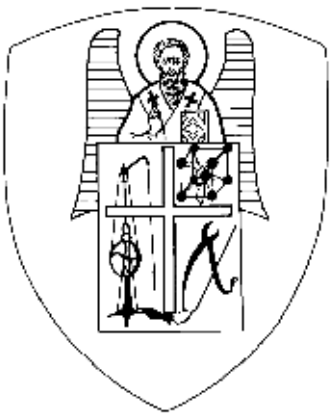
National and Kapodistrian University of Athens



School of Dentistry

INFORMATION FOR DENTED VISITORS

May 1999

Information for DENTED Visitors

The School is asked to answer these questions using the reference numbers for each section. Explanation and description of courses and structures from the host school are essential pieces of information for the visitors before the visit.

Name of School:	University of Athens - School of Dentistry	
Address:	2 Thivon Street, Athens GR-115 27, Greece	
Dean of School:	Prof. A. P. Angelopoulos e-mail: apangel@ath.forthnet.gr	fax: +30-1-7795600
Contact person:	Prof. A. Doukoudakis e-mail: apangel@ath.forthnet.gr	fax: +30-1-7781744
Secretary assigned to visitors by School:	Ms. Domna Tsoulfa e-mail: apangel@ath.forthnet.gr	fax: +30-1-7795600
Dates of visit:	15th - 19th May, 1999	
Visitors:	Prof. Peter Gaengler, Chairperson	e-mail: dagmark@uni-wh.de
	Prof. Nels Jacobsen	e-mail: nilsj@odont.uio.no
	Prof. David Mason	e-mail: i.j.mcquire@dental.gla.ac.uk
	Prof. Roger Monteil	e-mail: monteil@unice.fr
	Prof. Walter Kamann	e-mail: dagmark@uni-wh.de

Table of Contents

Section 1: Introduction and General Description

The School of Dentistry of the National and Kapodistrian University of Athens was founded in 1911. Through the efforts of the Faculty members and the Profession, it was declared by the government as a Dental Department of the Medical School in 1953, and as an independent School of the University in 1970. In 1982 the structure of the University was changed again to its present status. In 1970, the facilities of the School were moved to a new building within the Medical campus, where it is presently located. In 1991, an additional new building was constructed next to the existing one in order to house the graduate and postgraduate programs, the library and the administrative offices.

Presently the School of Dentistry is an active institution within the National Academic Community and has developed ties with many European and American Universities. For almost a century the School has educated a large number of students and has provided effective treatment of numerous patients, serving the community and the needed.

The School accepts 150 - 160 students. The five year curriculum includes courses in Basic Sciences, Biomedical Sciences, Oral Sciences and Clinical Dental Sciences. The arrangement of courses is in a diagonal format, providing a broad foundation of Basic and Biomedical Sciences and a gradual introduction to Dental Sciences. The fourth and fifth year of the curriculum are primarily devoted to clinical education and treatment of patients.

The faculty members are well-qualified individuals and the majority of them hold advanced training degrees in various clinical specialities. All of them have doctorate degrees and a significant number of them are involved in research. The diversified educational background of the faculty results in a dynamic environment and an active forum for exchange of ideas, creation of new projects and directing the educational programs to meet our goals and objectives.

The presence of graduate programs in every clinical discipline provides the opportunity to students to further their education following a clinical or research career and obtain advanced degrees equivalent to Master's and Ph.D. In doing so, the students are involved in the treatment of very complicated cases addressing the existing pathology, but they are also introduced to research and scientific writing.

The School is presently in close co-operation with other Schools and Universities as well as the Government, and it is constantly involved with community outreach programs targeting specific groups as part of the commitment towards the population at large.

The School is located in a major metropolitan area with rich history and cultural activities. Athens is a city with many libraries, archaeological sites, museums, theatres and stadiums. Major festivals, sporting events and scientific meetings are organised annually providing an excellent opportunity to faculty members and students to enrich their quality of life and their scientific interests.

The numerous and continuous activities of the School of Dentistry have placed the institution in a reputable position among the Schools and Academic Organisations in the area.

Mission

The mission of the School of Dentistry is the achievement of Excellence through contemporary and dynamic education of our students, innovations in basic and clinical research, and effective treatment of our patients, meeting the needs of the community at large.

Objectives

The main thrust and educational objective is to graduate competent dentists who will care for the well being of their patients and the oral health of our population. To achieve this we have identified four characteristics that we consider extremely important that every graduating student should posses. These are:

1. A sound and broad biological basis as the foundation of all clinical knowledge which will be provided during their education.
2. A preventive approach in addressing all patient needs and their existing or potential pathology.
3. Social sensitivity and service to the Community.
4. A direction towards Continuing Education and Professional enhancement throughout life, since the basic dental curriculum is unable to provide the knowledge and information which is constantly developing after graduation and is part of any scientific evolutionary process.

Section 2: Physical Facilities

Person in School who will explain and show this to the visitors:

Name: Prof. V., Tsatsas

The School of Dentistry is housed in two buildings which are connected to each other. The Main Building is primarily for the undergraduate program, while the New Wing is for advanced education programs and includes the library and the administrative offices of the Dean.

Facilities:

1. In the Main Building:

- Lecture Theatre for 200 students
- Conference Room for 50 persons
- Seminar Rooms (5) for 40 students each
- Clinics for the undergraduate students:
    - Two main clinics (2nd and 3rd Floor) (40 chairs each)
    - Oral Surgery Clinic (14 chairs)
    - Craniomandibular Disorders Clinic (6 chairs)
    - Orthodontic Clinic (7 chairs)
    - Paediatric Dentistry Clinic (11 chairs)
    - Oral Diagnosis Clinic (4 chairs)
    - Oral Medicine Clinic (6 chairs)
    - Surgical Clinic (4 chairs)

Total chairs: 132

The Main Building

2. In the New Wing:

- Multipurpose Lecture / Lab Room (for 54 students)
- Seminar Rooms (2) for 30 students each.

- Clinics for the postgraduate students:
  - 1st Department: 14 chairs
  - 2nd Department: 10 chairs
  - 3rd Department: 12 chairs
  - 4th Department: 2 chairs

  Total chairs: 38

- Library

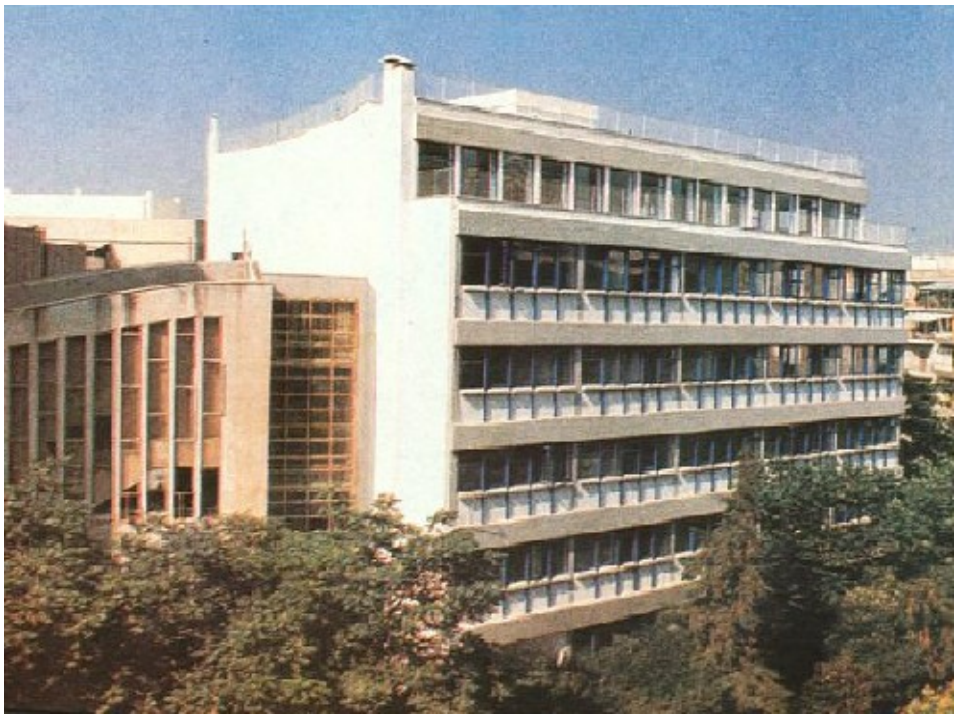
3. In the Medical School Complex:

Lecture theatres and Laboratories of the Basic and Biomedical Sciences Courses

4. In Hospitals:

For the Section of Oral and Maxillofacial Surgery:
- "Evangelismos" General Hospital (20 beds)
- Children's Hospital (10 beds)

5. Health Science Library



The New Wing of the Dental School

Planned Developments

The clinical facilities are modern and they have been renovated or are in the process of renovation. Minor changes will be made this summer to accommodate the Comprehensive Patient Care Clinic on the second and third floors of the Main Building. This new program will maintain the patient with the same student and provide faculty assistance chairside rather than have patients rotate and receive treatment.

A renovation of the first floor of the Main Building has been approved and works will be initiated this summer. This project will restructure the Oral Pathology and the Oral and Maxillofacial Surgery and provide them with new clinical facilities.

There are plans waiting approval for a separate building which will house research facilities, special clinics and the intramural practice for the faculty.

The existence of all graduate programs in the same building provides for much needed co-operation among graduate students and faculty members. This also leads to effective treatment of the patients and to exposure of graduate students to the clinical work of other disciplines.

Section 3: Organisational and Administrative Structures

Person in School who will explain and show this to the visitors:

Name: Prof. A. Angelopoulos

The University of Athens is the oldest University in Greece. It was inaugurated on 3rd May, 1837 and it was housed on the north-east side of the Acropolis.

Since then, there were major changes in the structure of the University. The National and Kapodistrian University of Athens, in its present structure, consists of five (5) Faculties as shown in Chart 1.

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, the Rectorial Council and the Rector.

The Senate consists of:

- the Rector, the two Vice-Rectors, the Deans of the Faculties and of the Schools and the Chairmen of the independent Departments which do not belong to Faculties;
- one representative of the teaching and research staff of each Department or School;
- one representative of the students of each Department or School;
- five representatives of the Graduate students (including the candidates for doctoral degrees);
- one representative of the special Teaching Staff;
- one representative of the special Administrative - Technical Staff, and
- one representative of the Administrative Staff.

The Head of the University Secretariat also attends meetings of the Senate ,without the right to vote. The Rectorial Council consists of the Rector, the two vice- Rectors, one representative of the students and one representative of the Administrative Staff, as rapporteur.

The School of Dentistry of the University of Athens is structured as shown in Chart 2. It has five Departments, but it should be mentioned that the 5th Department was established this year and it is not staffed yet. We are in the process of staffing it and it is estimated that it will take another 1-2 years before it will be in full function.

Information technology

Internet access (e-mail accounts for administrative and academic staff and graduate students).

The library has more than 2000 books and 4000 scientific journals, a computer facility with a 14 capacity CD-ROM drive for literature search of the Index Medicus and Index to Dental Literature. Book lending and photocopying services are also available.

Patient records are presently being organised with a central computerised filing system to address the needs of the Comprehensive Patient Care Programme, as well as the rest of the clinical activities.

Section 4: Staffing

Person in School who will explain and show this to the visitors:

Name: Prof. Vougiouklakis

e-mail: voug@newfaces.gr fax: +30-1-7788575

The teaching staff is divided into two main categories as shown analytically per Section in Chart 3. The first category represents the traditional faculty ranks who are employed by the University and receive annual salary. There are six ranks which include Professors, Associate Professors, Assistant Professors, Lecturers, Instructors and Clinical Associates. The second category includes Clinical Associates who receive no annual salary and assist the faculty members in the clinical or laboratory work. The Clinical Associates are well-trained young dentists who have advanced degrees and speciality training. Clinical Associates work part time (1/4 of the full time salaried staff). The 160 Clinical Associates represent 40 full time equivalent and they substantially assist the School's educational activities.

We should also mention that faculty members from the Basic Sciences also participate in our educational activities. At least 2 full time equivalents for each basic science course and biomedical course can be added to the total faculty of the School.

Clinical Academic Staff Statistics:

Professors	14
Other Senior Non-Professorial Staff	20
Non Senior Full-time Staff	84
Part-time Whole-time Equivalent Staff	40
Other Non-Clinical Academic Staff:	
Senior	
Non-Senior	
Administrative / Secretarial Staff	12
Nursing Staff	18
Dental Technicians	5

	TEACHING STAFF							SUPPORTING STAFF		
Section	**Professors**	**Associate Professors**	**Assistant Professors**	**Lecturers**	**Instructors**	**Clinical Associates (Paid)**	**Clinical Associates (Non-paid)**	**Secretarial**	**Nursing**	**Technicians**
Orthodontics	2	1	7			1	4	2	1	1
Paediatric Dentistry	1		3	1		3	16	1	1	
Preventive and Community Dentistry	1		3	1				1		1
Operative Dentistry	1	1	7	2	1		13	1	2	1
Endodontics	1	1	7	1		1	32	2	2	
Periodontics	2	1	7	1		2	18	1	2	
Removable Prosthodontics	1	3	6	1		3	24	1	1	

Fixed Prosthodontics	2	6	8	2		2	40	1	4	2
Oral Pathology	1	1	4				13			
Oral and Maxillofacial Surgery	1	6	12	1	2			1	4	
Oral Diagnosis and Radiology	1		5	2			5	1	1	
Total	**14**	**20**	**69**	**12**	**3**	**12**	**160**	**12**	**18**	**5**

Chart 3

Section 5 - 16: The Dental Curriculum

Introduction

The curriculum is organised in the diagonal format. In the first three years there is initially an emphasis in the basic and biomedical sciences and progressively the students are introduced to the dental subjects. From the third year on, the education is predominately in dental clinical sciences.

When reading the sections explaining the various subjects and their course content in the curriculum we felt it was necessary to divide the entire curriculum in two main sections. These are: a) the Basic and the Biomedical Sciences and b) the Clinical Sciences. The placement of various courses under "Basic and Biomedical Sciences" was easy but it was not working as well for "Clinical Sciences". In the clinical sciences we mention the Section of each clinical discipline representing a subject area, followed by an introduction explaining the teaching philosophy of the Section, before we list the individual courses.

Charts 4 – 13 represent each semester timetable for all the courses offered by the School of Dentistry. For laboratory and clinical courses, students are divided in three or four groups indicated on the timetable with letters A, B, C and D.

When reading the individual courses in the text, the accompanying code number is a composite number of five digits. The first two digits determine the semester, the third digit specifies the Department and the last two digits specify the Section within the Department.

A. BASIC AND BIOMEDICAL SCIENCES

Section 5.1. General Chemistry
Section 5.2. Biochemistry
Section 5.3. General Physics
Section 5.4. Cell Biology, Genetics

Section 6.1. Anatomy
Section 6.2. Physiology
Section 6.3. Histology-Embryology

Section 7.1. Pharmacology
Section 7.2. General Microbiology
Section 7.3. General Pathology
Section 7.4. Epidemiology

Section 8.1. General Medicine
Section 8.2. General Surgery

B. CLINICAL SCIENCES

Section 9.1. Orthodontics
Section 9.2. Paediatric Dentistry

Section 10. Public Oral Health and Preventive Dentistry

Section 11.1. Operative Dentistry
Section 11.2. Endodontics
Section 11.3. Removable Prosthodontics
Section 11.4. Fixed Prosthodontics

Section 12. Periodontology

Section 13.1. Oral and Maxillofacial Surgery
Section 13.2. Oral Diagnosis and Radiology

Section 14. Oral Medicine and Oral Pathology

Section 15.1. Integrated (Comprehensive) Patient Care
Section 15.2. Dental Emergencies
Section 15.3. Care of Special Needs Patients

Section 16. Practice Management and Communications
Section 16.1. Behavioural Sciences
Section 16.2. Communications
Section 16.3. Ethics and Jurisprudence
Section 16.4. Practice Management

A. BASIC AND BIOMEDICAL SCIENCES

Section 5.1: General Chemistry

Name of Course: General Chemistry

Section of Biochemistry

Director: Professor K.E. Sekeris

Course Code Number: 01001

Persons in School who will explain and show this to the visitors:

Introduction

This is a one semester course, given to first year students.

Primary goals

To establish a grounding in general inorganic and organic chemistry, with a focus on the chemistry of biomolecules, as well as the fundamentals in physical chemistry and bioenergetics. These are required for better understanding of Biochemistry at the molecular level.

Main objectives

Theoretical instruction:

Quantum Theory and Atomic structure, electron configuration and chemical periodicity, chemical bonding and molecular structure, intermolecular forces, properties of liquids and solutions, chemical kinetics, chemical equilibrium, acids-bases and ionic equilibria, chemical thermodynamics / bioenergetics, electrochemistry, and Redox reactions.

Hydrocarbons, saturated and unsaturated, straight-chain and carbocyclic compounds.

Constitutional isomerism and stereoisomerism. The inductive effect. Resonance stabilisation of organic compounds. Aromaticity. The mechanism of electrophylic aliphatic substitution. Reactions of electrophylic aliphatic addition. Reactions of nucleophylic aliphatic substitution.

Carbohydrates, amino acids, peptides, proteins, nucleic acids, lipids.

Laboratory experimentation

Hours in the curriculum

The lectures are given for five hours per week. The laboratory work includes four experiments of three hours each.

Methods of teaching

Lectures.
Laboratory exercises.

Assessment methods

Written exam.

Section 5.2: Biochemistry

Name of Course: Biochemistry I and II
Section of Biochemistry
Director: Professor K.E. Sekeris
Course Code Number: 03012, 04012

Persons in School who will explain and show this to the visitors:

Introduction

This is a two semesters course, given to second year students.

Primary aims

To acquaint the student with the main biomolecules, their function and metabolism. To correlate disease states with pathological deviations of Biochemical functions.

To acquaint the student with the principle regulatory mechanism of biochemical functions and the specific function of cells and organs.

Main objectives

Theoretical instruction:

Introduction to Biochemistry, coenzymes, storage-expression of genetic information, protein metabolism, energy production-Krebs cycle, oxidative phosphorylation, sugars and lipids metabolism, biological membranes, regulation, hormones, vitamins-nutrition, biochemistry of tissues and organs. Introduction to clinical biochemistry.

Laboratory experimentation

Hours in the curriculum

52 hours for Biochemistry I and 52 for Biochemistry II.

Methods of teaching

Lectures.
Laboratory exercises.

Assessment methods

Written exam.

Section 5.3: General Physics

Name of Course: General Physics
Section of Medical Physics
Director: Professor C. Proukakis
Course Code Number: 01002

Persons in School who will explain and show this to the visitors:

Introduction

Medical nuclear physics, mechanics-waves, heat, electricity-electronics.

Primary aims

Study of the principals and techniques of physics used to analyze human body physiology.

Application of techniques and methods in medicine and dentistry for diagnostic, therapeutic, and research reasons.

Comparison of techniques and methods of medical physics, with other methods used in medicine.

Methods of teaching

Lectures.

Laboratory exercises.

Assessment methods

Written exam.

Section 5.4: Cell Biology- Genetics

Name of Course: Cell Biology- Genetics

Section of Biology

Director: Professor T. Patargias

Course Coordinator: Prof. L Margaritis

Course Code Number: 01003

Persons in School who will explain and show this to the visitors:

Introduction

Biomolecules, mitosis, meiosis, cell classification and organization, cell structure and function, organization of DNA, biological membranes.

Composition of proteins, mitochondria, cell fibrils.

Protozoa, viruses-phages, funguses.

Chromosomes, chromosomal abnormalities, hemoglobulines, antigens, blood types, mutations.

Primary aims

Knowledge of cell structure and function.

Basic knowledge of human genetics.

Methods of teaching

Lectures.

Assessment methods

Written exam.

Section 6.1: Anatomy

Name of Course: Anatomy I and II

Section of Anatomy

Director: Professor N. Papadopoulos

Course Code Number: 01004, 02004

Persons in School who will explain and show this to the visitors:

Introduction

This is a course given to first year students.

Primary aims

Knowledge of the structure of the human body which is a prerequisite for the scientific advancement of the dental student.

Hours in the curriculum

Theoretical Course: 5 hours per week
Practical Work: 4 ½ hour per week

Methods of learning / teaching

Lectures, and laboratory exercises on human cadavers.

Assessment Methods

Written exam.

Section 6.2: Physiology I and II

Name of Course: Physiology I and II

Section of Physiology

Director: Assoc. Professor Paraschos

Course Code Number: 03011, 04011

Persons in School who will explain and show this to the visitors:

Introduction

Physiologic function of the cardio-pulmonary, digestive, and urinary systems. Metabolism of lipids, proteins, carbohydrates and hormones.

Mechanisms of physiologic functions of the genetical, muscular and neuromuscular systems.

Primary aims

Knowledge of mechanisms of function of physiologic systems.

Methods of teaching

Lectures.
Laboratory exercises.

Assessment methods.

Written exam

Section 6.3: General Histology - Embryology

Name of Course: General Histology - Embryology

Section of Histology and Embryology

Director: Professor Ch. Kittas

Course Code Number: 02007

Persons in School who will explain and show this to the visitors:

Angelopoulou Roxani, Ass Professor, Gorgoulis Vassilis, Lecturer

Fax: (01) 7790353

Introduction

The education in General Histology - Embryology comprises both theoretical instruction and laboratory work. Courses are given during the second semester of the 1st year of studies. The number of hours for theoretical instruction are 25 and for practical work 6.

Primary aims

The students should be able to recognise each tissue and cell and know their structure and function. They should also know the development of the fertilised ovum, the derivatives of the germinal layers, the crucial events during morphogenesis of the various organs and the formation of the embryo and the foetus. A general approach to the deviations of normal development due to chromosomal aberrations and the factors involved are also studied.

Main objectives

Theoretical instruction:

Analysis, on the tissue, cellular and molecular level of:

a) Epithelial tissue
b) Connective tissue
c) Extracellular Matrix
d) Muscle tissue
e) Osseous tissue
f) Immune System
g) Blood
h) Vascular (Blood and Lymph Vessels) System
i) Nervous System

Practical (Laboratory work):

Each lecture is followed by a 1 - hour practical class where students are provided with microscopes and sets of slides for observation. The supervisor demonstrates each slide on a closed-circuit television system and on the screen through a multimedia -

assisted teaching system. Students can check for the special features pointed on the screen and identify them in their own microscope.

Hours in the curriculum

Theoretical Course: 2 hours per week
Practical Work: 1 hour per week

Methods of learning / teaching

Lectures, laboratory exercises using TV monitors and the multimedia - assisted teaching.

Assessment Methods

Every step of the theoretical and laboratory work is assessed by an instructor. For the assessment of the state of knowledge, one written test must be passed at the end of the semester

Strengths

The computer - assisted teaching of histology and embryology helps the students to learn and better identify the main features in a microscopic image. It provides consistency of the course content. By following the instructions, students are able to check their skill in identification of special structures of interest. New data can be rapidly incorporated to update the existing program.

Weaknesses

There is not intention for the multimedia system to replace microscopy in the undergraduate curriculum or reproduce the material in the student textbooks, but rather to supplement both lectures and practical work and make the study more effective and enjoyable.

Section 7.1: Pharmacology I and II

Name of Course: Pharmacology I and II

Section of Pharmacology

Director: Assoc. Professor Delitheos

Course Code Number: 05021, 06021

Person in School who will explain and show this to the visitors:

Introduction

Introduction to principals of pharmacology. Pharmacology of the different systems of the human body. Anti-inflammatory, antihistaminic and anticoagulants. Principals of chemotherapy. Prescription writing. Antimicrobial drugs. Anticancerous drugs. Drugs of CNS. Hormones.

Primary aims

Knowledge of principles of therapeutic use of drugs, prevention of side effects and drug interactions. To be able to prescribe drugs especially analgesic drugs, chemotherapeutic drugs and hormones.

Methods of teaching

Lectures.
Laboratory exercises.

Assessment methods

Written exam.
Evaluation of laboratory exercises.

Section 7.2: General Microbiology

Name of Course: General Microbiology and Immunology

Section of Microbiology

Director: Professor N. Legakis

Course Code Number: 04017

Person in School who will explain and show this to the visitors:

Introduction

Morphology and physiology of pathogens. Immunology. Prevention, therapy, antibiotics. Epidemiology.

Primary aims

Knowledge on the nature and mechanism of action of pathogens, epidemiology and defensive mechanisms of body.

Methods of teaching

Lectures.
Laboratory exercises.

Assessment methods

Written exam.

Section 7.3: General Pathology

Name of Course: General Pathology

Department of Pathology, Medical School

Director: Professor P. S. Davaris

Course Code Number: 04017

Person in School who will explain and show this to the visitors:

P. S. Davaris, Professor

Fax:+30-1-7781487 *e-mail: p.davaris@atlas.uoa.gr*

Introduction

The education in General Pathology comprises 1 semestral course (4th semester) including 11 laboratory exercises (compulsory) and 24 lectures (attendance: non compulsory).

Primary aims

The students should become familiar with basic histopathologic lesions and particularly those of the oral cavity so as to recognise them on microscopic slides.

Main objectives

Theoretical instruction

a) Cell structure - Cell injury
b) Principles of Cytopathology
c) Degeneration - Pigment aggregates - Necrosis - Apoptosis
d) Deprivation diseases - Endocrine diseases
e) Diabetes melitus
f) Circulatory disorders
g) Inflammatory
h) Mechanisms of healing
i) Immunopathology
j) Dermatopathology
k) AIDS
l) Environmental Pathology
m) Genetic diseases
n) Carcinogenesis
o) Hyperplasia - Metaplasia - Dysplasia
p) Neoplasms
q) Immune mechanisms against neoplasia
r) Oral Pathology

Laboratory instruction

a) Biopsy - Histologic sections - Stains - Immunohistochemistry
b) Haemorrhagia - Thrombosis - Infarction - Types of necrosis
c) Degenerative changes - Amyloidosis - Atrophy - Hypertrophy - Hyperplasia - Metaplasia - Dysplasia
d) Common Inflammations
e) Granulomatous Inflammations
f) Epithelial Tumours
g) Mesenchymal Tumours
h) Inspection of mucosal tissue sections
i) Tumours of oral cavity - Lymphomas
j) Cytopathology in practice

Hours in the curriculum

Hours of laboratory exercises: 2 per week
Hours of lectures: 3 per week

Method of learning / teaching

Lectures, practical training (microscopy) slide presentations, case analysis.

Assessment methods

Every step of laboratory practice is assisted and assessed by one instructor per 5 students. For assessment of the theoretical state of knowledge, one written test must be passed at the end of the semester.

Strengths

Theoretical instruction is directly transferred into laboratory practice. In addition to the scheduled teaching hours, the laboratory training room is available to the students all day long, so that they may familiarise themselves with microscopy.

Weaknesses

The relatively large number of attending students.
Lectures are not regularly visited by all students.

Plans for future changes

Renewal and increase of teaching material (microscopes, CD-ROMs, etc.)

Section 7.4: Epidemiology

Name of Course: Epidemiology and Preventive medicine

Section of Epidemiology

Director: Professor D. Trichopoulos

Course Code Number: 04018

Person in School who will explain and show this to the visitors:

Introduction

Introduction to Epidemiology, descriptive epidemiological research, creation and testing of hypothesis.

Ethical and legal problems in medical research. Introduction to preventive medicine. Preventive methods for many different pathologic modalities.

Primary aims

Learning to perform an epidemiological study, to evaluate therapeutic and preventive measures.

Methods of teaching

Lectures.

Assessment methods

Written exam.

Section 8.1: General Medicine

Name of Course: General Medicine
Section of Internal Medicine
Director: Professor S. Hatziyannis
Course Code Number: 06026

Person in School who will explain and show this to the visitors:

Introduction

The course introduces the student to the following topics:

Medical history, clinical approach of the patient, infection of the oral cavity and pharynx, infections of the upper digestive system, fever syndromes, headaches and neuralgias, emergency syndromes of the respiratory system, endocarditis, cardiac arrhythmias, coronary and heart diseases, hypertension, viral diseases, ishemia, hepatitis, AIDS, allergies, diabetes, anemias, blood diseases, hormonal dysfunctions, renal failure.

Primary aims

The students should develop general knowledge on the above subjects both at the theoretical and clinical level.

Methods of teaching.

Lectures (2 hours per week) and clinical exercises (2 hours per week)..

Assessment methods

Successful completion of clinical exercises and of final written exam.

Section 8.2: General Surgery

Name of Course: General Surgery

Section of General Surgery

Director: Professor J. G. Gogas

Course Code Number: 07030

Person in School who will explain and show this to the visitors:

J. G. Gogas, Professor

Fax:+30-1-7791456 *e-mail:*

Introduction

The education in General Surgery of the students of Dental School gives the fundamental principles of Surgery.

Primary aims

The students should be able to diagnose a number of diseases, especially in the head-neck area.

Objectives

Theoretical instruction

a) Diseases of the head-neck area (lymph nodes, tumours, vascular disease, infections).
b) Definition and treatment of shock and cardiovascular resuscitation.
c) Trauma-Metabolic response.
d) Surgical infections.
e) Surgical oncology and burns.

Clinical instruction

a) Knowledge and skill of patient examination and teaching of suturing.
b) Discussion and assessment of different surgical problems.

Hours in the curriculum

Lectures: 1 hour a week.
4 hours a week in the department (rooms, out-patient clinic).

Assessment methods

Written examinations at the end of the course.

Weaknesses

The main difficulties result from the big number of students as far as the clinical course is concerned, and the number of hours which are provided for that purpose.

B. CLINICAL SCIENCES.

Section 9.1: Orthodontics

Section of Orthodontics

Director: Professor M. N. Spyropoulos

Person in School who will explain and show this to the visitors:

I. Adamidis, Professor

Introduction

The undergraduate education in Orthodontics comprises two major educational units, with courses given during the 4th, 7th, 8th, 9th & 10th semesters.

Unit I. Orthodontics I:

Course:

- Code 0419. Dentofacial growth and Development, Development of Occlusion and Classification of Malocclusions (4th Semester).

Unit II. Orthodontics II:

Courses:

- Code 07132. Laboratory exercises. (7th semester).
- Code 08132. Clinic and Seminars (8th Semester)
- Code 09132. (Clinic - 9th Semester)
- Code 10132. (Clinic + Seminars, 10th semester)

Primary aims

The students should gain the necessary knowledge regarding normal growth and development of the craniofacial complex, and the factors that may intervene with normal development of the occlusion. Furthermore, upon completion of the series of courses involved, they should be able to diagnose the existence of malocclusions and assess the necessity of treatment based on the differentiation between the types of malocclusion that can be treated by the General Practitioner and those that should be referred to a specialist.

Main objectives

They are presented in each course separately :

Hours in the curriculum

- Course 04119: Lectures. Students spend 3 hours per week, for 13 weeks.
- Course 07132: Laboratory pre-clinical exercises. Students spend 3 hours per week in the laboratory, for 13 weeks
- Course 08132:

  Seminars: One hour per week for 13 weeks.

Clinic: Students are trained in the clinic for 3 hours every other week, for 13 weeks (mainly diagnostic procedures).

- Course 09132: Students are trained in the clinic 4 hours every other week for 26 weeks, treating patients who need preventive and interceptive orthodontics.
- Course 10132:

  Seminars: One hour per week for 13 weeks.
  Clinic: Students are trained in the clinic 4 hours every other week for 26 weeks, treating patients who need preventive and interceptive orthodontics.

Methods of learning / teaching

a) Lectures
b) Seminars
c) Laboratory exercises
d) Case analysis ad treatment planing
e) Patient treatment under supervision
f) Case presentation and discussions
g) Seminars presented by the students on selected topics

Assessment Methods

Are presented in each course below.

Strengths

a) Special emphasis on diagnostic procedures
b) Repeated screening of patients for evaluation of possibility for preventive and/or interceptive procedures.
c) Treatment by the students of appropriate pre-selected patients.
d) All staff members are specialised orthodontists

Weaknesses

a) Proportionately great number of students
b) Voluntary attendance to lectures
c) Lack of audio-visual educational procedures

Name of Course: ORTHODONTICS I

Course co-ordinator: Professor M. Spyropoulos

Course Code Number: 04119

Course outline

The major chapters of this course are :

a) Morphogenesis and growth of the craniofacial complex which includes:
   Basic knowledge on human growth, embryology of the craniofacial complex, mechanisms of growth after birth, genetic influences, methods of studying growth, prediction of the growth of the craniofacial complex.
b) Development of normal occlusion which includes:
   The stages of odontogenesis, calcification and eruption of teeth from an orthodontic point of view. Description and analysis of the periods of

development of the normal occlusion. Morphological and functional aspects of normal occlusion.

c) Terminology and classifications of the various types of malocclusion, which includes:
Terminology description, types of malocclusions and the relationship of occlusal anomalies to the aesthetics of the face.

Course objectives

a) To expose the students to the knowledge relevant to the normal growth of the craniofacial complex, to provide understanding of the various factors which affect growth, and to investigate the possibilities of predicting and of influencing the biological phenomena in order to establish harmony in growth and development of the various elements of the craniofacial complex.
b) To expose the students to the knowledge relevant to the chronological development of the teeth in order to thoroughly understand the role of the teeth in the stomatognathic system, the possibility to predict and prevent certain types of malocclusion and the understanding of the types of the various deviations from the normal development.

Means to achieve objectives

Lectures with numerous projections of slides.

Criteria for successful completion

Written exams.

Name of Course: ORTHODONTICS II

Course co-ordinator: Prof. M. Spyropoulos

Course Code Number: 07132, 08132, 09132, 10132

The course runs for four semesters (7th, 8th, 9th, 10th)

A. 7th Semester (07132)

Course outline

Teaching and learning the methods of constructing removable and fixed orthodontic appliances which are used in preventive and interceptive treatment. Specifically, the students are trained in the construction of the following :

- Geometrical shapes from orthodontic wire
- Removable appliances for the maxilla
- Inclined plane for the mandible
- Lingual arch
- Fixed appliances for space maintenance and space recovery.

Course objectives

Students should :

a) Acquire the ability to bend orthodontic wires

b) Understand the various steps of constructing the acrylic part of removable appliances.
c) Construct, with satisfactory quality, the most common appliances used in preventive and interceptive orthodontics.

Means to achieve objectives

Demonstration by staff member.
Laboratory exercises by the students.

Criteria for successful completion

Competition and quality of all the laboratory exercises with continuous evaluation.

B. 8th Semester (08132)

Course outline

In this semester the students attend seminars and are trained in the clinic.
The seminars cover the following topics :

- Diagnostic methodology in Orthodontics.
- Dental arch analysis.
- Cephalometric x-ray analysis.
- Proper time to begin orthodontic treatment.
- Space problems.
- Habits - Open bites.
- Anterior and lateral crossbites.
- Basic principles of functional orthodontic appliances.
- Basic principles of removable and fixed appliances.

In the clinic the students are trained in the clinical examination of screened young patients, as well as in laboratory diagnostic techniques (study casts, cephalometric and other x-rays, photographs etc.)

Course objectives

Students should :

a) Acquire the knowledge and skills for the diagnosis and the clinical approach of the patient.
b) Become familiar with clinical examination, medical and dental history and the use of all laboratory diagnostic means which are required for patients with orthodontic problems.

Means to achieve objectives

Seminars
Clinical Training

Criteria for successful completion

Consistent attendance to the seminars
Successful fulfilment of clinical commitments

C. 9th Semester (09132)

Course outline

Daily clinical exercise of the students, in Orthodontics.

Course objectives

Students acquire clinical experience with patients who need preventive and interceptive orthodontic treatment.

This exercise contains :

1. Dental and medical history of the patient
2. Impression of the dental arches for construction of the study casts.
3. Cephalometric analysis
4. Treatment planning.
5. Construction of the appropriate orthodontic appliance.
6. Application of the orthodontic treatment appliances and follow up of the treatment which consists of preventing and intercepting orthodontic problems.

Means to achieve objectives

Clinical training on patients

Criteria for successful completion

No absences from clinic
Satisfactory patient appointments

D. 10th Semester (10132)

Course outline

In this semester the students attend seminars and are trained in the clinic.

The seminars cover the following topics :

- Clinical General Practice and Orthodontics.
- Limitations and risks of orthodontic treatment.
- Tooth movement and tissue responses.
- Treatment of skeletal problems.
- Hereditary absence of teeth and orthodontics.
- Impacted teeth.
- Adult orthodontics and interaction with periodontics and prosthodontics.
- Temporomandibular Joint Dysfunction and Orthodontics.
- Contribution of orthodontics in cases of trauma.
- Obstructive Sleep Apnoea
- Cleft lip and palate cases.
- Criteria of successful orthodontic treatment.

In the clinic the students continue the follow up and treatment of their patients.

Course objectives

Students should acquire the basic knowledge covering clinical interceptive orthodontics, as well as clinical experience with orthodontic patients who require preventive or interceptive orthodontic treatment. This training includes :

1. Patients' medical and dental history
2. Taking impressions and cast trimming
3. Cephalometric analyses

4. Treatment planning
5. Fabrication of orthodontic appliances for prevention and interception of malocclusion
6. Control of the use of the orthodontic appliance by the patient and regular appointments for monitoring the progress of the case.

In addition, the students have to plan and construct at least 4 orthodontic appliances which have clinical application in preventive and interceptive problems of the dental occlusion.

Means to achieve objectives

- Seminars.
- Treatment planning and Clinical training on patients

Criteria for successful completion

- Consistent attendance of seminars.
- Successful completion of clinical training.
- Success in practical oral and written examinations.

Students have to keep records of their practical and clinical work.

Section 9.2: Paediatric Dentistry

Section of Paediatric Dentistry Director: Professor E. Papagiannoulis

Person in School who will explain and show this to the visitors:

E. Papagiannoulis, Professor

Introduction

The undergraduate program in Paediatric Dentistry includes two theoretical courses and both laboratory and clinical training. The first theoretical course (Pedo I) is given to the students of the 7th semester in the form of lectures and its goal is to teach them the basic knowledge in Paediatric Dentistry. Laboratory training on plastic and natural primary teeth is taken place at the same semester to expand the dexterity of the students on the restorative procedures on primary teeth. Students of the 8th, 9th and 10th semesters treat co-operative children in the clinic. At the 10th semester, the second theoretical course (Pedo II) is given in the form of seminars in small groups of 20 students dealing with complicated oral problems.

Name of Course: Paediatric Dentistry I and II

Course coordinator: Professor L. Papagianoulis

Course Code Numbers: 07133, 08133, 09133, 10133

Primary aims

Upon graduation the students should be able:

a) to diagnose prevent and treat oral diseases appropriately.
b) to understand child's behaviour and to refer to the specialist children with negative behaviour to the dentist , complicated dental problems and patients with special needs.

Main objectives

The main objectives of the program are the following:

a) Knowledge of the child's normal physical, dental and psychological growth and development.
b) Knowledge of the child's behaviour in the dental clinic and application of the appropriate psychological methods to control the behaviour so that oral health care can be offered to co-operative children.
c) Knowledge of the main characteristics of patients with special needs (mentally retarded, emotionally disturbed, medically compromised, etc.)
d) Knowledge of the indications and limitations in employing pharmacological methods for the management of oral problems in uncooperative or medically compromised patients.
e) Knowledge and skill in examining patients, treatment planning and applying preventive and restorative treatment in co-operative children from 6 to 12 years of age.
f) Knowledge and skill to apply a preventive program according to the child's physical, mental and psychological development.
g) Knowledge and skill to restore the hard tissue lesions and periodontal problems in primary and permanent teeth in young children.
h) Knowledge and skill to treat dental injuries.
i) Knowledge to guide the development of occlusion.
j) Knowledge and skill to manage medical and dental emergency states in the dental clinic.

Hours in the curriculum

Semester (13 weeks)	Hours per week/per student		
	Lectures	Laboratory	Clinic
7	3 (Pedo I)	2	
8			2.5
9			2.5
10	1 (Pedo II)		2.5
Total	**52**	**39**	**78**

Method of learning / teaching

Lectures, seminars, laboratory training under supervision, case presentation and treatment planning, patient treatment under supervision and discussions.

Assessment methods

The assessment of knowledge of the first theoretical course takes place by a written exam at the end of the 7th semester, while the knowledge of the first and second theoretical course is assessed by an oral exam at the end of the 10th semester. Every step of laboratory and clinical training is evaluated by an instructor using certain criteria. In addition each student to complete successfully the clinical training has to do 30 restorative and pulp treatments (sealants, preventive resin restorations, restorations in primary and permanent teeth, stainless crowns, pulpotomies, root canal treatment etc.).

Strengths

The flow of the patients is satisfactory and the theoretical knowledge is applied to clinical practice. Each student has to complete the treatment plan of at least two patients (total patient care).

All the instructors in the Department are dentists trained in accredited Paediatric Dentistry programs of 2 or 3 years duration in the USA and or Europe.

Weaknesses

Clinical training is not available for the undergraduate students in very young, non-cooperative children, handicapped and medically compromised patients.

Innovations and best practices

a) The students are working in pairs taking the roles of dentist and dental assistant in turn. In this way they are training in four-handed dentistry.
b) The clinic is keeping records of the patients and there is an every six month recall system. Every students has to treat at least 2 recall patients.

Plans for future changes

Exposure of the undergraduate students in more complicated dental problems of children as follows:

a) The students will rotate in a school for children with special needs mostly mentally retarded. The purpose of this rotation is to familiarise the student with the characteristics of those children and to make them able to establish communication and to provide preventive procedures, as well as simple restorative procedures in co-operative patient in the dental operatory of the school. The Paediatric Dentistry Section is organising at the present time an operatory in this School.
b) The students will also rotate on the postgraduate clinic, so that they can observe the postgraduate students treat very young children , children with complicated dental problems and children with special needs.
c) A more, competence oriented evaluation systems, based on specific criteria (student and instructor evaluation at the same time)

Section 10: Public Oral Health and Preventive Dentistry

Section of Preventive and Community Dentistry

Director: Professor T. Athanassoulis

Person in School who will explain and show this to the visitors:

T. Athanassoulis, Professor

Introduction

The Laboratory of Preventive and Community Dentistry includes 3 courses:
- Introduction to Dentistry and Community Dentistry (01106)
- Preventive Dentistry (06127)
- Community Dentistry (07131)

The Laboratory of Preventive and Community Dentistry has the responsibility of the postgraduate studies in "Community Dentistry".

Primary aims

The Laboratory of Preventive and Community Dentistry aims to give the students knowledge and skills in such manner, so that they will be able to maintain and improve the oral health of their patients:
a) in individual level through their clinical practice, and
b) in community level through organised preventive programmes.

Name of Course: Introduction to Dentistry and Community Dentistry

Course coordinator: Professor T. Athanassoulis

Course Code Number: 01106

Introduction

The course provides an introduction to Community Dentistry and is designed for students attending the 1st semester.

Primary aims

The course aims to introduce the 1st semester students to the science of Dentistry, the History of Dentistry and the Behavioural Sciences; in addition, to familiarise them with the content of each of the University of Athens Dental School sections.

Main objectives

The students are expected to acquire knowledge on:
- The structure and function of the educational program of the Dental School.
- The dentist's profile.
- The contribution of health education and prevention to oral health.

- Philosophy basics.
- Psychology basics.
- Sociology basics.
- The history of dentistry.

Hours in the curriculum

Three one-hour sessions per week.

Method of teaching

Lectures. This is a theoretical course where the students are encouraged to actively participate and to interact with the instructors.

Assessment methods

The theoretical knowledge of the students is evaluated through written exams.

Strengths

The students are exposed to a number of faculty members from different areas of expertise.

Weaknesses

The evaluation of the students is only based on the written exams.

Innovations

Detailed exposure of the students to the educational content of each of the University of Athens Dental School sections during a one-hour additional lecture session per week.

Plans for future changes

Oral clinical evaluation of the 1st semester students, information and alert about their dental needs.

Name of Course: Preventive Dentistry

Course coordinator: Professor T. Athanassoulis

Course Code Number: 06127

Introduction

The course in Preventive Dentistry is comprised of lectures, seminars and pre-clinical exercises and is addressed to students attending the 6th semester.

Primary aims

The course aims to make the students adopt the philosophy of prevention and acquire the knowledge needed, in order to apply the means and methods of preventing oral diseases.

Main objectives

The students are expected:

- To know oral hygiene methods and to be able to educate patients.
- To know the effect of nutrition and dietary habits on oral health and to be able to

assess the nutritional status of the patient and give the appropriate dietary counselling.
- To know the physiology of saliva's secretion, the chemical and biological properties of its constituents and its role in the aetiology, pathogenicity and prevention of oral diseases.
- To know the aetiology, pathogenicity and prevention of dental caries, periodontal diseases, oral cancer and other oral diseases.
- To know the properties, metabolism and biological effects of fluoride and its applications in dentistry.
- To be able to plan and apply a preventive program in individual and community level.
- To know the preventive measures that must be applied in patients suffering from general diseases.

Hours in the curriculum

Students attend a two-hours lecture per week and participate in a one-hour seminar and pre-clinical exercise per week in small groups.

Method of teaching

Lectures, seminars and pre-clinical exercises.

Assessment methods

The theoretical knowledge of the students is evaluated through written exams. Their practical knowledge is assessed during their pre-clinical exercise from the teaching staff.

Strengths

The knowledge is acquired not only through lectures but also through seminars and pre-clinical exercise.

Plans for future changes

Implementation of preventive programmes in certain schools by students with the responsibility of staff members.

Name of Course: Community Dentistry

Course coordinator: Professor T. Athanassoulis

Course Code Number: 07131

Introduction

The course of "Community Dentistry" is designed for students attending the 7th semester.

Primary aims

The aim of this course is to provide knowledge concerning organisation and implementation of methods and techniques for the maintenance and improvement of oral health in general population and in individual level.

Main objectives

The students are expected to acquire knowledge on:
- Primary Health Care and Primary Dental Health Care

- Dental health education
- Organisation and implementation of epidemiological studies of oral health
- Health systems. Organisation, distribution, financing
- Planning of dental health personnel (dentists and auxiliaries)
- Community programs for the prevention of oral diseases.
- Health Economics
- Dentist – patient relationships
- Dental Profession ethics
- Forensic dentistry

Hours in the curriculum

Three one-hour sessions per week.

Method of teaching

Lectures. This is a theoretical course where the students are encouraged to actively participate and to interact with the instructors.

Assessment methods

The theoretical knowledge of the students is evaluated through written exams.

Strengths

The course greatly reinforces the social sensitivity of the students.

Weaknesses

The evaluation of the students is only based on the written exams.

Plans for future changes

Extramural activities, school visits for dental health education, visits to Health Centres, visits to institutions of special patients, school adoption.

Section 11.1: Operative Dentistry

Section of Operative Dentistry

Director: Professor G. Vougiouklakis

Person in School who will explain and show this to the visitors:

G. Vougiouklakis, Professor

Name of Course: Pathology of Dental Hard Tissues

Course coordinator: Assoc. Professor G. Douvitsas

Course code number: 02209

Person in School who will explain and show this to the visitors:

G. Douvitsas, Assoc. Professor

Introduction

The teaching responsibility of the course of Pathology of the Dental Hard Tissues is equally distributed to the Sections of Operative Dentistry and Endodontics. Teaching of the course is performed during the third semester through lectures. All students are required to attend 32 one-hour lectures.

Primary aims

1. to provide students with a global theoretical knowledge as far as pathology of hard dental tissues is concerned
2. to enable students to recognise all the above disorders in every-day clinical practice

Main objectives

Theoretical education on:

1. Dental disorders (classification, aetiology, pathology, diagnosis, prognosis)
2. Dissolution (classification, aetiology, pathology)
3. Tooth discoloration (classification, aetiology, pathology, diagnosis, prevention)
4. Fractures / trauma
5. Aetiology of dental caries (oral environment, nutrition, dental structure)
6. Dental caries histopathology
7. Clinical appearance of dental caries
8. Epidemiology of dental caries

Hours in the curriculum

The course is taught in 3 one-hour lectures per week.

Method of learning / teaching

Lectures, use of audio-visual aid, discussion.

Assessment methods

At the end of the theoretical part of the course the students are subjected to written exams.

Strengths

Each lecture includes a large variety of slides of clinical and histological pictures.

Weakness

Lack of a direct link between theory and practice.

Name of Course: Dental Morphology and Introduction in Occlusion

Course coordinator: Assoc. Professor G. Douvitsas

Course code number: 03214

Person in School who will explain and show this to the visitors:

G. Douvitsas, Assoc. Professor

Introduction

The teaching responsibility of the course of Dental Morphology and Introduction in Occlusion belongs to the Section of Operative Dentistry. The course is taught in the second semester through lectures and laboratory practice. All students are required to attend 16 one-hour lectures and 11 two-hour lab courses.

Primary aims

The students are asked to get familiar with the morphology and terminology of teeth, oral cavity and TMJ. They are also asked to acquire the ability of reproducing all anatomy characteristics of teeth and to use a large variety of dental instruments.

Main objectives

Theoretical education on:

1. Morphological, histological and clinical dental characteristics
2. Primary and secondary dentition
3. Various coding systems
4. Endodontic morphology
5. Anatomical characteristics of the oral cavity
6. Anatomical characteristics of TMJ
7. Movements of the mandible
8. Reproduction of Dental Occlusion

Practical education on:

1. Reproduction of the dental characteristics with the aid of wax
2. Dental occlusion reproduction with the aid of casts

Hours in the curriculum

The course is taught in 2 one-hour lectures per week. The lab practice is performed in two groups of students, two hours weekly.

Method of learning / teaching

Lectures: teaching, audiovisuals, discussion.

Lab: introductory seminar, tooth models, schematic pictures of teeth, written quiz after every teaching unit, practice tests.

Assessment methods

After the practice is successfully completed, assessment methods are performed. Students are subjected to written exams at the end of theoretical and laboratory courses. Students are also acquired to successfully perform the required number of prerequisites for every laboratory session. Assessment methods are performed at the end of each session.

Strengths

Theoretical learning which is directly linked with practice at the lab.

Weakness

No high tech audiovisuals usage.

Name of Course: Operative Dentistry I and II

Course coordinator: Professor G. Vougiouklakis

Course code number: 05222, 06222, 07222, 08222, 09222, 10222

Introduction

The responsibility of the courses in Operative Dentistry lies in the Section of Operative Dentistry, part of the Department of Dental Pathology and Therapeutics and is taught as a separate subject from the 5th to the 10th semester.

The curriculum of Operative Dentistry is divided into two courses named **Operative Dentistry I** (5th semester) and **Operative Dentistry II** (6th - 10th semester). The curriculum of the subject is introduced to the students by lectures, seminars, laboratory and clinical practice. Examinations are held at the end of the 5th and 10th semesters.

In the 5th semester the theoretical and basic knowledge of Operative Dentistry is taught by means of lectures and laboratory exercises on plastic teeth placed in phantom heads. The 7th and 8th semesters comprise the clinical practice of students in non-invasive, preventive and conservative restorations as well as seminars in topics corresponding to the clinical curriculum mentioned above. Clinical practice on extended and aesthetic restorations and seminars in modern subjects of Operative Dentistry are included in the 9th and 10th semesters.

Primary aims

To provide theoretical and practical knowledge on: (a) the prevention and treatment of carious lesions, and (b) the materials and techniques used for conservative restorations.

Main objectives

1. Basic biological considerations of hard dental tissue pathology and particularly that of dental caries,
2. Diagnostic methods and treatment plan for the prevention and restoration of hard tissue lesions,
3. Concepts and determination of caries risk assessment,
4. Materials used in conservative restorations (amalgam, composite resins, glass-ionomers, cements, ceramics, pulp protection, adhesives),
5. Basic biological and mechanical principles of hard tissue cutting as well as cutting technique methods,
6. Biological principles in restorative procedure (pulp protection, microleakage, materials toxicity, periodontics, occlusion),
7. Placement of preventive, micro-conservative, ultra conservative, conservative, extended and aesthetic restorations with the restorative materials mentioned above.

Hours in the curriculum

5th semester: Lectures: 3h/week, Laboratory: 4h/week(OD I)
6th semester: Lectures: 1h/week, Laboratory: 3h/week(OD II)
7th semester: Clinical practice: 4h/week (combined with Perio and Endo)(OD II)
8th semester: Clinical practice: 4h/week (combined with Perio and Endo)(OD II)
Seminars: 1h/week
9th semester: Clinical practice: 6h/week (combined with Perio and Endo)(OD II)
Seminars: 1h/week
10th semester: Clinical practice: 6h/week (combined with Perio and Endo)(OD II)

Method of learning / teaching

1. Laboratory exercises with direct restorations, on plastic and modular teeth on phantoms. The course is accompanied by table clinics and video live presentations in small groups of students (Operative Dentistry I),
2. Lectures (Operative Dentistry I),
3. Seminars in groups of students (Operative Dentistry II),
4. Treatment of patient with supervision of clinical instructors (Operative Dentistry II),
5. Demonstration of clinical cases in groups of students, by means of an intra-oral camera (Operative Dentistry II),
6. CD-ROMs with topics of restorative techniques (Operative Dentistry I and Operative Dentistry II).

Assessment methods

1. Evaluation (scores A, B, C, D) of each laboratory exercise, separately leading to a final laboratory credit
2. Assessment (scores A, B, C, D) of every single restoration carried out in the Clinic, leading to a final clinical credit,
3. Written exams (5th semester) on the curriculum content of Operative Dentistry I
4. Oral exams (10th semester) in the whole spectrum of Operative Dentistry.

Strengths

1. Large number of patients available for treatment, with a relative high percentage of patients needing extended restorations.
2. High qualifications of staff members; most of them have followed postgraduate studies (USA) and hold academic titles.
3. The post graduate program of Operative Dentistry; the post graduate students participate as instructors in Clinical practice of the students.

4. Pronounced research activity provided by the staff members; the latter allows the rapid incorporation of modern aspects into the curriculum.
5. The section of Operative Dentistry has up to now the responsibility of organising and supervising the function of the Research Unit of Dental Biomaterials.

Weakness

1. High number of students per year.
2. Restoration oriented and not patient oriented requirements for the students to complete their clinical practice.
3. No training in four-handed dentistry.
4. Absence of self-evaluation of the students since no recall of the patients treated by the students exists.
5. No mechanism is established for the evaluation of applied learning methods.

Innovations and best practices

The intra-oral camera used as a teaching method.

Plans for future changes

1. Part of the clinical practice of the student will be incorporated into the requirements of the new established Total Patient Care Clinic.
2. Introduction of CD-ROMs with new topics (titles).
3. Improvement in the application of clinical assessment criteria in Operative Dentistry.

Section 11.2: Endodontics

Section of Endodontics Director: Professor V. Tsatsas

Person in School who will explain and show this to the visitors:

V. Tsatsas, Professor

Introduction

Endodontics is one of the three independent sections of the department of Dental Pathology and Therapeutics of the Dental School.

The subject of Endodontics is taught from the 5th to the 10th semester of dental studies. The teaching activity includes lectures, seminars, laboratory and clinical practice. The examination of students is undertaken at the end of 6th and 10th semester of studies.

During the 3rd year of studies (5th and 6th semester), the theoretical background of Endodontics is given and the students are trained to perform a complete endodontic treatment on extracted teeth of all groups.

During the 4th year (7th and 8th semester) the education of students includes the clinical practice of endodontic treatment on single or two-rooted teeth as well as seminars on the clinical topics relative to the curriculum of this year. During the 5th year the students perform endodontic treatment on molar teeth or more complicated

cases and participate in treatment of patients in the endodontic emergency clinic.

Name of Course: Endodontics I and II

Course coordinator: Professor V. Tsatas

Course code number: 05228, 06228, 07228, 08228, 09228, 10228

Primary aims

To achieve the theoretical background in: a) the biology of the pulp and the periapical tissues as well as the lesions associated with these tissues and b) the detailed treatment of these lesions.

Main objectives

The course in Endodontics focuses on the knowledge of:

1. Physiology, pathology, diagnosis, differential diagnosis and therapeutics of the lesions of the pulp and the periapical tissues.
2. Consolidation of the above knowledge as well as that knowledge which is associated with the area of chemomechanical preparation of the root canal. The student is getting also familiar with the instruments, materials and techniques which are used for root canal preparation and obturation with lateral condensation of gutta-percha cones.
3. Preparation of the root canal for a post placement.
4. Establishment of the student capability to evaluate those cases which must be supplemented with Surgical Endodontics.

Hours in the curriculum

5th semester: Lecturers: 2h/week. Laboratory: 3h/week.
6th semester: Lecturers: 2h/week. Laboratory: 3h/week.

Total of 3rd year: Lecturers 4h/week. Laboratory: 6h/week.

7th semester: Clinic 4h/week. Seminars 1h/week.
8th semester: Clinic 4h/week. Seminars 1h/week.

Total of 4th year: Clinic 8h/week. Seminars 2h/week.

9th semester: Clinic 5h/week.
10th semester: Clinic 5h/week.

Total of 5th year: Clinic 10h/week.

Method of learning / teaching

1. Laboratory training of students by i) studying the morphology of the pulp cavity ii) restoring a destroyed crown to be capable of endodontic treatment iii) making an access cavity to the pulp chamber iv) performing a chemomechanical preparation and an obturation of the root canal in plastic blocks or natural teeth. The latter is done after a table exhibition by the staff members in small groups of students.
2. Lectures.

3. Seminars in group of students.
4. Clinical practice under the supervision of the staff members.
5. Demonstration of clinical cases in small group of students.

Assessment methods

1. Evaluation of every laboratory exercise and total grade of the laboratory course.
2. Evaluation of every clinical practice of the student and total grade of the clinical course.
3. Examinations (written) at the end of 6th semester, concerning the basic knowledge of Endodontics.
4. Final examinations (verbal) at the end of 10th semester, concerning the total subject of Endodontics.

Strengths

1. Great number of patients having teeth with extensive dental lesions.
2. High qualified scientific personnel with postgraduate studies abroad (USA etc.) and holding a postgraduate certificate.
3. Existence of a postgraduate clinical program in Endodontics. The postgraduate students assist also, as assistants, in the laboratory and the clinical practice of undergraduate students.
4. Development of research activity from the Department itself allowing the quick incorporation of modern knowledge into the teaching process.

Weaknesses

1. Great number of students in each year of study.
2. Requirements for completion of clinical training based mainly on the number of cases and not on the total treatment of patients.
3. Lack of training in four-handed dentistry.
4. Lack of recall examination of the endodontic treatments performed by the students and therefore there is lack of self-evaluation for the final success of treatment.
5. Lack of a reliable evaluation system for the effectiveness of the applied educational program.

Plans for future changes

1. Incorporation of part of the clinical training in Endodontics (9th and 10th semester) in the Total Patient Care Clinic.
2. Production of CD-ROMS with training subjects associated with laboratory and clinical practice of Endodontics.
3. Improvement of the existed evaluation criteria for the clinical practice in Endodontics.

Section 11.3: Removable Prosthodontics

Section of Removable Prosthodontics

Director: Professor P. Dimitriou

Person in School who will explain and show this to the visitors:

P. Dimitriou, Professor

The education in Removable Prosthodontics comprises 3 courses as follows:

Name of Course: Removable Prosthodontics I

Course Code Number: 05324 & 06324

Course coordinator: Professor P. Dimitriou

Primary aims

1. This is an introductory course. By the end of the course the students should be able to fabricate in the lab a set of complete dentures. In particular they should be familiar with all the materials and laboratory procedures followed by the dental technician in order to fabricate an acrylic set of complete dentures.
2. Also, development of theoretical background about complete and partial denture treatment, overdentures, immediate dentures, gerodontics and maxillofacial prosthetics.

Main objectives

Theoretical instruction:

I Complete dentures

1. History. Introduction to the anatomy and physiology of the edentulous mouth. Age changes in the stomatognathic system.
2. The dental materials used for the construction of complete dentures.
3. Diagnostic methodology and development of treatment plan for the edentulous person.
4. A step by step presentation of the clinical procedures for the fabrication of complete dentures.
5. Delivery of complete dentures, postinsertion complications and follow-up.

II Partial dentures, II Overdentures, III Immediate dentures

See as above.

IV & V

Introduction to the management of the third age dental patients, and patients with oral and facial defects.

Laboratory instruction

Knowledge of fabrication of complete dentures.

Hours in the curriculum

5th Semester:

The students spend 6 hours per week in the laboratory training and 3 hours per week for theoretical instructions.

6th Semester:

The students spend 6 hours per week in the laboratory training and 1 hour per week for theoretical instructions.

Methods of learning

Laboratory work and lectures.

Assessment methods

For the assessment of the theoretical state of knowledge one written test must be passed by the end of the 5th semester.

Students have also to fabricate one set of complete dentures. All the steps of the practical work are assessed by instructors.

Weaknesses

The number of students in relation with the laboratory facilities (160 students per year)

Name of Course: Removable Prosthodontics II

Course coordinator: Professor P. Dimitriou

Course code numbers: 07324, 08324, 09324, 10324

The course includes 4 semesters of teaching in the final 2 years of the curriculum

A. Fourth year (07324, 08324)

Primary aims

By the end of the course the students should be able to fabricate in patients a set of complete dentures. In particular they should be familiar with all the necessary clinical procedures for the clinical management of the completely edentulous patient.

Main objectives

Theoretical instruction

Comprises pre-clinical seminars in complete dentures and osseointegrated implants with emphasis on the implant retained overdentures.

Clinical instruction

Knowledge and skill on patient examination, development of treatment planning, and fabrication of complete dentures.

Hours in the curriculum

7th Semester: The students spend 5 hours per week in the clinical training.

8th Semester: The students spend 5 hours per week in the clinical training and 1 hour per week for theoretical instructions.

Methods of learning

Clinical work and seminars.

Assessment methods

Students have to fabricate one set of complete dentures in a completely edentulous patient. All the steps of the clinical work are assessed by instructors.

Strengths

The number of available cases (patients) seeking treatment in the department of Removable Prosthodontics.

B. Fifth year (09324, 10324)

Primary aims

By the end of the course the students should be able to fabricate in patients complete dentures, partial dentures, conventional and implant retained overdentures, and immediate dentures. In general they should be familiar with all the necessary clinical procedures for the clinical management of the completely or partially edentulous patient.

Main objectives

Theoretical instruction

Comprises clinical seminars in partial dentures

Clinical instruction

Knowledge and skill of patient examination, development of treatment planning, and fabrication of complete dentures, partial dentures, conventional and implant retained overdentures, and immediate dentures.

Hours in the curriculum

9th Semester: The students spend 5 hours per week in the clinical training and 1 hour in theoretical instruction.

10th Semester: The students spend 5 hours per week in the clinical training .

Methods of learning

Clinical work and seminars.

Assessment methods

For the assessment of the theoretical state of knowledge one written test must be passed by the end of the 10th semester (final exam).

Students have also to fabricate as obligatory work : 1 set of complete dentures in a completely edentulous patient and 2 removable partial dentures (4 pieces).

Alternatively 1 overdenture, or 1 immediate denture, or 1 implant retained overdenture instead of the 1 partial denture.

All the steps of the clinical work are assessed by instructors.

Strengths

The number of available cases (patients) seeking treatment in our department.

Section 11.4: Fixed Prosthodontics

Section of Fixed Prosthodontics Director: Professor Asterios Doukoudakis

Person in School who will explain and show this to the visitors:

A. Doukoudakis, Professor

Education in Fixed Prosthodontics is initiated during the 2nd semester of the undergraduate curriculum and it is completed in the 10th semester, when the clinical activities are concluded and the students take their final examination.

In the second semester the course "Dental Materials" is offered and it provides the opportunity to the students to understand the basic principles that guide the use of materials in dentistry. The course has an emphasis to basic material science and serves as a foundation for the preclinical courses which follow.

In the 4th semester the course "Basic Procedures in Fixed Prosthodontics" commences and it continues until the end of the 5th semester. Students participating in the course are taught the techniques of fabricating fixed prostheses on plastic teeth (dentoforms, typodonts).

Emphasis is given to various types of prosthesis and their biological background that guide the various contemporary techniques and procedures which are used.

In the 5th semester the Department offers the course "Physiology of the Stomatognathic System", which includes "Principles of Occlusion". Several of the laboratory exercises are integrated with some of the Basic Procedures in Fixed Prosthodontics.

In the 6th semester the students participate in the preclinical courses, which give them the opportunity to work on manikins and improve their hand skills prior to their entrance in the clinics.

In the 7th , 8th , 9th and 10th semesters students treat patients in our clinical facilities and participate in seminars. The educational activity provides a strong emphasis on total patient care concept, alternative treatment plans to serve the need of the patients in the community, and future directions for continuing education in contemporary topics.

Overall, the education process in Fixed Prosthodontics identifies three levels of interest and student involvement. The first level is the level of essential knowledge and application. Students are requested to learn procedures in preclinical courses and apply them during the clinical years. The material presented in these courses is requested in the final exams. The second level includes essential knowledge in Prosthodontic procedures, which is requested in the exams but students may use it in the clinical years if the patients have the requested pathology. The third level includes knowledge at the introduction level which serves as the motivation for future continuing education.

Analytically the courses offered by the department are the following:

Name of Course: Dental Materials

Course coordinator: N. Kafousias

Course code numbers: 02310

Introduction

The students' training on the behavior of dental materials is achieved by using practical and experimental methods. The duration of training is one semester (6 months) in the second semester of the Curriculum. Except of the laboratory training, lectures are given from the amphitheater.

Primary goals

Theoretical development of the physicomechanical properties of the chemical behavior and biocompatibility of the dental materials as well as the experimental testing of their properties.

Main objectives

The course of dental materials includes:

- Physical and Mechanical properties
- Crystalline structure
- Surface properties
- Thermal properties
- Dental gypsum-investment materials
- Dental alloys
- Dental porcelains
- Synthetic materials etc.

Hours in the curriculum

According to the Curriculum the course includes 3 hours of lectures and 6 hours of laboratory training per week.

Methods of teaching

Training methods include lectures, seminars and laboratory practice.

Assessment methods.

The assessment methods include 3 sectional exams and the final exams at the end of the semester.

Strengths

The strength of the course is based on the fact that the evolution of science is closely connected with the progress of the science of materials. More specific in Dentistry the huge part of its activity is based on the clinical use of the dental materials. Strong indication for the above mentioned comment is the enormous development of the experimental activity in the field of dental materials.

Weaknesses

The available time from the Curriculum is very confined, thus there is no opportunity for the students to be familiar with the clinical use of the dental materials.

Innovations and best practices

For better understanding of the dental materials the following are necessary:

- The extension of teaching of the course in small groups of students.
- The involvement in experimental programs based on European and international standards in the science of Dental Materials.

Plans for future changes

The course of dental materials includes the knowledge of the basic science and the laboratory and clinical experience. What is of great demand is the extension of teaching in the first clinical semester of the Curriculum with an orientation towards the clinical application of the dental materials.

Name of Course: Physiology of the Stomatognathic System

Course coordinator: B. Droukas

Course code numbers: 05320

Introduction.

Anatomy of the Temporomandibular joint, masticatory muscles. The function of the Stomatognathic System (functional and border movements of the mandible, centric occlusion, centric relation occlusion of the dentition, occlusal disharmony, premature contacts, ideal occlusion, normal occlusion, occlusion and craniomandibular disorders (CMD), epidemiological surveys on CMD, aetiology of CMD (mechanical displacement theory, neuromuscular theory, psychophysiologic theory, muscle theory, psychological theory), symptoms (pain, limitation of the movements and deviations), crepitation, clicking, headache, parafunctional habits - bruxism, trauma, osteoarthrosis of the temporomandibular joint, rheumatoid arthritis, ankylotic spondilitis, psoriatic arthritis and other degenerative joint diseases, history taking, clinical examination of patients (palpation of the TMJs and the muscles, examination of the motion of the mandible and recording of the border movements), radiologic examination and diagnosis, dental methods for the management of CMD (occlusal splints, occlusal equilibration), other methods for the management of CMD (physical methods, muscle exercises, biofeedback, ultrasound, heat, medication, psychological methods, surgical techniques), presentation (and discussion) of the recent international literature.

Primary goals

- Basic knowledge on the function and dysfunction of the stomatognathic system and the occlusion of the dentition.
- Basic knowledge on the examination, the diagnosis and the management of CMD.

Main objectives

- Basic knowledge on the function and dysfunction of the stomatognathic system.
- Occlusion of the dentition, centric occlusion, optimal, pathologic and non pathologic occlusion, centric relation, occlusion and craniomandibular disorders (CMD).
- Functional and border movements of the mandible
- Basic knowledge on the clinical examination and diagnostic procedures.

- Dental methods for the management of CMD.
- Other methods for the management of CMD.
- Presentation of the recent international literature.

Hours in curriculum

5th Semester: lectures (two 1-hour lectures every week), laboratory training in three groups (three hours every week).

7th and 8th Semester: Clinical training (treatment of one case of a patient with CMD).

Methods of teaching

Lectures, seminars, laboratory training in groups and clinical training.

Assessment methods

Oral examination

Strengths

Adequate number of patients to expose students in this area.

Renovated clinical facility. Comprehensive approach to the diagnosis and treatment.

Weaknesses

Excessive number of students. No opportunity for students to see other treatment modalities (relaxation methods or biofeedback).

Innovations and best practices

- In the laboratory, students are taught how to fabricate and adjust on the articulator at least three different types of splints.
- Clinical exposure to treatment for all students.

Plans for future changes

- Pain clinic: multidisciplinary treatment approach which can be beneficial to both graduate and undergraduate students.
- Students follow more than one case of a patient with CMD.

Name of Course: Fixed Prosthodontics I

Course coordinator: D. Gonidis

Course code numbers: 04325, 05325

Introduction

This is a course given to 4th (04325) and 5th (05325) semester students. Both sections of the course are an introduction and laboratory training on principles and techniques that a student should have sufficient dexterity on, before entering the Preclinical and clinical fixed prosthodontics courses.

Primary goals

Learning of basic fixed prosthodontics techniques.

Training on the use of instruments and materials.

Main objectives

At the end of both sections, students are required to learn the following:

- Basic techniques of tooth preparation
- Construction of provisional restorations
- Impression making techniques and use of impression materials
- Construction of preliminary and study casts
- Use of various articulators
- Construction of master casts and die preparation

Hours in the curriculum

For the 4th semester (04325), 2 hours of classroom teaching per week and 2 groups of students with 4 hours of laboratory training per group, per week. For the 5th semester (05325), 3 hours of classroom teaching per week and 2 groups of students with 6 hours of laboratory training per group, per week.

Methods of teaching

There are various teaching techniques employed, including classroom teaching with slides and overhead projections, table demonstrations in small groups before each laboratory exercise, laboratory training, and review of video tapes showing each procedure step by step.

Assessment methods

The assessment procedures are the following:

- Grading of each laboratory exercise (1-10 scale) by the teaching assistant.
- Grading of the overall laboratory performance (1-10 scale) by the course director.
- Midterm examinations, 2 per semester (voluntary).
- Final exams.

A grade of over 70% on the first three assessments allows students to enter the fixed prosthodontics clinic without a preclinical test. These students take final exams only if they want to raise their grade average. Students with a grade of less than 70% and the ones who decide not to participate to midterms are required to take a final examination.

Strengths

Among the strengths of the course are the very good quality of the laboratory guide, the diversity of teaching procedures and the devotion of the teaching staff to give the students up to date information through personal communication and table demonstrations.

Weaknesses

Weaknesses of the course are the large number of students (they have to be separated in two groups, reducing laboratory time), and the lack of sufficient amounts of instruments and materials

Innovations and best practices

The direction of education and exercises is towards contemporary clinical procedures.

Plans for future changes.

Future plans for the course include updating and upgrading of the laboratory guide, keeping computer records for student progress, and increasing the numbers of teaching

staff. The new laboratory stations (simulating clinical conditions) will be a great asset to the course.

Name of Course: Fixed Prosthodontics I

Course coordinator: D. Gonidis

Course code numbers: 06325

Introduction

This is a course given to 6th semester students. It is an introduction to clinical environment and preclinical training on principles and techniques that a student should have sufficient dexterity on, before entering the fixed prosthodontic clinic.

Primary goals

Learning how to work in a simulated clinical environment.
Develop principles on diagnosis and treatment planning.

Main objectives

At the end of the course, students should have sufficient knowledge on the following:

- Working in accordance with infection control procedures.
- Assessment of patients medical and dental history and treatment needs
- Preliminary impression making techniques and use of impression materials
- Obtain maxilomandibular records for use with various articulators
- Learn laboratory steps for construction of fixed prostheses.

Hours in the curriculum

For the 6th semester (06325), 1 hour of classroom teaching per week and 2 groups of students with 3 hours of laboratory training per group, per week.

Methods of teaching

Various teaching techniques are employed, including classroom teaching with slides and overhead projections, table demonstrations in small groups before each laboratory exercise, laboratory training, and review of video tapes showing each procedure step by step. In this preclinical course students in small groups rotate through fixed prosthodontics clinic, and graduate prosthodontics laboratory. Laboratory training is achieved in a simulated clinical environment.

Assessment methods

The assessment procedures are the following:

- Grading of each preclinical exercise (1-10 scale) by the teaching assistant.
- Grading of the overall preclinical performance (1-10 scale) by the course director.
- Midterm examinations, 1 per semester (voluntary).
- Final exams.

A grade of over 70% on the first three assessments, allows students to enter the fixed prosthodontics clinic without a preclinical test. These students take final exams only if they want to raise their grade average. Students with a grade of less than 70%

and the ones who decide not to participate to midterms are required to take a final examination.

Strengths

Among the strengths of the course are the very good quality of the laboratory setting, simulating clinical conditions, the diversity of teaching procedures and the rotation of students through all clinical and laboratory areas associated with fixed prosthodontics clinic.

Weaknesses

Weaknesses of the course are the large number of students (they have to be separated to two groups).

Innovations and best practices

Laboratory exercises on manikin (phantom) heads are following the comprehensive patient care concept.

Plans for future changes

Future plans for the course include updating and upgrading of the preclinical exercises, keeping computer records for student progress, and increasing the numbers of teaching staff. The new laboratory facility (simulating clinical conditions) is a great asset to the course, and there are plans to strengthen the procedure by computer assisted self training and self assessment.

Name of Course: Fixed Prosthodontics II

Course coordinator: A. Doukoudakis

Course code numbers: 09325, 10325

The course is extended for two years and four semesters and it is divided in two parts:

A. Fourth year (7th and 8th semester)

Introduction

Clinical training of students in Fixed Prosthodontics during the 7th and 8th Semester.

Primary Goals

The students should obtain sufficient knowledge in the examination, diagnosis and treatment planning of the prosthodontic patient. The students should obtain clinical skills in the restoration of simple prosthodontic cases.

Main objectives

Clinical instruction

- The students who are introduced to the program of the Clinical Fixed Prosthodontics, are getting familiar with the equipment, materials and devices used

in the field of prosthetic rehabilitation.
- The students are taught infection control policy.
- The students obtain medical and dental history of the patient and initiate examination.
- Mounted study casts and radiographic evaluation of the patients occlusion.
- Diagnostic wax-up is performed in order to evaluate the tooth shape, the occlusion and esthetics of the case.
- Final diagnosis made and treatment planning is completed in consultation with other departments.
- The construction of single crowns and 3-unit bridges is performed with emphasis on tooth preparation, provisional restorations and porcelain fused to metal restorations.

Hours in the curriculum

The students spent 4 hours (13:00-17:00) once per week and 4 hours additionally once per month (Friday) on treating patients.

Methods of teaching

- Lectures, seminars, practical exercises in the laboratory (on the fabrication of study models, working models, provisional restorations and working dies).
- Case analysis and patient treatment under the direct supervision of faculty members.

Assessment methods

Every single clinical stage is assessed by an instructor. Final assessment is performed through an oral exam after completion of all clinical work.

Strengths

- Well qualified faculty members and teaching assistants with deversified educational background, capable of carrying out the clinical activities of the department.
- Modern and renovated clinical facilities.
- Excellent patient population.
- Excellent faculty student ratio (1 to 4-5).
- Flexible requirements system.

Weaknesses

Although there is a laboratory facility attached to the clinic, students are not performing adequate laboratory procedures.

There is a lack of adequate number of dental assistants and students are not taught four-handed dentistry to the level that will be considered satisfactory.

Innovations and best practices

Opportunity to treat patients with contemporary procedures and materials (for example all ceramic restorations) and internally etched metal retainers.

Plans for future changes

To start the clinical training during the 5th and 6th semester.

B. Fifth year (9th and 10th semester)

Introduction

Clinical training of students in Fixed Prosthodontics during the 9th and 10th Semester.

Primary Goals

- The students should obtain clinical skills in the restoration of extended prosthodontic cases.
- Introduction to comprehensive patient care.

Main objectives

- Examination - diagnosis and treatment planning of complicated patients.
- Tooth preparation and fabrication of provisional restorations.
- Impressions of working models - occlusal registrations .
- Shade selection, framework try-in.
- Porcelain try-in, occlusal adjustment and final cementation.
- Introduction to implants, all ceramic restorations and cantilever bridges.

Hours in the curriculum

The students spent 4 hours (08:00 - 12:00) once per week and 4 hours additionally once per month (Friday) on treating patients. The seminars are held daily (08:00 - 09:00).

Methods of teaching

Lectures, seminars, practical exercises in the laboratory (on the fabrication of study models, working models, provisional restorations and working dies)

Case analysis and patient treatment under the direct supervision of faculty members.

Assessment methods

Every single clinical stage is assessed by an instructor and final assessment is an oral exam after completion of the requested clinical requirements.

Strengths

- Clinical experience in treating patients
- Theoretical knowledge is directly transferred into the clinical practice.
- Well qualified faculty members and teaching assistants with diversified educational background capable of carrying out he clinical activities of the department.
- Modern and renovated clinical facility which enables the students to comfortable treat their patients.
- Excellent patient population with a variety of pathology which ensures the completion of requirements and exposes the students to a wide range of clinical procedures.
- Excellent Faculty to student ratio (1 to 4-5) which helps the students to work under close supervision.

Weaknesses

- Although there is a laboratory facility attached to the clinic students are not performing adequate laboratory procedures.
- There is a lack of adequate member of dental assistants and students ate not taught four-handed dentistry to the level that will be considered satisfactory.
- Students are now starting to be exposed to comprehensive patient treatment to the level that is presently required by the dental profession. However this is changing with the new clinical program which is originating this year.

Innovations and best practices

- Contemporary procedures in Fixed Prosthodontics are being taught in lectures and Seminars and can be performed in the clinical facility due to a flexible requirement

system. Students must seek this opportunity which will stimulate their interest towards new materials and techniques and will orient them towards Continuing Education after their graduation.
- The opportunity exists for students that demonstrate clinical excellence to treat more complicated patients requiring extensive prosthodontic procedures and as a result the students are obtaining additional knowledge leading to a higher clinical competency.

Plans for future changes

- Start the clinical orientation earlier.
- Turn the 9th and 10th Semester Clinic into Comprehensive Patient Care Clinic, in September 1999.

Section 12: Periodontology

Section of Periodontology Director: Professor Z. Mantzavinos

Person in School who will explain and show this to the visitors:

Z. Mantzavinos, Professor

The education in Periodontology comprises
a) Oral Histology and Embryology (02208).
b) Periodontology I (05 223)
c) Periodontology II (06 223) (07 223) (08 222) (09 223) (10 223)

Oral Histology and Embryology is taught in the 2nd semester.
Periodontology I is taught in the 5th semester.
Periodontology II is taught in the 6-7-8-9-10th semesters.

Introduction

The education in Periodontology comprises 2 courses (Periodontology I and Periodontology II). Course 1 includes 2 lectures (2 lectures per week) and course 2 comprises seminars (totalling 31 hours in duration), pre-clinical training (12 hours) and clinical training (once a week) over a period of approximately 30 weeks.

Course I: 5th semester

Course II: 6th-7th-8th-9th-10th semester

Primary aims

The students should acquire the knowledge of the fundamentals of Periodontics, including histology, physiology and biochemistry of the periodontal structures in health and disease.

They should also be able to diagnose the severity of periodontal disease, assess and carry out its treatment, and collaborate with other dental specialities when needed.

Main objectives

Theoretical instruction:

1. Anatomy, histology, physiology, biochemistry and function of normal periodontal structures.
2. Initiation, establishment and progression of inflammatory periodontal disease.
3. Diagnostic methods and procedures.
4. Assessment of local/systemic aetiological factors.
5. Definition of treatment goals and development of the appropriate treatment plan including prognosis, maintenance and consideration of surgical and/or combined modes of treatment.
6. Measures of prevention of periodontal disease.
7. Fundamentals of implant dentistry.

Clinical instruction:

1. Knowledge and skill of patient examination, diagnosis and treatment planning.
2. Knowledge and skill of treating all forms of gingivitis and their maintenance.
3. Knowledge and skill of treating mild and moderate forms of periodontitis and their maintenance and of diagnosing advanced forms of periodontitis for further referral to post graduate clinics.

Hours in the curriculum

During Course I, students spend a total of 21 hours (2 hours per week).

During Course II, students spend a total of 31 hours on seminars, over a period of 3 semesters (VIII, IX and X), a total of 12 hours on preclinical training during the VI semester, and a total of 60 hours on clinical training during the IX and X semesters.

Methods of learning / teaching

Lectures, seminars, practical exercises on phantom heads, X-ray development and analysis, treatment, planning, patient treatment under supervision, presentations of surgical cases.

Assessments methods

For assessment of the theoretical state of knowledge written tests must be passed during the semester.

Strengths

a) Availability of patients with significant periodontal disease in great numbers.
b) Adequate number of teaching staff with full training in the specialty of Periodontology.
c) The Section of Periodontology provides a three year PG perio program where patients undergo periodontal surgery after completion of phase-I treatment in the undergraduate clinic.

Weaknesses

- Big number of students.
- Non-existence of Dental Assistants.
- Non-existence of Dental Hygienists.
- Non-existence of administrative staff for the teaching staff.
- Non-existence of computer facilities.

Name of Course: Oral Histology and Embryology

Course coordinator: Professor Z. Mantzavinos

Course code number: 02208

Seminar contents

Histology and Embryology of all Dental Periodontal, Oral and Periodontal structures including (enamel, dentin, periodontal ligament, gingiva, alveolar bone, dental pulp, salivary glands, oral mucosa and I.M.J. .

Primary aims

Knowledge of the origin - development Embryology, Histology, Micro-Anatomy, and Structural Anatomy of all the normal Oral Tissues.

Main objectives

a) To recognise the normal oral structures.
b) To learn the use of light microscopy.
c) To learn the methodology for preparing specimens for light microscopy.

Hours in the curriculum

a) 26 hours in total of seminars and lectures.
b) 13 hours in laboratory techniques.
c) 26 hours in Microbiology.

Methods of teaching

- Lectures (mandatory)
- Seminars (mandatory)
- Laboratory training

Assessment methods

- Participation in all the seminars of laboratory training.
- Written exam by the end of the semester.

Name of Course: Periodontology I

Course coordinator: Professor Z. Mantzavinos

Course code number: 05223

Seminars contents

1. Introduction to periodontology and periodontics.
2. Historical review: Anatomy and physiology of the periodontic structures.
3. Etiology of the periodontal diseases.
4. Dental plaque. Local irritating factors.
5. Immunological mechanisms attending periodontium. Progress of periodontal disease systemic factors contributing to pathogenesis of periodontal disease.

6. Periodontal disease, clarification, clinical and microbiological findings.
7. Gingivitis - periodontitis, ANUG, Periodontal Abcess. The importance of occlusion in periodontal disease. Periodontal manifestations of periodontal diseases.
8. The AIDS problem .

Main objectives

Knowledge of the No. 1,2,3,4 of the Main Objectives of the subject.

Methods of teaching

Lectures (21 hours in total).

Assessment methods

Written final exam at the end of all semesters.

Name of Course: Periodontology II

Course coordinator: Professor Z. Mantzavinos

Course code numbers: 06223, 07223, 08223, 09223, 10223

The course is extended for five semesters and each semester is analyzed separately.

A. 6th Semester

Seminar contents

Epidemiology of periodontal disease. Rational and goals of periodontal therapy. Clinical examination and Diagnosis. Prognosis and Treatment Planning. Oral hygiene, control of local initiating factor. Emphasis on root planning and scaling. Control of iatrogenic factors. Therapeutic management of acute periodontal problems. Re-evaluating after periodontal therapy. Maintenance and supportive treatment.

Main objectives

Knowledge of the No. 4,5,6 of the main objectives.

Methods of teaching

a) Seminars (one hour per week for each group) total 12 hours.
b) Preclinical training (one hour per week for each group). The preclinical training includes scaling and root planning on models - phantom heads and natural teeth.

Assessments methods

- Participation in the seminar and the preclinical training group is mandatory.
- For assessment one written test must be passed for each seminar.
- A final written test must be passed at the end of the seminar.

B. 7th Semester.

Seminar contents

During the 7th semester Periodontology I includes only clinical training.

Main objectives

Knowledge of the No.5,6,7,8,9 of the Main Objectives.

Methods of teaching

Patients treatment under supervision including Diagnosis, Treatment, Planning and Non- surgical periodontal therapy. (A topic of 45 hours in clinical course).

Assessments methods

Complete periodontal treatment of two patients with gingivits and one with initial periodontitis.

C. 8th Semester.

Seminar contents

The periodontal patient. Periodontal treatment of children and adolescents. Periodontal disease and systemic conditions. Applied clinical dental pharmacology. Basic concepts of periodontal surgery. Complication of periodontal surgery. New attachment periodontal surgical procedures. Retentive techniques. Regenerative techniques. Mucogingival surgery. Maintenance.

Main objectives

Knowledge of No.5,6,7,8,9,10 of the main objectives.

Methods of teaching

- Seminars (14 hours in total).
- Clinical work (approximately 25 hours in total).

Assessments methods

- Participation in the seminars is mandatory.
- Complete periodontal non-surgical treatment of two patients (one with initial periodontitis and one with moderate periodontitis.

D. 9th Semester.

Seminar contents

Gingival recession and surgical root coverage techniques. Endo-periodontal lesions. The furcation problem, surgical preparation of the periodontal tissues for prosthetic rehabilitation. Tooth mobility and splinting. Regenerative surgical techniques. Combined ortho-perio treatment. Maintenance.

Main objectives

Knowledge of the No.6,7,8,9 of the main objectives.

Methods of teaching

- Seminars (14 hours in total).
- Clinical work (approximately 40 hours in total).
- Participation in the recall system of the department.
- Participation in the postgraduate program and observation of surgical techniques.

Assessments methods

- Participation in the seminars is mandatory.
- Complete non surgical periodontal treatment of 3 more periodontal patients, 2 with moderate periodontal disease, and 1 with advanced periodontal disease.

E. 10th Semester.

Seminar contents

Current opinions on osseointegration basic principles of implant dentistry. The implant concept in periodontal therapy. Maintenance of the implant patient. Peri-implantitis, diagnosis treatment.

Main objectives

Knowledge of all main objectives, including exposure of the students to the modern implantology concepts.

Methods of teaching

- Seminars (8 hours in total).
- Clinical work (approximately 40 hours in total).
- Participation in the recall system of the department.
- Participation in the P-6 perio clinic and observation of surgical techniques.
- Participation in the clinic of implant Dentistry.

Assessments methods

- Participation in the seminars is optional.
- Complete of treatment of all patients treated during semesters 7,8 and 9th including prosthetic rehabilitation and operative dentistry where is needed.
- Maintenance of all patients treated during the 7,8,9 semester and performed of supportive periodontal treatment where is needed.
- At the end of the semester students are examined and evaluated by the staff on their clinical skills.
- Oral examination of students by senior teaching staff members.

Section 13.1: Oral and Maxillofacial Surgery

Section of Oral and Maxillofacial Surgery

Director: Professor A. Angelopoulos

Person in School who will explain and show this to the visitors:

Chris Skouteris, Associate Professor

Name of Course: Dental Anaesthesiology

Course coordinators: Professor A. Angelopoulos and Assoc. Professor S. Kamperos

Course code number: 05416

Introduction

The Course on Dental Anaesthesiology includes lectures, workshops, and chairside instruction in the Outpatient Clinic. This course is part of the 5th-semester dental curriculum.

Primary aims

The primary aims of the course include:

- student familiarisation with the various methods of dental anaesthesia
- the ability to administer successfully local anaesthetics via infiltration and nerve block techniques
- the capability to identify and manage medical emergencies that could result from the use of anaesthetic agents.

Main objectives

These objectives are achieved through lecture and clinical instruction sessions and include the following:

Lecture subjects:

- aseptic technique-methods of sterilisation
- principles of general anaesthesia
- intravenous techniques
- nitrous oxide inhalation anaesthesia
- anaesthesia in children
- pre-anaesthetic considerations
- principles of local anaesthesia
- local anaesthetics
- intraoral and extraoral administration of local anaesthetics
- local and systemic complications of local anaesthesia including prevention and management.

Clinical instruction:
- administration of local anaesthesia to patients in the Outpatient Clinic
- management of medical emergencies related to the administration of local anaesthetics.

Hours in the curriculum

Lecture hours: 2 per week.

Clinical instruction hours (workshops, seminars, and other learning sessions): 2 per week / student

Method of learning / teaching

Lectures, workshops, practical seminars, anaesthetic management of patients under staff supervision

Assessment Methods

This is accomplished via written final exams at the end of the semester and by evaluating student proficiency throughout his/hers participation in the various seminars, workshops, Outpatient Clinic activities, and other learning sessions.

Strengths

- Adequate lecture coverage of anaesthesia related topics.
- Adequate exposure to the management of patients by local anaesthetic agents and methods.
- Adequate exposure to the management of medical emergencies.

Weaknesses

- Large number of students in each learning group.
- Fairly limited lecture attendance by the students.
- Inadequate exposure to intravenous and nitrous oxide inhalation techniques due to state regulations restricting their use to anaesthesiologists.

Plans for future changes

These are directed towards improving student attendance, enrich lecture topics, and providing better exposure to intravenous and inhalation techniques by pursuing a change in the existing state regulations.

Name of Course: Oral Surgery I and II

Course coordinators: Professor A. Angelopoulos and Assoc. Professor S. Kamperos

Course code number: 06429, 07429, 08429, 09429, 10429

Introduction

The Course on Oral Surgery includes lectures, seminars, and chairside instruction in the Outpatient Clinic. This course is given in two parts- designated Oral Surgery I (introductory) and Oral Surgery II- and spreads along the 6th to the 10th semester of the dental curriculum, with gradual progression from simple exodontia to more involved minor oral surgical procedures.

Primary aims

The primary aims of the course include:

- improvement of the acquired skills in administering local anaesthesia
- student efficiency in performing simple dental extractions
- removal of impacted teeth and complicated exodontia
- familiarisation with a broader spectrum of minor oral surgical procedures
- the capability to identify and manage intra-operative and postoperative complications.

Main objectives

These objectives are achieved through lectures, clinical instruction sessions and seminars and include the following:

Lecture subjects:

- principles of exodontia
- indications and contraindications of tooth extractions
- instruments and sterilization methods
- dental extraction techniques
- types of incisions and suturing techniques in minor oral surgical procedures
- extraction of teeth in patients with systemic conditions and physical handicaps
- intraoperative and postoperative complications in exodontia with particular emphasis on bleeding and hemostatic agents and methods.

Clinical instruction:

- simple and complicated extractions
- student participation as assistants in the removal of impactions and other minor oral surgical procedures
- basic cardiopulmonary resuscitation (CPR).

Seminars:

- history taking in minor oral surgery
- postextraction healing
- dental extractions in patients with endocrine, renal, hepatic and other systemic conditions
- allergic reactions with emphasis on prevention and management
- Lasers in oral surgery
- multiple extractions and alveoloplasty
- removal of impacted and supernumerary teeth
- crown exposure for orthodontic purposes
- reimplantation and transplantation of teeth.

Hours in the curriculum

Lecture hours:

Oral Surgery I - 2 per week / student in the 6th semester.

Clinical instruction hours:

Oral Surgery I (introductory learning sessions) - 1 per week / student in the 6th semester.

Oral Surgery II - 4 per week / student in the 7th semester.

Oral Surgery II - 4 per week / student in the 8th semester.

Oral Surgery II - 5 per week / student in the 9th semester.

Oral Surgery II -5 per week / student in the 10th semester.

Seminar hours:

Oral Surgery II - 1 per week / student in the 8th semester.

Oral Surgery II - 1 per week / student in the 10th semester.

Method of learning / teaching

Lectures, practical seminars, clinical instruction on dental extractions in patients under staff supervision, active participation in other minor oral surgical procedures. , basic CPR sessions with practice of resuscitation techniques on dummies.

Assessment methods

This is accomplished via written final exams at the end of the 6th and 10th semesters and by evaluating student proficiency throughout his/hers participation in the seminars and Outpatient Clinic activities.

Strengths

Clinical instruction includes treatment of patients.
Theoretical instruction is directly translated into clinical practice.

Weaknesses

Large number of students in each learning group.
Fairly limited lecture attendance by the students.

Plans for future changes

These are directed towards improving student attendance, enrich lecture and seminar topics, and provide better exposure to a variety of minor oral surgical procedures with special emphasis on uncomplicated impactions and biopsy techniques.

Name of Course: Maxillofacial Surgery I and II

Course coordinators: Professor A. Angelopoulos and Assoc. Professor A. Patrikiou

Course code number: 08436, 09436, 10436

Introduction

The Course on Maxillofacial Surgery includes lectures, seminars, and attendance at the Outpatient Clinic. This course is given in two parts- designated Maxillofacial Surgery I and II - and spreads along the 8th to the 10th semester of the dental curriculum.

Primary aims

The primary aims of the course include:
- exposure of the students to the full scope of Maxillofacial Surgery
- in depth discussion of topics of special interest to the senior students

Main objectives

These objectives are achieved through lecture and clinical instruction sessions and include the following:

Lecture subjects:

- maxillofacial infections (clinical manifestations, pathophysiology, surgical treatment, antibiotic therapy, osteomyelitis, osteoradionecrosis, sinusitis, special infections)
- preprosthetic surgery (multiple extractions, alveoloplasty, vestibuloplasty, implants)
- cysts (classification, principles of surgical treatment)

- facial fractures (aetiology, classification, diagnosis and principles of treatment)
- principles of orthognathic surgery
- oncologic surgery (principles of surgical treatment of benign and malignant tumours)

Clinical instruction:

Student participation as assistants in the removal of impactions and other minor oral surgical procedures.

Seminars:

In depth discussion of topics in the form of case presentations. These topics have been previously presented in lecture form as mentioned above.

Hours in the curriculum

Lecture hours:

Maxillofacial Surgery I - 2 per week in the 8th semester.

Clinical instruction hours:

Maxillofacial Surgery II - 5 per week / student every fourth week in the 9th semester.

Maxillofacial Surgery II - 5 per week / student every fourth week in the 10th Semester.

Seminar hours:

Maxillofacial Surgery II - 1 per week / student in the 9th semester.

Maxillofacial Surgery II - 1 per week / student in the 10th semester.

Method of learning / teaching

Lectures, seminars, active participation in oral surgical procedures at the Outpatient Clinic and through attendance of the activities of the Department at the affiliated Hospitals (Rounds, Seminars, Grand Rounds, Outpatient Clinic, major maxillofacial surgical procedures under general anaesthesia)

Assessment methods

This is accomplished via two mid-term written exams during the 8th semester and one final exam at the end of the 8th and 10th semesters and by evaluating student proficiency throughout his/hers participation in the seminars and Outpatient Clinic and Hospital activities.

Strengths

Adequate exposure to the full scope of contemporary Oral and Maxillofacial Surgery.

Seminar format encourages in depth analysis of surgical topics with active student participation.

Weaknesses

Large number of students in each learning group.

Fairly limited lecture attendance by the students.

Innovations and Best Practices

Students are encouraged to perform biopsies of precancerous and cancerous oral lesions under staff supervision. These skills are considered particularly important in the effort to enhance their awareness and responsibility as future practitioners to the early detection and diagnosis of oral cancer.

Plans for future changes

These are directed towards improving student attendance, enrich lecture and seminar topics, and provide exposure to new techniques of more practical value to the graduating students.

Section 13.2: Oral Diagnosis and Radiology

Section of Oral Diagnosis and Radiology

Director: Professor N. Spyropoulos

Person in School who will explain and show this to the visitors:

N. Spyropoulos, Professor

Name of Course: Oral Diagnosis and Radiology I and II

Course coordinators: Professor N. Spyropoulos

Course code number: 07415, 08415

Introduction

The section of "*Oral Diagnosis and Radiology*" is part of the Department of "*Oral Pathology and Oral Surgery*". Oral Diagnosis and Radiology is responsible for the teaching of the homonymous courses, which are taught in the 3rd, 7th, 8th, 9th and 10th semesters. The curriculum of "Oral Diagnosis and Radiology" comprises of 2 courses, "Oral Diagnosis and Radiology I" (3rd semester) and "Oral Diagnosis and Radiology II" (7th-10th semester). Lectures, seminars, laboratory and clinical practice form the methodology that the subject curriculum is introduced to the students. Examinations are held at the end of the 3rd and 10th semester.

In the 3rd semester the students are taught the basic concepts of clinical examination of the face, neck and oral cavity as well as the basic intraoral and extraoral radiographic techniques.

In the 7th and 8th semester the students examine and diagnose the pathologic conditions of the oral cavity and take the appropriate radiographs.

In the 9th and 10th semester the students learn the concepts of differential diagnosis and treatment planning.

Primary aims

To provide theoretical and practical knowledge on: a) clinical and physical examination of the oral tissues, as well as the concept of the diagnostic procedure and, b) the procedures of obtaining intraoral and extraoral radiographs and the interpretation and evaluation of these radiographs.

Main objectives

1. medical and dental history,
2. basic principles of physical examination (methods of intraoral and extraoral examination),
3. differential diagnosis of facial pain,
4. biologic effects of radiation, radiation safety and protection,
5. processing of X-ray films,
6. imaging principles and techniques (intraoral and extraoral radiographic examinations, specialised radiographic techniques),
7. differential diagnosis and treatment planning,
8. basic principles of forensic dentistry

Hours in the curriculum

3rd semester: Laboratory: 3h/week,
Lectures: 3h/week,
7th semester: Clinical practice: 4h/week (combined with Oral Surgery)
8th semester: Seminars: 1h/week,
Clinical practice: 4h/week (combined with Oral Surgery)
9th semester: Clinical practice: 5h/week (combined with Oral Surgery and Oral Pathology)
10th semester: Seminars: 1h/week,
Clinical practice: 5h/week (combined with Oral Surgery and Oral Pathology)

Methods of learning

1. Laboratory practising of the students in taking X-rays on phantoms.
2. Lectures (Oral Diagnosis and Radiology I)
3. Seminars in small groups of students (Oral Diagnosis and Radiology II)
4. Clinical examination of patients under the supervision of clinical instructors (Oral Diagnosis and Radiology II)
5. Radiographic examination of patients under supervision of clinical instructors.
6. Demonstration of clinical cases in groups of students, by means of an intraoral camera.
7. Demonstration and use of digital X-ray system.

Assessment methods

1. Written exams on the curriculum of *Oral Diagnosis and Radiology I* at the end of the 3rd semester
2. Evaluation in the Oral Diagnosis Clinical and Oral Radiology Laboratory.
3. Written exams on the curriculum of *Oral Diagnosis and Radiology II* at the end of the 10th semester

Strengths

1. Large number of patients examined by students (approximately 5000 patients are examined annually in the Oral Diagnosis and Radiology Clinic).
2. High qualifications of staff members most of them with postgraduate studies and academic titles.
3. Three-year Post-graduate programme in Oral Diagnosis and Radiology (three students per years). The postgraduate students participate as Clinical Instructors in the Clinic.

Weakness

1. Large number of students per year.
2. Insufficient number of radiographic technicians, secretaries and nurses.
3. Not enough space in the Oral Diagnosis and Radiology Clinic for such a high number of patients and student per year.
4. Only one digital radiographic system at the moment.

Innovations and best practices

1. The digital X-ray system as a teaching method.
2. Computer learning methods.

Plans for future changes

1. Introduction of CD-ROMs with topics in Oral Radiology
2. New X-ray equipment
3. Clinical practice of the students in specialised radiographic technique.

Section 14: Oral Medicine and Oral Pathology

Section of Oral Pathology

Director: Professor S. Papanikolaou

Person in School who will explain and show this to the visitors:

S. Papanikolaou, Assoc. Professor

The curriculum of Oral Pathology consists of 4 courses

- Oral Pathology I (07343) and (08434) during the 7th and 8th semesters.
- Oral Pathology II (0934) and (10434) during the 9th and 10th semesters.

Name of Course: Oral Pathology I

Course coordinators: Professor S. Papanikolaou

Course code number: 07434, 08434

Introduction

Oral Pathology I (07434) includes, genetics, orofacial dysplasias and oral oncology.

Teaching hours consist of three lectures per week and a concomitant microscopic laboratory course of 2 hours duration, on a weekly basis.

The material of Oral Pathology I (8434) includes inflammatory lesions, infections diseases (bacterial, vital, fungal) and oral manifestations of systemic diseases . Teaching hours consist of 2 lectures per week and microscopic laboratory study 2 hours per week.

Primary aims

Students should obtain a theoretical knowledge on the aetiology, pathogenesis, diagnostic procedures and the treatment of oral diseases. At the same time they become familiar with the histopathologic changes of the diseased oral tissues.

Main objectives

Theoretical instruction:

- Oral histology and embryology.
- Genetics and orofacial syndromes.
- Oral oncology and cystic lesions.
- Inflammatory lesions and infectious diseases.
- Oral manifestations of hemopoetic diseases and metabolic, hormonal and vitamin disturbances.
- Oral manifestations of skin and venereal diseases.
- Oral manifestation of muscular, neural, bone diseases and psychological disturbances

Laboratory instruction:

- Microscopic structures of the oral tissues.
- Chromosomal abnormalities.
- Histopathologic tissue changes of the above mentioned diseases.

Hours in the curriculum

7th semester. Lectures 3h/week, laboratory course 2h/week.
8th semester. Lectures 2h/week. Laboratory course 2h/week.

Methods of learning

Lectures.
Microscopic studies, in small groups.
Clinicopathologic seminars, in small groups of students.

Assessment methods

The students have to attend the lectures and study histopathology (each one with a personal microscope). Evaluation of the obtained knowledge is accomplished by written exams at the end of the 8th semester.

Strengths

The combination of theoretical knowledge with the understanding of microscopic changes of the diseased tissues.

Well educated staff members. Postdoctoral instructors as well as post graduate students participate in the students' education.

Weaknesses

The large number of students in each class.

Innovation and best practices

Instead of a final examination at the end of the 8th semester the educational material is divided in 3 parts and each one is evaluated by a written test during the semester.

In the laboratory, the teacher's microscope is connected with TV-screens and enables him to explain to the students particular microscopic changes of the examined tissues.

Plans for future changes

Provide the students with a microscopic guide containing coloured pictures

corresponding to their glass slides as well as clinical and radiographic pictures. The guide would be available in a CD- ROM that would give the students the ability to review the content of the laboratory and evaluate their knowledge by self-assessment tests.

Name of Course: Oral Pathology II

Course coordinators: Professor S. Papanikolaou

Course code number: 09434, 10434

Introduction

Oral Pathology II includes two courses.

Oral Pathology II (09434) during the 9th semester and Oral Pathology II (10434) during the 10th semester. Oral Pathology II focuses in Oral Medicine. The students during the 9th and 10th semester, are divided into small groups and rotate in the clinic of Oral Pathology as well as in clinics of affiliated Hospitals. The students also broaden their clinical experience on oral diseases and lesions by attending clinicopathologic seminars of the hours duration on a weekly basis.

Primary aims

The students should be able to apply prevention, to diagnose oral diseases and to provide, therapy or refer the patients for proper treatment.

Main objectives

Clinical instructions.

Knowledge of preventing methods of oral diseases.

Knowledge and skill in examining patients, establishing the diagnosis and planning the treatment.

Seminar instructions.

Broadening of the students' clinical experience.

Hours in the curriculum

Students actually spend 4 hours per week assisting the staff members on a rotation basis in the Dental and hospital clinics.

Slide-seminar 1 hour per week.

Method of learning

Clinical work and clinicopathologic slide seminars.

Assessment methods

The students have to participate in the patients' clinical examination (take histories, biopsies and plan the treatment). In the hospitals clinics the students see patients treated for oral cancer (Anti-cancer Hospital), patients with skin and venereal diseases (skin and V.D. Hospital) and examine children with orofacial dysplasias and haematological disturbances in a Children's' Hospital. The students also attend a CPC slide seminar. At the end of the 10th semester the students have to pass a written test. Occasionally, tests (written and oral) can be given according to the educator's estimation during the semester.

Strengths

As written for Oral Pathology I (08434).

Weaknesses

The large number of students
Difficulties in the follow up of the patients

Innovations and best practices

Co-operation with anticancer centres, including BMT units is underway in order to evaluate and treat oral complications.

Plans for future changes

Establishment of a specific clinic for immunosupressed patients

Section 15.1. Integrated (Comprehensive) Patient Care

Integrated Patient Care will be initiated in September 1999 as a mandatory educational program for all Senior Dental Students and it will occupy the major clinical activity for the 9th and 10th semesters. Parts of this program have been already discussed in various sections of this report.

Section 15.2. Dental Emergencies.

There is not a separate identified course in Dental Emergencies. However Dental Emergencies are taught primarily by Oral Surgery, Endodontics and Peadiatric Dentistry.

Patients with emergency problems are sent from the Oral Diagnosis Clinic to the specific clinics during the hours of operation of our School. Emergency problems after 5.00 p.m. are addressed by the two major Oral Surgery Clinics in the Children's Hospital and "Evangelismos" Hospital.

Section 15.3. Care of Special Need Patients.

Teaching of care for special needs patients is done through the lectures and seminars within the various departments. Patient contact is achieved through several programs that exist among geriatric nursing homes, anti-drug treatment centres, institutions for special need children, etc.

Section 16. Practice Management and Communications.

Section 16.1 - 3. Behavioural Sciences, Communications, Ethics and Jurisprudence.

Behavioural Sciences, Communications and Ethics are taught under the courses "Introduction to Dentistry and Community Dentistry" and Paediatric Dentistry I and II. Further information and knowledge is given by the various courses which are taught in the Dental Curriculum.

Section 16.4. Practice Management.

There is no formal course in practice management but information is provided in various seminars in the 5th year of studies. Under a funded program by the European Community a limited number of students (20) are sent to pre-selected Dental practices to observe their operation and learn principles of practice management. The School is making efforts to expand this program to a larger number of students.

Section 17: Examinations, Assessments and Competencies

Introduction

The School's assessments vary among the departments, but there several types that are used by faculty members. Daily assessments are performed in the laboratory and clinical courses, sort exams are common in didactic courses and oral exams at the end of the tenth semester. Most of them are formative and it is our opinion that they work effectively.

Student motivation

The exams are always motivating students to study harder but there are attempts by individual departments to motivate students in contemporary topics and current literature. Every year we are organising a 3-day Scientific Meeting, where students can present their own research or scientific activity. The number of papers submitted annually is really high and clearly demonstrates the enthusiasm as well as the motivation of our students towards both clinical activities and research. Efforts have been initiated towards self-assessment of the students but they are at a very early stage.

Strengths

- The students receive a balanced education among the clinical and basic sciences that are taught in our curriculum.
- Oral exams give the opportunity to evaluate the total experience and knowledge of the student and develop a picture of the type of graduates we produce.
- A large number of graduates are opening their own practices which indicates to us, that they feel competent concerning the majority of the dental procedures.
- Our students are extremely successful when they participate in graduate programs abroad. A very large number of them are attending graduate programs in Europe, USA and other countries and the feedback which we are receiving from colleagues abroad is that they are doing very well.

Weaknesses

There is a lack of a student self-assessment program that can be used under a School-wide policy.

Innovations / best practices

- Students in all clinical disciplines must successfully pass all exams at the end of third year in order to enter the clinic.
- The Comprehensive Patient Care Program will result in the preparation of a more competent graduate capable to address the existing pathology in the community.

Plans for future changes

Develop a student self-assessment program and a faculty self-assessment program.

External examiners

They are no external examiners involved with dental education.

Examination to register as dentists

There is no formal exam for our students in order to register as dentists.

EU Advisory Committee recommendations

The School has published these recommendations in our Study Guide which is given to all faculty members and students. The guide is published annually and the recommendations are placed at the beginning where we are providing the characteristics of the profile of the Contemporary European Dentist. All departments are placing emphasis on the recommendations and make efforts to modify their education to meet these standards.

Section 18: Other Influences

Regional oral health needs

Regional oral health needs vary and the school is able to treat a diversified sample of the population exposing our students to the oral health needs of our area. Through community programs, which have been described elsewhere in the report the students are able to target specific populations and provide diagnostic services and treatment, becoming familiar with “special needs” patients, increasing their sensitivity and broadening their knowledge.

Evidence based treatments

Evidence based treatment is becoming a goal in the undergraduate curriculum. This is achieved by teaching a very broad biological science background through regularly updated Greek and International textbooks, as well as, the existing literature. Clinical training is based on scientific evidence and internationally accepted methods and materials, as they have been outlined by research studies rather than the clinicians own experiences in private practice. There is a great effort for clinical training to be homogeneous throughout the entire curriculum with an emphasis on current clinical concepts that meet the profile of the E.U. advisory committee of the training of dental practitioners.

Involvement in other university activities and sport

Our students are successfully participating in intramural sports, which are organised by the students union. These sports cover a variety of activities and they are taking place in the University campus. Cultural and political activities are organised in co-operation with students from other schools or other Universities in Greece. Furthermore our students are represented at the European Dental Student Association and they have organised the annual meeting of the EDS in Athens, two years ago.

Recreation

Recreation varies depending on the individual, but Athens provides an excellent opportunity to follow cultural events, performances and activities.

Student selection procedures

Undergraduate students are admitted to the Dental School through a National Entrance Exam which is given every June and is extremely competitive. Students are tested and graded in four subjects: essay writing, chemistry, physics and biology. There is no dental aptitude test given to the students and there is no way to judge their manual dexterity. Apart from the students entering through the National Exam there are a number of students who are enrolled in the School and they are either transfers from other dental schools, or they have already completed their studies in other subjects and wish to obtain a DDS degree.

There is no particular time devoted to involvement in extramural activities but students may request that from the administration and the majority of times these requests are granted.

Section 19: Student Affairs

Visitors should meet full senior class together with the class representatives of earlier years.

Name of Student representatives who will discuss this:

Final year:

Fourth year:

Third year:

Second year:

This will be the basis of a discussion with visitors.

19.1 Basic Data from Dental Schools

- Average number of dental students qualifying per year: 150
- Average number of dental students admitted to the first year: 150 - 160
- Length of course in years and/or semesters: 5 / 10 years / semesters
- Is there is a separate period of vocational training following graduation as a dentist in your country? NO

19.2 List different postgraduate courses

Subject / Specialty	Degree Awarded	Length of Core	Annual Output
Prosthodontics	Diploma	3 years	2-3
Orthodontics	Diploma	3 years	1-2
Periodontics	Diploma	3 years	1-2
Oral Surgery	Diploma	2 years	2
Endodontics	Diploma	3 years	1-2
Pedodontics	Diploma	2 years	1-2
Oral Diagnosis And Radiology	Diploma	2 years	3-4
Oral Pathology	Diploma	2 years	2-3
Operative Dent.	Diploma	3 years	2
Dental Materials	Diploma	2 years	2
Public Dent. Health	Diploma	2 years	2-3
Oral Biology	Master of Science	2 years	2-3
Dental Materials	Master of Science	2 years	2-3
Oral Pathology	Master of Science	2 years	2-3
Public Dent. Health	Master of Science	2 years	2-3
Doctorate Program	Doctorate	3 years	3-5

19.3 List different auxiliary / technology / other courses and state number who qualify per year

One dental assistant program which is qualifying approximately 20 dental assistants per year.

Section 20: Research and Publications

Introduction

The work done in the School of Dentistry is mainly applied research and involves both laboratory and clinical studies, for a wide range of subjects.

Research is mainly performed under the supervision of faculty members on a personal or departmental level, with the co-operation of graduate students and clinical associates.

Research is the responsibility of Sections, many of which have separate research units that are mentioned below. With the creation of the fifth department, the co-ordination of research will be transferred in a great degree from the separate Sections to the fifth Department, which involves basic sciences.

1. Experimental EMG Laboratory of Removable Prosthodontics

Introduction

The experimental EMG laboratory is a part of the educational - research activities of the Section of Removable Prosthodontics.

Objectives

The main objective of the research laboratory is to investigate in detail:

1. the muscular behaviour of the masticatory muscles during various functions and parafunctions of the stomatognathic system, and,
2. the particular neurophysiological mechanisms regulating the function of the above system in younger and older, dentate and edentulous adults (jaw reflexes etc.).

The research facilities of the laboratory are also available for educational purposes in the postgraduate program of prosthodontics and for those students who are enrolled in the course leading to a doctorate diploma (PhD thesis).

Equipment

The laboratory is fully equipped with:

a) compact - mobile EMG appliance (digital functions, four channels-electr. stimulator, averager, laser printer) for all the range of the clinical neurophysiological examinations
b) an experimental EMG set-up (2 amplifiers, 2 integrators, audio ampl., A/D converter, PC, printer, software for recording and analysis)
c) constant current, isolated, electrical stimulator
d) two channel storage oscilloscope with software
e) TENS appliance
f) complete dental unit and also polymeters, digital thermometers, surface and needle electrodes, reflex hammers, etc.

The whole experimental set up is accommodated in a special, air-conditioned, and well-ventilated room.

Funding

Research activities of this laboratory are constantly supported by research grants from the University of Athens, European Union, and British Council, while the staff maintains co-operation with other research laboratories abroad (University of London).

2. Research Facilities of Oral Pathology

Introduction

The research activities of the staff members and the graduate students which apply in the field of histopathology are performed in the histopathology laboratory of the Department of Oral Pathology. The main goal of this laboratory however focuses on the routine diagnostic histopathologic demands of the Department.

Equipment

One lab-technician is responsible for the activities of this laboratory which is equipped as follows:

1. Histotechnicon.
2. Microtome.
3. Incubation oven.
4. Cryostate.
5. Scale (precision balance).
6. Microscope with a camera for photomicrographs.

Collaboration

Immunohistochemistry and molecular biology, when necessary, are performed in the following collaborating laboratories.

1. Histopathologic laboratory of the Department of Pathologic Anatomy, Medical School University of Athens.
2. Laboratories of the Department of Histology, Medical School of Athens.
3. Histopathologic Laboratory of the 401 General Military Hospital of Athens.

Funding

The research projects are mainly funded by Grants of the University, the Ministry of Health and the Ministry of Development.

3. Research Unit of Dental Biomaterials

Introduction

The Research Unit of Dental Biomaterials was established in 1992 and was organised mainly by the Section of Operative Dentistry.

The Unit consists of a laboratory equipped by the appropriate facilities for research applied in the field of dental biomaterials.

Objectives

The Unit was instituted with objectives: (a) to enhance the research activity developed by the staff members, (b) as a tool in the postgraduate and graduate programs of our Faculty, (c) to strengthen the proposals for funding and collaborations and (d) to attain the capability for direct evaluation of commercially available products.

A great number of research projects has been carried out in the Unit of Dental Biomaterials in the period 1992-1998, particularly by the Sections of Operative Dentistry, Fixed and Removal Prosthodontics, Paediatric Dentistry, etc.

The results have been presented in national and international congresses and published in national and international Dental Journals.

Areas of interest

1. Mechanical properties (compressive, tensile, diametral and flexure strengths, modulus of elasticity, hardness)
2. Physical properties (water sorption, water solubility, colour)
3. Surface characteristics (roughness, topography examined by optical and scanning electron microscopy-SEM)
4. Fatigue (thermocycling) and artificial "ageing" (accelerated light exposure)
5. Evaluation of hard dental tissue-material and material-material interfaces (bond strength measurements and SEM examination)
6. Marginal adaptation (microleakage techniques-examination under SEM)

The research interests have been concentrated on restorative materials (amalgam, resin composites, glass-ionomers, compomers), dental cements, dental ceramics, impression materials, denture base resins and prosthodontic alloys.

Equipment

The Research Unit of Dental Biometerials is equipped with the following devices:

1. Scanning Electron Microscopy (Phillips, The Netherlands)
2. Optical and Stereoscopic Microscopies (Leitz, Germany)
3. Polarized Microscopy (Zeiss, Germany)
4. Microhardness Test Instrument (Shimadzu, Japan)
5. Universal Testing Machine (Monsanto, England)
6. Colorimeter Instrument (Braive Instruments, Belgium)
7. Surface Roughness Meter (Asmeto AG, Germany)
8. Table-top accelerated lighting unit (Heraeus, Germany)
9. Apparatus with thermo-cool baths (Heto, Belgium) and computerized robot system for thermocycling
10. Hard Tissue Macrotome (Metal Research, England)
11. Grinding/Polishing Device (Buehler, USA)
12. Sputter Coater Device (BAL-TEC, Liechtenstein)
13. Critical Point Dryer (BAL-TEC, Liechtenstein)

Collaboration

The Research Unit of Dental Biomaterials has developed collaborations with: (a) Research Centre of Biomaterials (EKEVYL), (b) corresponding Sections of National Technical University NTU of Athens and (c) Stone Conservation Centre - Ministry of Culture.

Funding

The research projects are funded mainly by Research Grants of the University of Athens, grants from the private sector (companies of dental products) and also by the Tactical funding of the University.

4. Oral Microbiological Laboratory

Areas of Interest

- Bacteriology of Healthy and Diseased periodontium.
- Bacteriology of root canals and periapical lesions
- Oral ecology
- Immunohistochemistry of periodontal and periapical tissues
- Isolation and identification of Oral Microbial flora by means of:
  Cultural techniques

Dark field and face contrast Microscopy
Immunofluorescense techniques
Chromatographic analysis of end metabolic products

- Studies of the growth rates of periodontopathic and cariogenic bacteria stressed by plaque control agents and different concentrations of fluoride.
- Detection of the infiltrated cells of hummoral response, in the tissues by monoclonal antibodies.

Funding

University of Athens - Greece, Research account.
Ministry of Industry, Research and Technology - Greece
Dental School, University of Athens, Greece
Pharmaceutical companies (occasionally)

Collaboration

- Microbiological Laboratory of Medical School - University of Athens.
- Laboratory of Pathologic Anatomy and Histopathology. General hospital "Evangelismos"
- Department of Immunology and National Tissue Typing Centre. General Hospital of Athens G. Genimatas.
- Geneve
- Zurich
- Nijmegen, Holland

Equipment

1. Microscope Zeiss Axioscop with condenser for Dark Field microscopy.
2. Microscope Zeiss with ultra violet lamps for immunofluorescence techniques.
3. Colour CCD camera ICD - 500p
4. Colour picture Monitor lkegami CMV - 1460 (type-P, 14-inch)
5. Stereomicroscope Zeiss SV8
6. Anaerobic glove box incubator, National Heinicke Co
7. Jars for anaerobic or $C0_2$ conditions
8. Centrifuges: - MLW T 52,1 - Hettich Universal II
9. $C0_2$ incubator for cell cultures, H0R0
10. Balances: - Electronic Mettler H 20 - Mettler BB 240
11. Autoclaves PBI
12. Miele Thermo - Disinfector G7731 (Wash machine)
13. Deep Freeze Refrigerator, J0UAN
14. Automatic stirring water-bath: - SWB - Bioline SWB 5030
15. Vortexes: Heidolph Reax-l, Heidolph vortex GeniI (Magnetic plaque)
16. Sevelal instruments and equipment for bacteriological and biochemical assays
17. Automatic water still, Aquatron A4S

5. Orthodontic Section, Craniofacial Growth and Physiology Research Unit

Areas of Interest

Form and function interaction, TMJ growth, Effect of muscle resection on craniofacial growth, mode of action of functional appliances.

Equipment

a) Cephalometric and panoramic unit
b) Mandibular kinesiograph
c) Microtom of hard tissues
d) Force transducer
e) Bite force transducer

Collaborators

Members of the staff
Collaborating scientists:
Dr A. Tsolakis
Dr D. Halazonetis
Dr M. Nasika
Dr E. Anastasopoulou
Dr K. Konstiandou

Funding

From the University of Athens Research Grants(total: 3 grants)

6. Research Laboratory of Pulp Biology

The research laboratory of pulp biology is a part of the educational-research activities of the Section of Endodontics.

Objectives

The main objective of the research laboratory is to investigate in detail the biological, physiological and inherent defence mechanisms of the dental pulp and periapical tissues. The mechanisms of dental hypersensitivity and the biological properties of dentine as well as the influence of various modern cutting devices on dentin structure and pulp are also investigated. The development of new pharmacological-biological therapeutic modalities for the affected pulp is also of interest.

The research facilities for the laboratory are available also for educational purposes in the postgraduate program of Endodontics and for those students who are enrolled in the course leading to a doctorate diploma (PhD thesis).

Equipment

The laboratory is fully equipped with:
a) A complete set of instruments for the study of pulp nerve activity.
b) Laser Doppler Flowmetry for the study of blood microcirculation of the pulp and surrounding tissues.
c) Electrical stimulators.
d) Photometers and centrifuges.
e) High-power operating stereo microscope.
f) Surgical table for experimental animals.

Research

The experiments are primarily done on experimental animals which are accommodated in special, air-conditioned rooms nearby the operating room.

The research staff of the laboratory is highly qualified with PhD degree resulting from complete post-graduates studies in the field of pulp biology abroad (Sweden).

Also, novel research findings from this laboratory received first prize award in European congresses.

7. Epidemiology Research Unit

Introduction

Epidemiology is the study of the distribution and the determinants of disease in populations.

The research conducted by the Epidemiology Unit attempts primarily: (i) to determine the status and future needs for oral health, and (ii) to identify the most important factors for the prevention and the control of oral diseases.

The Unit has long conducted epidemiological studies of the prevalence and the etiologic profile of dental and oral diseases that enabled the researchers to identify populations at risk and thus to develop interventions to promote health and prevent disease. The researchers involved have numerous publications in international scientific journals, book publications as well as scientific presentations in international meetings and conferences. The compiled scientific information shapes the Unit's current and future research projects that principally seek the advancement of the oral health of the public.

The Unit' s facilities include computer facilities, on-line access to all major databases, as well as a library.

Areas of Interest

The Unit's current research activities focus primarily in the subsequent areas:

- Exploration of the changing trends in oral diseases
- Identification of risk factors for dental caries among children
- Assessment of the elderly patient oral health needs
- Identification of risk factors for enamel defects
- Evaluation of primary preventive dentistry measures
- Identification of dietary determinants of oral diseases
- Assessment of strodium role in caries prevention
- Determination of behavioural aspects of oral hygiene
- Development of tobacco cessation programs
- Exploration of biostatistical issues in dentistry

Collaboration

The Unit' s members collaborate with cross-disciplinary local and international investigators studying various scientific aspects and having relevant expertise. The following Research Units or University Departments presently collaborate with the Epidemiology Unit:

- Department of Epidemiology, University of Athens Medical School, Athens, Greece
- Oral Health Services Research Centre, University Dental School, Cork, Ireland
- Unilever Dental Research Port Sunlight Laboratory, Merseyside, United Kingdom
- Department of Clinical Dental Sciences, Liverpool University School of Dentistry, Liverpool, United Kingdom
- Division of Oral Health Services Research, King's Dental Unit, London, United Kingdom
- Department of Preventive Dentistry, Hiroshima University School of Dentistry, Hiroshima, Japan
- European Network for Smoking Prevention, Brussels, Belgium
- Centre for Tobacco Prevention, Karolinska Institute, Stockholm, Sweden

- Institute of Dentistry, University of Helsinki, Helsinki, Finland

Funding

The Unit is principally funded through the University of Athens, the Greek Government and the European Union. The subsequent projects are currently funded by:

- Ministry of Education, Greece
  Title: School network - Health education and oral health
  Duration: March 1998 - May 1999
- University of Athens, Greece
  Title : Epidemiology of oral diseases of Greek population
  Duration: September 1998 - September 1999
- European Commission, Biomed 2, Luxembourg
  Title: A study to measure toothpaste use ingestion and absorption by young children (Part 2)
  Duration: June 1996 - May 1999
- European Commission, Public Health and Safety at Work Directorate, Luxembourg
  Title: Development of tobacco control training programs for dentist based on analysis of their tobacco control practices and attitudes
  Duration: March 1999 - March 2000

8. Cariology Research Unit

The Unit conducts research mainly on caries using in vitro, in vivo and clinical methods.

Areas of interest

- Effect of trace elements (i.e. F, Sr, AI) on remineralization and demineralization of hard dental tissues.
- Assessment of the effectiveness of various commercially available products (i.e. toothpastes, mouthrinses) on caries prevention and on inhibition of calculus formation.
- Assessment of the effect of various components of saliva on the de-remineralization of teeth.
- Study of the pathogenicity and prevention of dental erosion.
- Safety of use of dental hygiene products (i.e. toothpastes, mouthrinses).
- Effect of fluoride on cariogenic bacteria.
- Assessment of the reliability of various cariogenicity tests.

Equipment

- Photometers: spectrophotometers, infrared spectrophotometer, gas chromatograph, and atomic absorption spectrophotometer.
- Thin sectioning machine.
- Ion analysers: expandable ion analyser, pH meter.
- Amino acid analyser.
- Micro hardness tester
- Microscopes: stereomicroscope, polarised microscope, phase contrast microscope, and simple microscopes.
- Centrifuges: super speed refrigerated centrifuge, and simple centrifuges.
- Different type incubators i.e. autoclave incubator.
- Analytical balances.
- Refrigerators.

Collaborators

- University of Alabama, USA, Cariology Department.
- University College, Cork, Ireland, Oral Health Services Research Centre
- Research Centre of Physical Sciences 'Dimokritos', Athens, Greece.

Funding

- University of Athens, Greece.
  Title: S.E.M. study of enamel morphological changes after the application of Al, Sr and anticalculus dentifrices in vitro.
  Duration: September 1998 - September 1999.
- Koulourides award, financed by 'Procter and Gamble', Greece.
  Title: Effect of aluminum AI, strontium Sr and fluoride, alone and in combination, on enamel remineralization in vitro.
- European Commission, Biomed 2, Luxembourg
  Title. A study to measure the prevalence of enamel opacities present on the anterior teeth of 8-year-old children (part 1).
  Duration: June 1996-May 1999.

Section 21: Quality Development

Quality development is a continuous activity, aiming forever higher education effectiveness and efficiency. These activities often require new values and behaviour focusing on evaluating continuously all the integral parts of the dental education system.

Faculty

Continuous scientific education of faculty members is achieved through:

- Faculty seminars organised by each section.
- Faculty seminars organised by two or more sections on subjects of common interest.
- Participation in Meetings, Seminars and Courses nationally and internationally.
- Visitations to foreign dental schools in Europe and the USA. Participation in research programs at the clinical or research units of the school or in co-operation with other parties.
- Sabbatical leaves are available for all faculty members who have completed six years of work at the Dental School. This program is widely and effectively used by faculty members.

Students

Quality development of students is achieved through:

- Continuous assessment from the study committee of the application of the study program and corrections wherever is deemed necessary.
- Specific description in the study guide of every subject in what regards the content, the aims, the means to achieve those aims and finally the criteria of successful completion of the subject.
- Placement as a necessary prerequisite for every student in order to begin clinical training is the successful completion of the theoretical part of all clinical subjects.
- Organisation on a yearly basis of a Scientific Meeting for dental students where mainly senior students present posters, table clinics, and oral presentations under the supervision of faculty members.

Section 22: Overall Comments on the School

Strengths

1. Strong and broad basis teaching of basic sciences and biological sciences. Dental students are taught the courses together with medical students leading to the establishment of the contemporary dentist as an oral health physician.
2. Faculty members and teaching associates with excellent and well diversified academic background capable of providing an up to date dental education based on evidence treatment and scientific information which is taken by current literature.
3. Excellent Faculty to student ratio (1:4 - 1:6) in both laboratory and clinical teaching.
4. Modern and renovated clinical facility which enables students to comfortably treat patients.
5. Excellent patient pool which assures the completion of requirements and exposes the students to a wide range of pathology and treatment procedures.
6. There is adequate number of research units and wide range of research activities in the school, primarily from Faculty members and graduate students.
7. Well-structured and strongly supported graduate programs with emphasis in both basic and clinical sciences.
8. Despite the large number of students the School has been able to graduate dentists who are successful in private practice and as graduate students in programs abroad.
9. In the clinical program students are treating patients under Faculty supervision rather than observing procedures which are performed by Faculty members.

Weaknesses

1. The very large number of students who are enrolled creates a problem in both laboratory and clinical training. Unfortunately the School's attempts to limit the number of students have not succeeded since the policy of the Government and the Ministry of education is to provide an increasing number of students with a wide access to the academic institutions.
2. The very few, entry level Faculty positions given to the School over the last decade, reduces the opportunity to renew faculty members and the average age of our faculty is increasing since 90% of the faculty is tenured.
3. A large portion of the School's budget is controlled by the State. The international economic hardship may lead to diminishing educational funds world-wide and this may affect the School's teaching programs.
4. Although major renovations have been done, the need for renovation of the main amphitheatre and some small laboratories is prominent.
5. The use of computer assisted learning has been minimal and must be improved in the near future.
6. There is lack of adequate number of dental assistants and supporting personnel.
7. There is limited funding for research and formation of alternative educational modalities.

Innovations and best practices

The following are considered innovations and directions, which the school will follow.

1. The School has established a basic science department, which will help to achieve our educational objectives. The Department will be staffed with faculty members who hold basic sciences degree but also are graduates of the dental School. In doing so there is belief that the basic science courses will be taught more effectively and at the same time we will be able to bridge the gap among basic and clinical science. Dental students will be more enthusiastic and actively participate in the basic core curriculum since the thrust will be to provide them with information that has clinical relevance .
2. Starting this year the students in the last year will be treating patients following the concepts of comprehensive treatment or total patient care. The fifth year clinic has been renovated and redesigned to accommodate the new program, and we strongly feel it will benefit both patients and students. The patient will receive a more effective and faster treatment while the students will enhance their treatment planning skills and learn how to sequence a treatment step by step.
3. The operation of the clinical simulation laboratory will prepare students to enter the clinical years with better basic skills and manual dexterity. During their training in the clinical simulation laboratory they will be able to organise and sequence a treatment plan that will be executed on phantom heads.
4. The students in their senior year may elect to work in a private practice receiving experience and also a stipend by the government. Although this is not available for all students, a fair number of them are benefited by this practical training.