (GGET)	11	2002-2003
New casting processor Ti dental applications: the protection efficacy of a ceramic coating (CATIPRO),	Papadopoulos T	European Union	4 from Germany, 4 from Greece, 3 from Spain, 2 from Great Britain and 1 from Iatly	2003-2005
Injection Moulding of Titanium Powders for Biomedical Applications (BIOTIP),	Papadopoulos T	European Union	4 from Germany, 4 Greece, 2 Great Britain, 2 from Roumania and 1 from Spain	2005-2008
LABORATORY OF PERIODONTICS				

Impact of the periodontal therapy on the control of blood sugar of patients with diabetes melitus type 2	Madianos F.N.	«Pythagoras I» EPEAEK II,	A΄ Preparatory Pathologic Clinic and Diabetological Centre, PGNA «Laiko», E.K.P.A.	2005-2008
Relation between periodontal disease and coronary disease: a Control-Patients epidemiological study	Madianow F.N.	Colgate-Palmolive Europe	1η Cardiologic Clinic, Ippokrateio Hospital, E.K.P.A.	2007-2009
Impact of the periodontal therapy on the control of plasma sugar of diabetes mellitus type 2	Madianos F.N.	«Pythagoras I» EPEAEK II,	A΄ Preparatory Pathologic Clinic and Diabetological Centre, PGNA «Laiko», E.K.P.A.	2005-2008
LABORATORY OF PEDODONTICS				
An advancement and recording program of the oral health of Greek population I. Health action II. Formation of an epidemiological map of the country	Oulis K.	Colgate Palmolive Co.	Hellenic Dental Association Laboratory of Pedodontics Laboratory of Preventive and Community Dentistry	2003-2006
II. An advancement and recording program of the oral health of Greek population I. Health action with the Method of Biomatic learning in Schools II. Study on the influence of Oral health in the quality of life of the Greeks III. Study on the disparity of the distribution of oral health care in the Greek population	Oulis K.	Colgate Palmolive Co.	Hellenic Dental Association Laboratory of Pedodontics	2006-2009
Recording of the oral health status of children 2 to 5 years old in the municipality of Tauvros, prefecture of Attica and estimation	Papagiannoulis E.	FDI/UNILEVER	Hellenic Dental Association Laboratory of Pedodontics	Start 2006

of their caries' risk				Expected termination: 2009
LABORATORY OF PREVENTIVE DENTISTRY				
Oral health attitudes and behaviors using the HU-DBI	Πolichronopoulou A.		17 from Europe, Asia, Japan, Australia	1998-2006
Self-perceived oral health and general health of university students	Πolichronopoulou A.		University of Dental Clinic Graz, Austria Per Axelsson Oral Health Promotion Center, Brazil University of Jena, Germany University of Athens, Greece Aichi-Gakuin University, Japan Pusan National University, Korea Institute of Dental Medicine, Myanmar University of the East College, Philippines University of Bern, Switzerland Hanoi Medical University, Vietnam University of Leeds, United Kingdom	2003-2007
Multicenter investigation of stress provoking factors in dental education	Πolichronopoulou A.		Dental Schools: Zagreb,Croatia, Athens, Greece Dublin, Ireland Ljubljana, Slovenia, Santiago de Compostela, Spain	2003-2004

			Malmo, Sweden	
Computer literacy and attitudes among dental school students	Πolichronopoulou A.		Dental Schools: Athens, Greece Santiago de Compostela, Spain Malmo, Sweden	2004
Dental education in Europe: undergraduates views of graduate studies	Πolichronopoulou A.		Dental Schools: Athens, Greece Zagreb, Croatia Malmo, Sweden	2004
LABORATORY OF OPERATIVE DENTISTRY				
In vitro characterization of resin based sealants	Kakamboura A.	«Pythagoras I» EPEAEK. II,	Laboratory of Biomaterials	2005-2008
DIAGNOSTIC AND ACTINOLOGY LABORATORY				
Osteoporosis diagnosis of patients through dental x-ray estimation	Karagianni A.	European Union's Programm OSTEODENT	Dental schools of Manchester, Amsterdam, Leuven, Malmo	2004-2007
Research and clinical data analysis on the volumetric quantitative tomography and formulation of the European standards of use of the technique	Tsichlakis K.	European Union program SEDENTEXCT	Dental schools of Manchester, Leuven, Malmo, Klutz, Vilnius	2008-2011

APPENDIX 5

PUBLICATIONS OF FACULTY MEMBERS

(2003-2007, data Scopus, International Journals)

1. Kontakiotis E.G., Tzanetakis G.N., Loizides A.L. A l2-month longitudinal in vitro leakage study on a new silicon-based root canal filling material (Gutta-Flow). Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics 2007;103:854-859
2. Kontakiotis E.G., Tzanetakis G.N. Four canals in the mesial root of a mandibular first molar. A case report under the operating microscope. Australian endodontic journal : the journal of the Australian Society of Endodontology Inc 2007;33:84-88
3. Fernandes R., Nikitakis N.G., Pazoki A., Ord R.A. Osteogenic Sarcoma of the Jaw: A 10-Year Experience. Journal of Oral and Maxillofacial Surgery 2007;65:1286-1291
4. Karoussis I.K., Kotsovilis S., Fourmousis I. A comprehensive and critical review of dental implant prognosis in periodontally compromised partially edentulous patients: Review. Clinical Oral Implants Research 2007;18:669-679
5. Lang N.P., Tonetti M.S., Suvan J.E., Bernard J.P., Botticelli D., Fourmousis I., Hallund M., Jung R., Laurell L., Salvi G.E., Shafer D., Weber H.-P. Immediate implant placement with transmucosal healing in areas of aesthetic priority: A multicentre randomized-controlled clinical trial I. Surgical outcomes. Clinical Oral Implants Research 2007;18:188-196
6. Papagrigorakis M.J., Synodinos P.N., Yapijakis C. Ancient typhoid epidemic reveals possible ancestral strain of Salmonella enterica serovar Typhi. Infection, Genetics and Evolution 2007;7:126-127
7. Scheper M.A., Nikitakis N.G., Sauk J.J. Survivin is a downstream target and effector of sulindac-sensitive oncogenic Stat3 signalling in head and neck cancer. International Journal of Oral and Maxillofacial Surgery 2007;36:632-639
8. Kontakiotis E., Chaniotis A., Georgopoulou M. Fluid filtration evaluation of 3 obturation techniques. Quintessence international (Berlin, Germany : 1985) 2007;38:-
9. Koletsi-Kounari H., Mandonanaki M., Stefaniotis T. Private dental health expenditure in Greece by region and income: Comparison between the years 1987 and 1998. Community Dental Health 2007;24:213-216
10. Hebert C., Norris K., Scheper M.A., Nikitakis N., Sauk J.J. High mobility group A2 is a target for miRNA-98 in head and neck squamous cell carcinoma. Molecular Cancer 2007;6:-
11. Soulis G., Papalexi E., Kittas C., Kitraki E. Early Impact of a Fat-Enriched Diet on Behavioral Responses of Male and Female Rats. Behavioral Neuroscience 2007;121:483-490
12. Scheper M.A., Nikitakis N.G., Chaisuparat R., Montaner S., Sauk J.J. Sulindac induces apoptosis and inhibits tumor growth in vivo in head and neck squamous cell carcinoma. Neoplasia 2007;9:192-199
13. Brooks J.K., Gilson A.J., Sindler A.J., Ashman S.G., Schwartz K.G., Nikitakis N.G. Osteonecrosis of the jaws associated with use of risedronate: Report of 2 new cases. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics 2007;103:780-786
14. Pandis N., Polychronopoulou A., Eliades T. Self-ligating vs conventional brackets in the treatment of mandibular crowding: A prospective clinical trial of treatment duration and dental effects. American Journal of Orthodontics and Dentofacial Orthopedics 2007;132:208-215
15. Strombeck L., Sandros J., Holst E., Madianos P., Nannmark U., Papapanou P., Mattsby-Baltzer I. Prevotella bivia can invade human cervix epithelial (HeLa) cells. APMIS 2007;115:241-251

16. Koros C., Papalexi E., Anastasopoulos D., Kittas C., Kitraki E. Effects of AraC treatment on motor coordination and cerebellar cytoarchitecture in the adult rat. A possible protective role of NAC. NeuroToxicology 2007;28:83-92

17. Brooks J.K., Nikitakis N.G. Painless gingival mass. Peripheral giant cell granuloma. General dentistry 2007;55:-

18. Divaris K., Polychronopoulou A., Mattheos N. An investigation of computer literacy and attitudes amongst Greek post-graduate dental students. European journal of dental education : official journal of the Association for Dental Education in Europe 2007;11:144-147

19. Warburton G., Nikitakis N.G., Roberson P., Marinos N.J., Wu T., Sauk Jr. J.J., Ord R.A., Wahl S.M. Histopathological and Lymphangiogenic Parameters in Relation to Lymph Node Metastasis in Early Stage Oral Squamous Cell Carcinoma. Journal of Oral and Maxillofacial Surgery 2007;65:475-484

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21. Tien N., Chaisuparat R., Fernandes R., Sarlani E., Papadimitriou J.C., Ord R.A., Nikitakis N.G. Mesenchymal Chondrosarcoma of the Maxilla: Case Report and Literature Review. Journal of Oral and Maxillofacial Surgery 2007;65:1260-1266

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24. Stavridakis M.M., Kakaboura A.I., Ardu S., Krejci I. Marginal and internal adaptation of bulk-filled class I and cuspal coverage direct resin composite restorations. Operative Dentistry 2007;32:515-523

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29. Emmanouil D.E., Quock R.M. Advances in understanding the actions of nitrous oxide. Anesthesia progress 2007;54:9-18

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34. Efstratiou M., Papaioannou W., Nakou M., Ktenas E., Vrotsos I.A., Panis V. Contamination of a toothbrush with antibacterial properties by oral microorganisms. Journal of Dentistry 2007;35:331-337

35. Tzanetakis G.N., Lagoudakos T.A., Kontakiotis E.G. Endodontic Treatment of a Mandibular Second Premolar with Four Canals Using Operating Microscope. Journal of Endodontics 2007;33:318-321

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APPENDIX 6

LABORATORY EQUIPMENT

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
1.	Incubator		2	Dept Stomatology
2.	Histokinette	Shandon Citadel 1000		Dept. Stomatology
3.	Microwave oven	Alaska C.R.S.		Dept. Stomatology
4.	Microscope with co-observation tube for 5 observers	Olympus BH-2	2	Dept. Stomatology
5.	Microscope with co-observation tube for 3 observers	Leitz		Dept. Stomatology
6.	Microscope with attached camera	Zeiss Axiostar Plus		Dept. Stomatology
7.	Microtome	Leica RM2145		Dept. Stomatology
8.	Immunohistochemistry system	Shadon		Dept. Stomatology
9.	Paraffin embedding system	Kaltek EMBED 503		Dept. Stomatology
10.	Waterbath	Kunz HIR-3		Dept. Stomatology
11.	Optical microscope	Zeiss Axioscop		Dept. Periodontology
12.	Stereomicroscope	Zeiss SV8		Dept. Periodontology
13.	Electronic balance			Dept. Periodontology
14.	Digital balance	Mettler H2O		Dept. Periodontology
15.	Incubator	Memmert Co		Dept. Periodontology
16.	CO2 incubator			Dept. Periodontology
17.	-16^{o} C freezer	Angelantoni Premium		Dept. Periodontology
18.	-80^{o} C freezer	Angelantoni Premium		Dept. Periodontology
19.	Refrigerator			Dept. Periodontology
20.	Waterbath	SWB		Dept. Periodontology
21.	Centrifuge with 4 rotors	Universal II Hettic		Dept. Periodontology
22.	Autoclave	Mini PBI		Dept. Periodontology

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
23.	Chemilluminescence-fluorescence detector	Fujifilm LAS 300		Dept. Periodontology
24.	Washing machine for glassware	Miele		Dept. Periodontology
25.	mini centrifuge			Lab of cell cultures
26.	Centrifuge			Lab of cell cultures
27.	Electrophoresis apparatus			Lab of cell cultures
28.	Power supply			Lab of cell cultures
29.	Vortex mixer	Vortex		Lab of cell cultures
30.	Laminar flow hood			Lab of cell cultures
31.	PCR			Lab of cell cultures ν
32.	UV Transilluminator			Lab of cell cultures
33.	Photographic device			Lab of cell cultures
34.	Microscope			Lab of cell cultures
35.	Incubator			Lab of cell cultures
36.	Waterbath			Lab of cell cultures
37.	Liquid nitrogen storage tank			Lab of cell cultures
38.	CO2 tank			Lab of cell cultures
39.	Computer and printer			Lab of cell cultures ν
40.	Isolated proamplifier	NL850 Neurolog	2	Dept. Removable Prosthodontics
41.	Differential amplifier	ACPreampNL104	2	Dept. Removable Prosthodontics
42.	Analog converter	NL705rms Neurolog	2	Dept. Removable Prosthodontics
43.	Cathodic Oscillograph	Hameg HM 205-3		Dept. Removable Prosthodontics

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
44.	12 bit AD converter	Keithley Metrabyte		Dept. Removable Prosthodontics
45.	Computer 80386 DX 33MHZ 4RAM & screen			Dept. Removable Prosthodontics
46.	Stimulus isolation unit & square pulse stimulator	S48K Astromed GRASS		Dept. Removable Prosthodontics
47.	Fume hood			Dept. Preventive and Community Dentistry
48.	Simple H2O-distillation apparatus	BUCHI		Dept. Preventive and Community Dentistry
49.	Balance	Mettler P1210,P163	2	Dept. Preventive and Community Dentistry
50.	Analytical balance	Mettler H33,H54	2	Dept. Preventive and Community Dentistry
51.	Heated magnetic stirrer	Heidolph, GallenKamp	2	Dept. Preventive and Community Dentistry
52.	Centrifuge	SORVAL RC-5, GL C-2	2	Dept. Preventive and Community Dentistry
53.	Incubator Drying oven Chemichal sterilizer	Memmert TV60b Heraeus KST600 Harvey 4000	3	Dept. Preventive and Community Dentistry
54.	Waterbath			Dept. Preventive and Community Dentistry
55.	Ionometer	ORION EA940		Dept. Preventive and Community Dentistry
56.	Optical microscope	LEITZ DIALUX SM Lux		Dept. Preventive and Community Dentistry
57.	Stereomicroscope	OLYMPUS VANOX EC-Bi-I STEREO S2 III		Dept. Preventive and Community Dentistry
58.	Micro hardness tester	TUKON		Dept. Preventive and Community Dentistry
59.	Microtome for hard tissues	BRONWILL 77		Dept. Preventive and Community Dentistry

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
60.	Ultrasound unit (probe 6-10 MHz, trolley and footswitch)	Aquila Pie Medical		Dept. Paediatric Dentistry
61.	Portable gas chromatography system	Oral Chroma		Dept. Oral Diagnosis and Radiology C
62.	Portable radiographic machine for intraoral radiography	Port-XII EZX-60		Dept. Oral Diagnosis and Radiology
63.	Oscilloscope HM 1005 and Signal analyzer HM 8028	HAMEG		Dept. Endodontics
64.	Electric pulse generator	DIGITIMER		Dept. Endodontics
65.	Laser Doppler Flowmeter PF3	PERIMED		
66.	Device for measuring contact angle of dental materials	custom made		Dept. Endodontics
67.	Fluid-transport device for measuring material leakage	custom made		Dept. Endodontics
68.	Spectrophotometer	SPECTRONIC		Dept. Endodontics
69.	Surgical microscope	KAPS		Dept. Endodontics
70.	Ultrasound unit (shared with the Lab of Paediatric Dentistry, see previous page)	Aquila Pie Medical		Dept. Orthodontics
71.	Cephalometric radiographer	Siemens		Dept. Orthodontics
72.	Tabletop cooling centrifuge	HERMLE, Z233 MK-2		Lab of Basic Biomedical Sciences
73.	Microwave oven	Toyotomi		Lab of Basic Biomedical Sciences
74.	Refrigerator with -16 ^{o} C freezer	LG		Lab of Basic Biomedical Sciences
75.	Digital balance	OHAUS, SPU-402		Lab of Basic Biomedical Sciences
76.	-80^{o} C freezer	Jouan		Lab of Basic Biomedical Sciences

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
77.	Orbital shaker	Lab Tech, SLOS-20		Lab of Basic Biomedical Sciences
78.	Vortex mixer	LMS, VTX-3000L		Lab of Basic Biomedical Sciences
79.	Hot plate Stirrer	Lab Tech	2	Lab of Basic Biomedical Sciences
80.	Polarizing transmission/reflection microscope with integrated microphotography system (analog)	Ortholux II Pol-BK/Leitz		Dept of Biomaterials
81.	Metallurgical microscope, with universal trans/refl objectives and high resolution microphotography system(a) plus digital camera (d)	ME 600 Eclipse/Nikon U-III/Nikon (a) EC3/Leica (d)		Dept of Biomaterials
82.	Stereomicroscope, with uniaxial and lateral fiber-optic illumination and digital camera (d)	Elvar/Leitz; Coolpix 990/Nikon (d)		Dept of Biomaterials
83.	Portable video-microscope, with uniaxial fiber-optic illumination, contact and non-contact lenses connected to an image processing data station	Micro-Scopeman /Moritex		Dept of Biomaterials
84.	Biological optical microscope transmission/ polarizing with integrated microphotography system (a)	Photomicroscope/Zeiss		Dept of Biomaterials
85.	Portable transmission/reflection stereomicroscope	Ceti		Dept of Biomaterials
86.	Transmission/reflection digital micro-measuring microscope	STM/Olympus		Dept of Biomaterials
87.	Transmission/reflection microscope with incident source for Fluorescence Microscopy, universal objectives and Leica digital camera (d)	DM400B/Leica DFC420C/Leica (d)		Dept of Biomaterials

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
88.	Scanning electron microscope /Energy dispersive x-ray microanalysis spectrometry system and accessories (sputter coating and critical point drying units)	Quanta 200/FEI, Phoenix CDU Sapphire Series/EDAX, SCD 004 Sputter-Coater/Bal-Tec, CPD 03 Critical Point Drier/Bal-Tec		Dept of Biomaterials
89.	Universal Tensometer	Tensometer 10/Monsanto		Dept of Biomaterials
90.	Micro-hardness tester (KH,VH)	HMV 2000/Shimadzu		Dept of Biomaterials
91.	Hardness Tester (RH, VH, BH)	Diatronic 2RC/Wolpert		Dept of Biomaterials
92.	Stylus profilometer	DH-5 Diavite/Asmeto		Dept of Biomaterials
93.	Polymerization shrinkage measuring system	LVDT (Solartron), A/D (Pico)		Dept of Biomaterials
94.	Elastic recovery measuring system	K-system, A/D (Pico)		Dept of Biomaterials
95.	Thermocycling unit	Heto Water baths		Dept of Biomaterials
96.	Photo-aging unit	Suntest 30 CPS Plus/Atlas		Dept of Biomaterials
97.	Metals microtome	Microtome 2/Metals Research		Dept of Biomaterials
98.	Hard Tissue Microtome	Isomet/Buehler		Dept of Biomaterials
99.	Grinding/Polishing machine	Ecomet III/Buehler		Dept of Biomaterials
100.	Dental unit	EMO		Dept of Biomaterials
101.	Ultrasound bath	Ultramatic 150		Dept of Biomaterials
102.	Digital micrometer	Shars-Mitutoyo		Dept of Biomaterials
103.	pH-meter/ ionometer	P903/Consort		Dept of Biomaterials
104.	Portable pH-meter	Radiometer		Dept of Biomaterials
105.	Vortex stirrer	Genie 2		Dept of Biomaterials
106.	Heated magnetic stirrer	Nuova/Thermolyne		Dept of Biomaterials
107.	Electronic balance	BP 310S/Sartorius		Dept of Biomaterials

A/A	APPARATUS	MODEL/COMPANY	QUANTITY	IN THE PROPERTY OF
108.	Analytical balance	AU 200/Shimadzu		Dept of Biomaterials
109.	Drying oven	Memmert	3	Dept of Biomaterials
110.	Vacuum oven	Heraeus		Dept of Biomaterials
111.	Tabletop centrifuge	Hartmann		Dept of Biomaterials
112.	De-ionized water apparatus			Dept of Biomaterials
113.	Portable colorimeter	Micro-Color Data Station/Dr. Lange		Dept of Biomaterials
114.	Gloss-meter	Horiba IG 330A		Dept of Biomaterials
115.	Photo-polymerization units	Trilight/3M-ESPE, Optilux 501,Optilux 350/Kerr,e-light/GC κ.λ.π.		Dept of Biomaterials
116.	UV light-unit	UVL-21/Black-Ray		Dept of Biomaterials
117.	Light-observation units (6V)	Olympus		Dept of Biomaterials
118.	FTIR spectrometer with a variety of accessories for surface characterization including micro-MIR (a), micro-ATR (b) and angle-resolved ATR (c) cells plus transmission /reflection microscope (d) for molecular microanalysis and imaging including a micro-ATR objective and visible polarizers .	Spectrum GX/Perkin-Elmer, Micro-ATR/Perkin-Elmer (a), Micro-ATR/Golden-Gate Specac (b), AR-ATR/RIIC (c), AutoImage (d)		Dept of Biomaterials
119.	UV-Vis spectrophotometer with 50 mm integrated sphere for total transmittance and diffuse reflectance measurements plus colorimetry software	Lambda 35/Perkin-Elmer,		Dept of Biomaterials