



DENTED VISIT

THE MEDICAL UNIVERSITY OF WARSAW

SCHOOL OF DENTISTRY



6 – 10 MAY 2000

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Provisional timetable for the visit to the Medical University of Warsaw

Saturday May 6th

- 16⁰⁰ Short tour of the city (Prof. T. Bączkowski, former head of the Dental School). The group meets at the reception of the PAN Biocybernetics Hotel at ul. Trojdena 4.
- 18⁰⁰ Meeting of the visitors (Dept. Conservative Dentistry, ul. Miodowa 18)
- 19⁰⁰ Meeting with the Dean (Prof. H. Wanyura) and contact person (Prof. M. Wierzbicka)
- 19³⁰ Dinner with the Dean and some of the staff members

Sunday May 7th

- 9⁰⁰ Meeting at the Department of Oral Surgery with contact person, Prof. A. Wojtowicz (Chair of the Department of Oral Surgery) and Dr E. Dybiżbańska (volunteer to help in interpretation)
- 10⁰⁰ Meeting with the Dean and some of the staff of the School (introduction, structure of the School, staffing, examinations and assessment, quality development, other influences, regional oral health needs, overall comments)
Visit to one of the Departments
- 13⁰⁰ Working lunch with senior staff (sections 4, 17, 18 discussed)
- 14³⁰ Beginning of report preparations
- 19⁰⁰ Working dinner with the Dean and some of the senior staff members

Monday May 8th

- 9⁰⁰-13⁰⁰ Team A
Histology, Molecular Biology, Microbiology, General Surgery, Orthodontics, Prosthodontics, Preclinical Dental Education / Restorative Dentistry
- 9⁰⁰-12³⁰ Team B
Public Dental Health, Preventive and Community Dentistry, Restorative Dentistry, Paedodontics, Periodontology, Oral Medicine
- 13⁰⁰-14⁰⁰ Working lunch with non – senior staff

- 14³⁰ Meeting with the Vice – Rector and Dean of the Medical Faculty
(time and place to be confirmed)
Meeting with students (time to be confirmed)
- 20⁰⁰ Dinner with the senior staff at the Club of Physicians, Al.
Ujazdowskie 24

Tuesday May 9th

- 9⁰⁰ Information technology, Internal Diseases, other
- 13⁰⁰ Working lunch with senior staff
- 17⁰⁰ Meet the Dean and contact person to review preliminary findings
- 19⁰⁰ Opera

Wednesday May 10th

- 14⁰⁰ Presentation of report, discussion and agreement on the final report
Gluziński lecture room, ul. Nowogrodzka 59

Address of the secretariat of the visiting group:

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Background

The state of oral health and treatment needs in the population of the Warsaw region.

On the basis of nation wide epidemiological studies, the Warsaw region can be classified as one of the regions of the highest caries occurrence, and the highest restorative and surgical treatment needs for this disease. Over the period 1987 – 95, the percentage of 12 year old children with a DMFT value ≤ 3 significantly decreased. Orthodontic and periodontal treatment needs, and the percentage of adults with TMJ problems, are also high. The distribution of dentists and dental personnel is uneven. In the capital city, there are fewer than 1 000 inhabitants per dentist, whereas in some of the peripheral areas, the number of inhabitants per dentist reaches 10 000.

The history of the Dental School

The first records of teaching dentistry in Warsaw date back to 1818, to the times of the Royal University of Warsaw. In 1920, the first Polish dental school was founded – the State Institute of Dentistry. This evolved in 1933 into the Academy of Dentistry. During the Second World War, like all institutes of higher education, the Academy was closed down. However, the teaching of Dentistry continued underground. In 1945 the Academy was re-opened, and in 1949 was incorporated into the Medical Faculty of the University of Warsaw, as a Sub-Faculty. In 1950 the Medical University of Warsaw became a separate institution, with a Sub-Faculty of Dentistry. To this day the Dental School remains a Sub-Faculty of the Medical University of Warsaw.

At present, the various departments of the Dental School are located at 2 sites. On the grounds of the Clinical Hospital at ul. Nowogrodzka 59, near the city centre, can be found the 1st and 2nd Departments of Maxillofacial Surgery, the Departments of Oral Surgery, Dental and Maxillofacial Radiology and Prosthodontics, the affiliated Department of Internal Diseases, and, from May 2000, the Departments of Orthodontics and of Basic Dental Sciences and Prevention.

The second site, housing the Departments of Paediatric Dentistry, Conservative Dentistry and Periodontology and Oral Medicine, is situated at ul. Miodowa 18, near the historical old town (about 30 minutes away by bus).

Studying Dentistry in Warsaw

The Dental Course in Warsaw lasts 5 years, with each year divided into 2 terms (semesters). The 1st (autumn) term lasts from October till mid-January, and the 2nd (spring) term from February till June.

The first two years of the Dental Course cover mainly theoretical subjects, such as Anatomy, Histology and Embryology, Chemistry, Biology, Physiology and Biophysics. However, already at this stage, elements of Dentistry are introduced during courses in Prevention (1st and 2nd year) and Preclinical Dentistry (2nd year).

During the 3rd year of study clinical subjects are taught (Pathology, Pathophysiology, Pharmacology, Medical Microbiology). General Medicine and General Surgery are also introduced into the curriculum. Students start working with patients at the Departments of Conservative Dentistry and Oral Surgery, and prepare for further clinical work through a phantom course in Prosthodontics.

The 4th and 5th years are devoted primarily to dental disciplines – Conservative Dentistry (including Endodontics), Oral and Maxillofacial Surgery, Paediatric Dentistry, Orthodontics, Prosthodontics, Periodontology, Oral Medicine and Dental and Maxillofacial Radiology. The course in General Surgery is continued, and the course in General Medicine is expanded to include specific medical disciplines such as Infectious Diseases, Dermatology and Laryngology.

During their summer vacation, students are obliged to undertake a month's elective in nursing (after the 1st year), dental assisting (after the 2nd year), general medicine and surgery (after the 3rd year) and general dentistry (after the 4th year). This gives them the opportunity to see how the knowledge learnt may be applied in the everyday practice / hospital situation.

The Dental School during a period of transition

Systemic changes initiated in 1989 have had implications for the Dental School. In 1999, a reform of the health service was undertaken, connected with the introduction of a compulsory system of health insurance and the formation of regional sickness funds. A system of contracts was introduced between sickness funds and providers (individuals or institutions) for the provision of basic and specialist care under the public insurance system. The dental School has such a contract covering treatment rendered to patients at the School, and the resources thus gained from the sickness fund are an important part of the School's budget. However, this also means that the School has to compete for patients with other dentists / practices providing public dental care, under the rules of the free market.

Section 1: Introduction and General Description

The main aim of the school is to provide well-trained and competent oral physicians with a knowledge and understanding of comprehensive oral health care in a diverse population, and the necessary clinical skills for its implementation.

The primary functions and responsibilities of the school include:

- undergraduate training of dental students
- vocational training for graduates
- participation in the development of specialisation programmes, and provision of postgraduate training for dentists wishing to specialise
- continuing education of dentists through regular organisation of scientific sessions, meetings and congresses at a local and national level (with participation of overseas presenters), in co-operation with the Polish Dental Association
- provision of basic oral health services under the public insurance system for patients from the Warsaw region (approx. 95-100 thousand patients treated annually)
- provision of specialist services under out-patient and hospital conditions
- active participation in the development of oral health promotion programmes
- calibration and training of epidemiologists for monitoring oral health at a national level; organisation of a national epidemiological database
- research, including research opportunities for students in special students' research groups based at particular departments

- clinical trials performed for industry prior to registration of new products, in co-operation with the Drug Institute
- the school does not participate directly in the education or training of auxiliary staff

Visitors Comments

Introduction and General Description

The Medical University, created as a separate institution in 1950, with a history stretching back to the 18th century, comprises the Faculties of Medicine and Pharmacy. The Medical Faculty has within it the Sub-Faculty of Dentistry. The teaching of dentistry began in 1920 at the State Institute of Dentistry, which later became the Dental School (Sub-faculty of the Medical Faculty).

It is currently housed in three buildings, two of which are interconnected. The third is situated some twenty minutes away by car. Although the buildings are old they have been carefully renovated and equipped to a standard consistent, and in many respects, above the European norm.

Approximately eighty students are admitted each year to the five year dental programme. Tuition is free. Students are accepted directly from secondary school on the basis of their academic grades. If they do not achieve admission in this way, they may gain admission at the discretion of the School, as fee paying students. Currently the School has approximately fifteen fee paying students. The first two years of the programme are fundamentally the same as the programme for medical students and cover the basic biomedical sciences, anatomy and physiology. The third year is a transitional year, which comprises pathology, microbiology, internal medicine, general surgery, pharmacology and operative technique courses in restorative dentistry, prosthetics, oral surgery and dental radiology. The medical components continue into the fourth year with in addition specialty experiences in, for example, otorhinolaryngology, ophthalmology and infectious diseases as well as providing increased exposure for students in clinical dentistry. They are also introduced to periodontology. The fifth year also has a significant medical component but at the same time many more hours of practical clinical dentistry. An undoubted strength of the school is its location within the Medical Faculty and the rich medical component that this persists in the undergraduate programme.

Section 2: Physical Facilities

Strengths

Recently introduced computer workstations with access to the Internet at departments and at the library of the Medical University.

Weaknesses

Localisation of the specific departments in different parts of the city, which is inconvenient for both students and patients, and makes co-operation between departments and integrated care of patients more difficult. This is also an important factor limiting research opportunities, due to a limited access of some of the departments to scientific facilities (laboratories, microscopes, etc).

Lack of space. The dental school is localised in old buildings with limited possibilities of modernisation and adaptation. Due to limited space it is not possible for students to have their own, individual, fully-equipped work areas in which they can learn to organise their work.

Lecture rooms are in need of modernisation.

Relatively limited access to overseas dental textbooks and journals.

Planned developments

A long – term plan is to have all departments of the Dental School localised at one site.

Preparations are being made to install radiovisiography at the Department of Conservative Dentistry.

An improvement of library facilities is also planned. The Library and University authorities are constantly seeking external funds which would help to improve the

quality of services offered by the Library. The main aim is to find the funds for purchasing computers as, at present, there are too few of them to meet students' needs.

Visitors Comments

Overall the clinical and laboratory facilities are modern and well equipped. They certainly equate with some of the best in Europe and the USA and indeed exceed many.

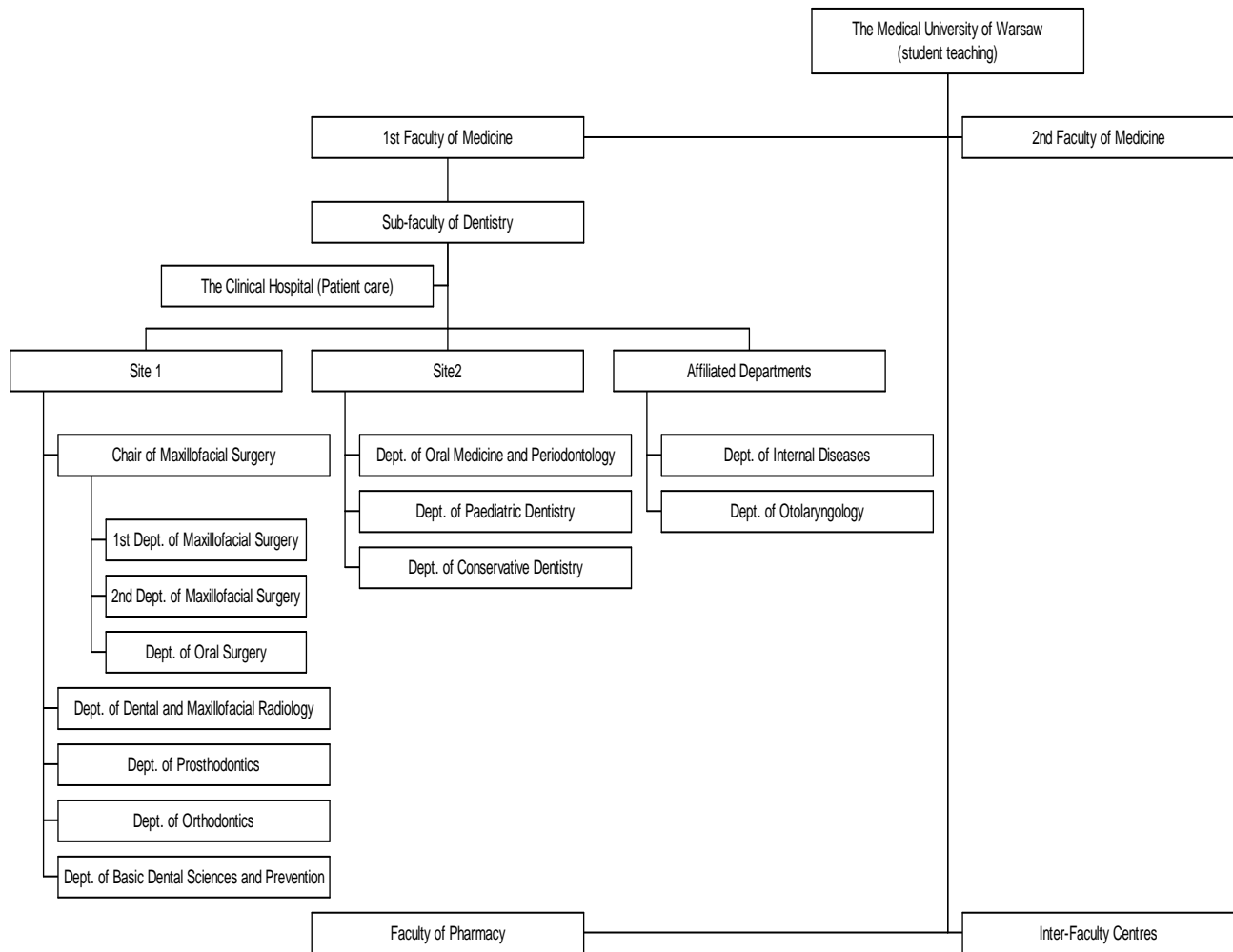
The space allocation to departments for both teaching (lecture rooms and seminar rooms) and clinical work are very generous and indeed are considerably better than the average in Europe and the USA.

Although the two main buildings occupied by the dental hospital/school are old, the clinical areas are well maintained, well decorated and very clean. However, the “common parts” – entrances, corridors and waiting areas – have been neglected and are in need of modernisation and general refurbishment.

The visitors believe that there is a major problem in having a dental hospital/school situated on two sites approximately twenty minutes apart by bus. Furthermore we question whether the distribution of the departments between the two sites is appropriate. In particular it would seem illogical to have paediatric dentistry and orthodontics on separate sites. We would recommend that some consideration is given to accommodating paediatric dentistry in the main hospital. This would free up space at Miodowa Street which could be used for integrated dental care (see later).

Section 3: Organisational and Administrative Structures

The Medical University of Warsaw



Administrative Organs of the Medical University

These comprise of the senate, councils of the specific faculties, the rector and the dean. The term of office for each of these organs is 3 years.

The Senate

The senate comprises of:

1. the rector
2. vice - rectors
3. deans (including the dean of the dental school)
4. selected representatives: 13 professors / associate professors (including 1 from the dental school)
6 other academic teachers (including 1 from the dental school)
6 students (including 1 from the dental school)
3 employees of the Medical University who are not academic teachers

The senate has committees for:

Teaching (dealing with co-ordination of teaching plans within the Medical University, development of teaching facilities, evaluating how well prepared graduates are for working in their chosen profession, help for the students' research groups, controlling financial aid for students)

Research (dealing with the division of resources for research, evaluation of the University's research activities, co-operative research with overseas centres, research awards)

Staff development (dealing with policies for staffing the University, initiatives for staff development, periodic review of staffing levels in specific organisational units (i.e. departments), staff research activities)

Postgraduate education (dealing with programmes of post-graduate education, evaluation of programmes of specialisation)

Treatment provision and regional co-operation (dealing with treatment provision, prevention and diagnostic procedures provided by the departments, co-operation of the University with regional authorities with regard to health care)

Medical information and publishing (dealing with publishing activities of the University, co-operation with the library concerning stocking up with books and journals)

Finance (evaluation of financial plans of the University, evaluation of propositions for the division of resources for various activities of the University, evaluation of the financial report of the University)

Ethics (development of principles for evaluation of the ethical aspects of clinical and laboratory experiments, evaluation of adherence to these principles by staff)

Student recruitment (dealing with the principles of student recruitment, annual entrance exams, co-ordinates and supervises the activities of recruitment committees of the specific faculties)

Staff assessment (headed by the rector, and comprising 2/3 professors / associate professors, 1/3 other academic teachers – development of principles and criteria for staff assessment)

Assessment of professors (comprising of professors – assessment of professors)

Decisions of the senate are made by majority vote (over 50 %), in the presence of at least half of the members of the senate.

In cases related to changes in the statute of the University, approval of the rector's annual report, formation / transformation / closing down of organisational units of the University, decisions made by the councils of the faculties – decisions of the senate are made by 2/3 of votes.

Decisions related to individuals are made by secret ballot. Decisions related to organisational units may only be made in the presence of representatives of these units. Decisions made by the senate are binding for all organs of the University.

The senate meets at least once every 2 months (not including vacations) on the decision of the rector. A meeting of the senate may also be called on the suggestion of at least 7 of its members.

Councils of the faculties

These comprise of the dean, vice – dean, professors and associate professors, other academic teachers (10 % of the council), students (10 % of the council), and other employees who are not academic teachers (5 %) of a faculty. The council controls the functioning of the faculty, including:

1. Choosing the dean and vice-deans
2. Making decisions concerning the teaching programme within the faculty
3. Making decisions concerning the finances of the faculty
4. Evaluation of the dean's suggestions concerning forming / changing / closing of organisational units / departments within the faculty
5. Suggestions concerning organisation, functioning and development of the faculty; evaluation of the dean's suggestions in these matters
6. Evaluation of the dean's suggestions concerning staff employment (including heads of departments)
7. Staff development within the faculty

Visitors Comments

Organisational and Administrative Structure

The School of Dentistry is administered primarily through the Office of the Dean. Professor Hubert Wanyura who is also Professor and Chairman of the 1st Department of Maxillofacial Surgery. Coincidentally the current Rector of the Medical University, Professor Jamisz Piekarczyk, is Head of the 2nd Department of Maxillofacial Surgery. There are, besides the two departments of Maxillofacial Surgery, nine other departments in the Dental School as follows: Dental Surgery, Prosthodontics, Diseases of the Oral Mucosa and Periodontics, Orthodontics, Basic Dental Sciences and Prevention, Paedodontics, Conservative Dentistry, Maxillofacial Radiology, Internal Diseases and Otolaryngology.

Funding:

The School receives its funding from three principal sources:

- Teaching is funded currently through the Ministry of Health. This may change in the future as current discussions are exploring the possibility of transferring this responsibility to the Ministry of Education. The amount of money provided in any one year is based on a formula that takes into account student numbers, the number and qualifications of the academic staff and the school's scientific publication record.
- Research funds from the Polish Scientific Research Committee. Grants are made on a competitive basis. We were unable to ascertain the exact amounts.
- Health Insurance (Regional Sick Funds). A national health insurance programme introduced in the past year provides for the provisions of primary dental services to insured patients. The school is a contracted provider of such services but is limited to the provision of the amount of services per annum. This is monitored on a monthly basis and unfortunately sometimes, when the monthly quota of free care has been provided any further care provided that month has to be paid for directly by the patient. No cast framework, removable partial dentures or fixed crown and bridgework can be provided under the health insurance scheme. All such work has to be paid for by the patient.

Currently the supply of patients is adequate largely because of the School's clinical reputation and the patient fee structure. The fees charged by the school are

approximately 30% of those charged by private dental practitioners. This situation may not always pertain in the future.

Strengths

The School has a very generous staff student ratio, in some instances one faculty member supervises only two students in the clinic. The School is receiving research funding.

Weaknesses

The funding formula for the teaching programme does not appear to encourage efficiency in the utilisation and recruitment of staff.

Section 4 Information technology systems at the Medical University of Warsaw

The departments and clinics of the Medical University of Warsaw are located at 21 points of the city. They can be treated as the nodes of a computer network. Among them are two big campuses – Banacha and Lindley, 6 medium size nodes and 13 small size nodes. The main goal is building the university computer network with access to the Internet from all nodes. The location of the Dental Clinics and Departments are ul. Nowogrodzka (Lindleya campus) and ul. Miodowa – medium sized node.

The main functions of the university computer network (UCN) are:

- research: access to scientific and bibliographic databases (Medline) and other Internet resources,
- education: access to multimedia, medical educational programmes, lists of subjects, curricula, schedules,
- patient care: access to medical databases of patients,
- administration: access to financial and administrative data, reports, etc.

At present the network infrastructure is developed at Lindleya campus and fast ATM connection is planned for the link of Lindleya and Banacha campuses.

With regard to research and education the access to Internet is now possible for every student of the Medical University. The students can open e-mail accounts and are trained in e-mail, WWW browsing and Medline use during the 1st year of education when studying Medical Informatics. Within this subject programmes such as Dental Practice are demonstrated. More advanced students take part in

Student Research Group working on 3-D visualisation programmes with possible applications in education, but also in computer assisted maxillofacial surgery planning.

The Department of Medical Informatics has been actively involved in Computer Assisted Learning (CAL) within the framework of two Tempus programmes Joint European Project 04272 and Joint European Network 04272. Many multimedia, medical educational programmes were designed and built. Two – Cartilage and Immunodermatology – are available on Internet. Many departments develop their own educational resources also available on Internet – e.g. Dept. of Anatomy.

Within the Tempus programme, 30 multimedia, medical educational programmes were purchased and are available in the CAL Laboratory. These programmes apply to a variety of medical disciplines such as radiology, anatomy, diagnostic imaging, immunology, haematology, etc.

At the Department of Medical Informatics the SGI 02 Workstation with the Advanced Visualisation System software is available which can be used for dental purposes.

Students also have access to computers at the Main Library of the Medical University, where they may attend Internet courses organised by the Internet Medical Centre at the Main Library. It is planned to install additional computers to which students will have access at some of the departments of the Dental Faculty.

Visitors Comments

STAFFING

Strengths

1. There is adequate number of faculty members to carry out the educational and research activities of the Institution. Faculty to student ratio is excellent at all areas of education including basic, biomedical, medical and dental sciences.
2. There is an adequate number of supporting personnel (secretaries, nurses, hygienists, laboratory technicians) and they play an important role in the overall appearance of the various areas of the clinics and laboratories.
3. Senior faculty members are professional, thorough, knowledgeable and very supportive to junior faculty members, certainly serving as role models for the educational community.
4. Junior faculty members are enthusiastic, full of energy and ready to help and assist students in their daily activities.
5. Through the efforts of senior and junior faculty members, research groups – study groups for students are organised in every department, introducing the students to various clinical and scientific topics leading to research or study of the international literature.

Weaknesses

It is apparent that although all departments are well staffed by general European standards there is a distinct absence of middle grade staff. It appears that recent graduates are keen and enthusiastic to join the teaching faculty, but after some years when they have gained specialist experience they find it more attractive to work in private dental practice. The visitors consider it to be important that the dental school develops incentives to retain some of its junior staff long term. There is a real need to maintain continuity and ensure a succession of staff within the faculty.

Sections 5 – 16: The Dental Curriculum

First Year

Subject	1 st (autumn) term		2 nd (spring) term	
	lectures (hours)	Seminars + practical classes (hours)	lectures (hours)	seminars + practical classes (hours)
Anatomy	15	90	15	90
Histology and Embryology	15	40	15	40
Biology and Parasitology	15	45		
Medical Chemistry	14	46		
Manual Training for Dentistry	0	30		
Conservative Dentistry (covering Prevention)			6	9
Medical Informatics	4	27		
Sociology of Medicine			30	30
Modern Language (French, German or Russian)	0	30	0	30
Latin	0	30	0	30
Physical Training	0	30	0	30

Second Year

Subject	1 st (autumn) term		2 nd (spring) term	
	lectures (hours)	Seminars + practical classes (hours)	lectures (hours)	seminars + practical classes (hours)
Biochemistry	40	45	40	25
Biophysics			0	45
Cytophysiology	0	45		
Physiology	30	50	35	55
Physiology of the Masticatory System			0	33
Immunology			19	23
Foundations of Resuscitation			0	8
Dental Materials	8	22		
Preventive Dentistry	5	33		
Conservative Dentistry	15	0		
Modern Language (French, German or Russian)	0	30		
English for Dentistry	0	30	0	30
Introduction to Dentistry			0	45
Physical Training	0	15	0	15

Third Year

Subject	1 st (autumn term)		2 nd (spring) term	
	lectures (hours)	Seminars + practical classes (hours)	lectures (hours)	seminars + practical classes (hours)
Pathology	30	30	15	30
General Surgery			15	45
Oral Surgery			0	30
General Medicine	30	45	0	45
Pharmacology			0	30
Hygiene and Epidemiology	0	30	0	30
History of Medicine	15	15		
Medical Microbiology	22	68		
Pathophysiology	0	45	15	45
Phantom Course in Prosthodontics			0	38
Prosthodontics			0	15
Medical Psychology	0	30		
Dental Radiology	5	0	0	10
Conservative Dentistry	30	45	0	45
English for Dentistry	0	30	0	30
Philosophy	30	30		

Fourth Year

Subject	1 st (autumn) term		2 nd (spring) term	
	lectures (hours)	seminars + practical classes (hours)	lectures (hours)	seminars + practical classes (hours)
General Surgery	0	30		
Oral Surgery	15	65	0	70
General Medicine	0	35	15	30
Infectious diseases			0	30
Dermatology			0	30
Laryngology	0	45		
Ophthalmology	0	15		
Paediatrics			15	45
Medical Ethics			16	14
Pharmacology	15	45		
Periodontology			0	30
Phantom Course in Prosthodontics	0	37		
Prosthodontics	15	0	15	30
Dental Radiology	15	35		
Conservative Dentistry	10	60	0	60
Paediatric Dentistry	20	0	0	36

Fifth Year

Subject	1 st (autumn) term		2 nd (spring) term	
	lectures (hours)	seminars + practical classes (hours)	lectures (hours)	seminars + practical classes (hours)
Anaesthesiology	10	20		
Health Care Organisation	10	20		
Physiology of Pregnancy and Labour	5	10		
Neurology	0	30		
Psychiatry	0	15		
Forensic Medicine	0	15		
Medicine of Disasters	20	30		
Clinical Pharmacology			5	10
Conservative Dentistry	5	45	0	45
Periodontology	15	30		
Prosthodontics	15	90	0	90
Oral and Maxillofacial Surgery	15	80	0	85
Dental Radiology			0	10
Paediatric Dentistry	0	49		
Orthodontics	9	61	0	60

Section: 5.1 Name of the course: Biochemistry

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

Name: Prof. Anna Baraczyk-Kuma

Department of Biochemistry

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e-mail: akuzma@amwaw.edu.pl fax: (22 48) 658 06 79

An introductory paragraph:

Proteins: structure, properties, separation, function; enzymes: properties, kinetics, regulation; biologic oxidation: mitochondrial electron transport, oxidative phosphorylation, free radicals, tricarboxylic acid cycle; DNA and RNA structure, chromatin, DNA replication, mutation, repair, transcription, splicing, translation, antibiotics, interferon, viruses, control of gene expression, genetic diseases, genetic engineering, gene therapy, cancerogenesis; carbohydrates: glycolysis, pentose phosphate pathway, gluconeogenesis, glycogen metabolism, glycoproteins; lipids: fatty acid and acylglyceride metabolism, phospholipids, glicolipids, cholesterol, steroid hormones, bile salts; amino acids: degradation and biosynthesis, disposal of nitrogen, urea cycle; synthesis and breakdown of hormones, nutrition, digestion, vitamins, membrane structure and function, blood: plasma proteins, haemoglobin, haeme synthesis and breakdown, acid-base balance; tissue metabolism: kidney, liver, brain; biotransformation, xenobiotics, metabolism of ethanol, integration of metabolism.

Primary Aims:

Understanding of macromolecule synthesis and degradation, integration of metabolism.

Main objectives:

proteins and enzymes

nucleic acids

lipids

carbohydrates

hormones

nutrition

digestion

biotransformation
tissue metabolism
regulation of metabolism.

Hours in the Curriculum (two semesters):

Total: 150 hours

Lectures: 80 hours

Seminars: 40 hours

Laboratory practise: 30 hours

Methods of learning/teaching:

Lectures, discussion during seminars and laboratory classes, experiments during laboratory classes, video films.

Assessment methods:

Intermediate examinations-written, oral; final exam-multiple choice test (MCQ).

Strengths:

Lectures, laboratory classes

Weaknesses:

Students' groups too big

9/10. Innovations and Best Practices.

Plans for future changes:

Changes in the laboratory classes-new methods and new equipment.

Section: 5.2.2 Name of course: Biophysics

Head of Department: Professor Henryk Kowalski MD, PhD

Department of Biophysics

Address: 02-004 Warsaw, ul. Chałubińskiego 5

tel.: (48 22) 628 78 46

An introductory paragraph

This course is organised during the 2nd year, and is intended to give students the basic knowledge and understanding which will later serve as a foundation for basic biological and medical sciences, such as physiology and biochemistry.

Primary Aims

To present the physical structure of biological systems (at a molecular and cellular level, and at the level of the organism), and their functions.

To familiarise students with physical diagnostic and therapeutic methods, and the functioning of medical apparatus.

Main objectives:

biophysics of membrane transport

biophysics of hearing

biophysics of vision

biophysical aspects of ionising radiation, isotopes

lasers in medicine

computers in medicine

ultrasound

Hours in the Curriculum

Seminars: 14 hours

Practical classes: 31 hours

Method of learning / teaching

Seminars in groups of approx. 12 students.

Practical classes in groups of 2 – 3 students, with 4 – 5 such groups supervised by one teacher.

Assessment methods

Evaluation of students' knowledge during seminars and practical classes.

Class examination at the end of the course.

Section: 5.2.3 Name of course: Medical Chemistry

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

Name: Dr Elbieta Hejchman

Department of Medical Chemistry

Address: 02-007 Warsaw, ul. Oczki 3

e-mail: ehajchman@bibl.amaw.edu.pl fax: (22 48) 628 06 79

An introductory paragraph:

This is the Course in Medical Chemistry for 1-st year students of the Faculty of Medicine/Dentistry.

Primary Aims:

This is a preparatory course for Physiology, Biochemistry, Pharmacology and Clinical Analysis.

It is aimed at:

the determination and identification of the constituents of body fluids (cations, anions and buffers) as well as analysis of the effects of the components of the fluids on osmotic pressure.

study of structures and properties of natural components of the human body involved in biochemical processes, such as:

lipids

sugars

amino acids

proteins

and qualitative and quantitative analysis of above mentioned compounds.

3. Main objectives:

analytical procedures employed in Medical Chemistry

inorganic constituents of blood and body fluids

qualitative analysis

quantitative analysis

acid-base balance

chemical kinetics

structure and chemical properties of selected groups of organic compounds:

characteristic reactions of alcohols, phenols, ketones, acids, esters, amines
lipids
sugars
aminoacids
proteins
heterocyclic compounds and nucleic acids
chromatography

Hours in the Curriculum:

Lectures: 10 hours

Laboratory classes: 50 hours

Methods of learning/teaching:

Lecture-10h, given by Professor Jerzy Kossakowski

13 laboratory classes once a week in the laboratories of the Chair and Department of Medical Chemistry for small groups (8-10 students), first students attend a seminar, then they work individually at the lab table. They are required to describe performed lab experiments and present the report to the assistant.

Assessments methods:

Every week students write 15 min. preliminary tests (1-6 points) and present lab report (2 points). Volunteers may also obtain 1-2 points for oral presentation during the seminar. They are obliged to obtain 55% of the total score to be classified.

Strengths:

Attending the Course makes it is easier to overcome the barrier between high school and academic classes. Students are familiarised with laboratory equipment and apparatus (e.g. pH-meter, polarimeter, Specol) used in following courses.

Weaknesses:

Insufficient number of lecture hours. There is a need for more contemporary lab equipment.

Innovations and Best Practices:

Continuous upgrading of lab equipment such as burettes, automatic pipettes, new digital pH-meter and combined glass/calomel electrode.

Plans for future changes:

We are planning to co-operate tightly with Biochemistry, Pharmacology and Laboratory Diagnostics.

Section 5.2.4 Name of course: Introduction to Computer Science

Head of Department: Prof. Robert Rudowski ScD, PhD

Department of Computer Science for Medicine

Address: 020-972 Warsaw, ul. Banacha 1

e-mail: robert.rudowski@amwaw.edu.pl

fax.(48 22) 658 29 97

1. An introductory paragraph:

This course is held in the autumn term of the 1 st year, and serves to prepare students to use computers as a tool in their later work.

2. Primary Aims:

To teach students the basics of computer skills and introduce them to programmes which may be useful in medicine and dentistry (e.g. editors, medical databases, education programmes, literature searches, Internet).

3. Main objectives:

medical databases and how to use them

decision making, clinical algorithms

hospital information systems

computerised case histories

digital imaging

simulation of pathological processes; teaching aids

programmes used in the dental practice

dentistry in the Internet

4. Hours in the curriculum:

Lectures: 4 hours

Practical classes: 27 hours

5. Method of learning/teaching:

Lectures

Practical classes in small groups, comprising of a short introduction and practical training of each student at a computer.

6. Assessment methods:

Active participation in classes, and practical test of computer skills at the end of the course

Section: 5.3 Name of course: Biology and Parasitology

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

Name: Dr Henryk Rebandel

Department of General Biology and Parasitology

Address: 02-004 Warsaw, ul. Chałubińskiego 5

e-mail: hreband@ib.amwaw.edu.pl fax: (22 48) 628 53 50

An introductory paragraph:

The course taught is named "Biology with Parasitology" and consist of selected topics, focused on two branches: parasitology (50%) and genetics (50%), held during the 1st year of study (autumn semester). The main objective of teaching is to introduce future dentists to a causative, biological way of thinking.

Primary Aims:

Parasitology:

To widen students' knowledge of parasites of different specificity to man, with special attention paid to oral parasites. Explanation of the diverse biological backgrounds of pathogenesis of parasitic diseases in man.

Genetics:

To widen students' knowledge of human heredity, with special attention paid to the biological basis and mechanisms of genetic diseases and congenital defects.

Main objectives:

Parasitology:

Parasitism as one of the means of co-existence between species. Diversity of routes and conditions necessary for infection with parasites. Host–parasite interactions as the basis for pathogenesis in parasitic diseases. Overview of biology and life cycles of parasites of significance to human. Biological basis for epidemiology and prevention of parasitic diseases.

Genetics:

Principles of heredity. Genetic mechanisms and their environmental dependence.

Molecular and physiological background of selected human genetic diseases and congenital defects. Classical and molecular methods used in genetic analysis.

Methods of genetic diagnosis and genetic counselling in medicine. Introduction to human ecology and ecogenetics.

Hours in the Curriculum:

Lectures: 15 hours (10x1,5 school hours, once a week)

Practical classes: 45 hours (22x2 school hours, twice a week).

Method of learning/teaching:

Lectures, laboratory exercises and seminars.

Assessment methods:

Students are assigned passing grades on the grounds of regular class attendance, active participation in classes and at least satisfactory performance in their oral class examination.

Strengths:

Possibility for future dentists to learn the current biological background of selected areas of greatest significance to medical sciences.

Weaknesses:

Tight packing of the programme because of time limitations

Innovations and Best Practices:

Introduction of audiovisual methods (department's library of films).

Plans for future changes:

Consecutive up-dating of the teaching programme.

Visitors Comments

Please see comments following Section 7.

Section 6.1 Name of course: Anatomy

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

Name: Bogdan Ciszek

Department of Anatomy

Address: 02-004 Warsaw, ul. Chałubińskiego 5

e-mail: bciszek@embryo.ib.amwaw.edu.pl fax: (48 22) 629 52 83

An introductory paragraph:

Anatomy is the basic subject taught during the whole of the 1st year, implementing practical and theoretical knowledge.

2/3.Primary Aims:

To acquaint students with the structure and functions of the human body:

to acquaint students with the detailed structure of the head and neck

to acquaint students with the detailed structure and the most important functions and pathology of the organ of mastication.

to acquaint students with the basics of development and congenital disorders of the head and neck, giving due consideration to the organ of mastication.

to acquaint students with descriptive anatomy of the human body

to acquaint students with topographical anatomy of the human body

4. Hours in the Curriculum;

Lectures: 30 hours

Dissecting practice: 180 hours

Methods of learning/teaching:

Lectures, seminars, dissection of the human body by students under an assistant's supervision, presentations of specimens and anatomical models, presentation of different imaging techniques, presentation of anatomical and clinical videos, presentation of digital anatomical image and text bases placed on the local server.

Assessment methods:

The main ways of assessing the knowledge of students are oral assessment of knowledge during each dissecting session, take-home exams, oral and practical

exams at the end of each topic, practical exams at the end of term, final practical and oral exam.

7. Strengths:

Excellent staff (lecturers)

Very well prepared technical and educational aids

Weaknesses:

limited number of dissecting rooms

limited number of anatomical specimens

expensive textbooks and anatomical atlases

Innovations and Best Practises:

education in clinical anatomy in a specially separate form

education in diagnostic anatomy with interactive digital anatomical bases of images and texts placed on the local server, which are especially prepared by the staff of our Department.

stimulation to take an interest in anatomy education by entering a special anatomical competition – Scapula Aurea.

Plans for future changes:

Education in anatomy and microanatomy using visual tracks and fibroscopy

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Section: 6.3 Name of course: Histology and Embryology

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

Name: Professor Stanisław Moskalewski, M.D., Ph.D.

Department of Histology and Embriology

Address: 02-004 Warsaw, Chałubińskiego 5

e-mail: smosk@ib.amwaw.edu.pl fax.(48 22) 629 52 82

An introductory paragraph:

The course in Histology and Embryology is taught during the two first semesters of the dental curriculum. Histology allows students to study the theoretical and practical aspects of the microscopic structure of cells, tissues and organs, with particular emphasis on the teeth and oral cavity. The structural studies of tissues and organs are implemented with basic information regarding their function, with particular emphasis on modern cell biology. The course in Embryology allows students to study the medical aspects of reproduction, fertilization and development of human organisms, with emphasis on the development of the teeth and the maxillofacial region.

Primary Aims:

comprehension of cytophysiology and microscopic structure of cells, tissues and organs

forming the human body.

comprehension of the developmental processes leading to the formation of the human

body from a fertilised ovum.

Main objectives:

Comprehension:

ultrastructure of the cell and the functions of the different organelles

different types of tissues—structure and function

microscopic anatomy of the main organs

cytophysiology of particular tissues and organs

development, structure and cytophysiology of the teeth

human embryonic development

microscopic recognition of main tissues and organs

Hours in Curriculum:

Lectures: 30

Practical classes: 80 hours

Method of learning/teaching:

The lectures are intended to provide students with a general overview of each topic, with particular emphasis on the newest achievements in the field. During the practical classes, students evaluate microscope specimens, studying the structure of each type of tissue and organ, assisted by an academic teacher. Depending on the topic, part of the practical class has the form of a seminar. During each practical class, the teacher evaluates the preparation of students by oral assessment or short tests. Each practical class is preceded by a short lecture demonstrating the specimens, which will be studied.

Assessment methods:

During the course in Histology and Embryology there are partial examinations:

General Histology – at the end of the 1st semester – includes a practical examination (slide test) and an oral examination.

Embryology – at the beginning of the 2nd semester – oral examination

Microscopic Anatomy – at the end of the 2nd semester – includes a practical examination (slide test) and an oral examination

After students have completed the entire course and passed successfully all three partial examinations, they are allowed to take the final examination, which consists of a practical examination (slide test) and a written test of 100 multiple choice questions.

Strengths:

broad range of topics covered in the practical classes

mainly slides of specimens of human origin

updated knowledge given during lectures

biyearly updated textbooks written by the Faculty teaching staff.

Weaknesses:

not enough small classrooms

some microscopes require replacement

Innovations and Best Practices:

students are encouraged to use English textbooks as supplementary material

students are encouraged to use video tapes with a course of Histology available at the Department's Library

students are given short summaries from the literature covering the newest developments, not yet included in textbooks
details of the curriculum are available at the [www](#) pages of the Department

Plans for future changes:

Improvement of the technical infrastructure, which would allow access to multimedial histology programs during classes.

Section: 6.3 Name of course: Cytophysiology

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

Name: Prof. Stanisław Moskalewski, M.D., Ph. D.

Department of Histology and Embriology

Address: 02-004 Warsaw, Chałubińskiego 5

e-mail: smosk@ib.amwaw.edu.pl fax: (48 22) 629 52 82

An introductory single paragraph:

The course in Cytophysiology is conducted during the third semester of the dental curriculum. The course allows students to learn the basic mechanisms responsible for regulation of various cell functions and differentiation in relation to cell structure and biochemical processes. Special emphasis is laid on understanding the cell pathophysiology. The course is implemented with extended information on cellular physiology and regulatory mechanisms of tooth development.

2. Primary Aims:

comprehension of basic phenomena responsible for cell and tissue development and functions at a structural and molecular level.

comprehension of molecular basis of different diseases and developmental disorders.

3. Main objectives:

Comprehension:

basic methods used in studies of tissue and cell function.

structure and function of the cell membranes

cell communication and signal transduction

regulation of cell proliferation

regulation of cell differentiation and organogenesis

regulation of programmed cell death and ageing

regulation of cytoskeletal organisation and cell motility

significance and possible application of current knowledge on cell biology in diagnostics and treatment.

4. Hours in the curriculum:

Seminars: 15 hours

Practical classes: 30 hours

Methods of learning/teaching:

The seminars are intended to provide students with a general overview of each topic, with particular emphasis on the newest achievements in the field. During the practical classes students are assisted by an academic teacher. Teachers present and explain schemes and charts concerning relevant cellular and molecular phenomena. When necessary the students evaluate microscopic slides and micro- or electronograms. In some cases the students perform simple experiments by themselves. During each practical class, the teacher evaluates the students by oral assessment or short tests.

Assessment methods:

Following completion of the entire course students undergo a final oral or multiple-choice examination.

7. Strengths:

the curriculum covers the most important topics of cell biology and physiology
updated knowledge given during the seminars
the materials presented to the students (schemes and charts) are updated every year
faculty teaching staff edits a textbook that is regularly updated.

Weaknesses:

not enough small classrooms
inability to perform more sophisticated experiments and demonstrations during regular practical classes

Innovations and Best Practices:

Improvement of the technical infrastructure, which would allow access to multimedial teaching programs (video, Internet) during practical classes.

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Section: 6.3 **Name of course: Immunology**

Head of Department: Professor Marek Jakóbiński MD, PhD

Department of Immunology

Address: 02-004 Warsaw, ul. Chałubińskiego 5

e-mail: mjakobis@ib.amwaw.edu.pl

tel.: (48 22) 622 63 06

An introductory paragraph

This course is held during the 2nd year.

Primary Aims

To introduce students to the functioning of the immune system, mechanisms of immune response, the role of immunological processes in the pathogenesis of specific diseases, and methods of evaluating the functioning of the immune system.

Main objectives

antibodies – structure, function, monoclonal antibodies

the immune response, antigens, T cells, lymphocyte activation

complement system, activation

hypersensitivity

immunological aspects of transplantation

immunological aspects of neoplasms

autoimmunity

AIDS

Hours in the Curriculum

Lectures – 19 x 1 hour

Seminars – 7 x 2 ½ hours

Method of learning / teaching

Lectures, seminars

Assessment methods

Evaluation of students' knowledge during seminars.

MCQ examination at the end of the course

Section 6. 2 Name of course: Physiology

Head of Department: Professor Ewa Szczepańska-Sadowska MD, PhD
Department of Experimental and Clinical Physiology
Address: 00-927 Warsaw, ul. Krakowskie Przedmieście 26/28
e-mail: eszs@amwaw.edu.pl fax: (22 48) 826 45 86

The introductory paragraph

The students study human physiology during the second year of the course in the Department of Experimental and Clinical Physiology.

Primary Aims:

to give students knowledge of mechanisms responsible for normal function of the human body

to acquaint the students with the physiological basis for prevention, diagnosis and treatment of oral diseases.

Main objectives:

During the course of physiology the students should learn with understanding: the properties of various types of cells and basic mechanisms regulating their function

physiology of the blood; blood cells, hemostasis and coagulation

physiology of the skeletal and smooth muscles

physiology of the cardiovascular system

physiology of the respiratory system

physiology of the central and peripheral nervous system

mechanisms responsible for water-electrolyte and acid base balance, including kidney physiology

mechanisms responsible for regulation of metabolism and gastrointestinal functions

hormonal regulation of body functions with special emphasis on the local tissue growth factors

mutual interactions between neural and hormonal mechanisms in regulation of body functions

Hours in the Curriculum

Total: 180 hours

Lectures: 75 hours

Seminars: 45 hours

Practical classes: 60 hours.

Methods of learning / teaching:

Up-to-date knowledge in physiology is given to the students during lectures. During seminars the most difficult issues are discussed. Students are actively participating in the seminars. During practical classes they perform simple experiments and measure physiological parameters. They also use computer programs to observe changes in function of cells, organs or systems during simulation of action of some specific disturbing factors, or pathological disorders. Projection of scientific movies is also used to illustrate some physiological processes. Projection of slides is used during lectures and seminars.

Assessment methods:

Students are informed in advance which material they should prepare for seminars and practical classes. Knowledge of a particular section of physiology is tested during summing-up seminars during which the most difficult issues are clarified once more. The final examination is organised in the form of a multiple choice test.

Strengths:

Very good experienced and highly qualified teaching team. Good equipment.

Weaknesses:

Not enough space for teaching, too many students in the classroom.

Innovations and Best Practices:

Each year the program of teaching is adjusted to the up-to-date state of knowledge and new teaching equipment, computer programs and movies are introduced.

Plans for future changes:

It is planned to introduce a new seminar, specifically summarising effects of inappropriate endocrine functions on development and preservation of dentition.

Section: 6.2 Name of course: Pathophysiology

Head of Department: Prof. Sławomir Maśliński MD, PhD

Department of Pathophysiology

Address: 00-325 Warsaw, ul. Krakowskie Przedmieście 26/28

e-mail: smaslinski@hotmail.com

fax.: (48 22) 82 64 85

An introductory paragraph

This course is held during the 3rd year. Basing on the course in physiology, it introduces the student to changes in physiological processes occurring during disease.

Primary Aims

To introduce students to functional changes occurring during disease, to changes in physiological processes leading to disease, and to changes resulting from disease. The course aims to integrate physiology with clinical disciplines and prepare students for the clinical part of the curriculum.

The course covers general pathophysiology (genetics, metabolic disorders, effect of environmental factors, ageing, biological rhythms) and pathophysiology of specific organ systems.

Main objectives

cardiovascular disease (heart failure, heart defects, ischaemic heart disease, myocardial infarct, arrhythmias, cor pulmonale, hypertension, hypovolaemic shock, pathophysiology of oedema)

respiratory disease

gastrointestinal disease (peptic and duodenal ulcer, pathophysiology of the liver – jaundice)

haematological disease (anaemia, coagulation defects, changes in the white blood cells, leukaemias)

renal disorders, renal failure

endocrine disease (hypothalamus – pituitary gland – adrenal gland, thyroid)

allergies.

Hours in the Curriculum

Lectures: 15 hours

Seminars and practical classes: 45 hours

Method of learning / teaching
Lectures, seminars and practical classes.

Assessment methods

Class exam at the end of the course.

Section: 6.2 Name of course: Physiology of the Masticatory System.

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

Head of department: Dr n. med. Aleksander Remiszewski

Department of Paediatric Dentistry

Address: 00-246 Warsaw, ul. Miodowa 18

fax: (48 22) 635 11 03

1. An introductory paragraph.

This course introduces 2nd year students to the development of the masticatory system, its anatomy and physiology, as a preparation for clinical practice. The different parts of the course are taught at the Department of Paediatric Dentistry, the Department of Orthodontics and the Department of Prosthodontics.

2. Primary Aims.

The introduction of students to the development of the masticatory system from the embryonic phase.

The teaching of the anatomy, histology and physiology of the masticatory system.

3. Main objectives.

Department of Paediatric Dentistry.

the primary and secondary dentition; anatomy, histology and physiology of the teeth, periodontium and oral mucosa.

introduction of students to elements of clinical examination in dentistry

(examination of the oral cavity, with particular emphasis on the dentition and the periodontium; pulpal and periapical responses of healthy teeth to stimuli.

salivary glands and saliva – physiology, chemistry.

Department of Orthodontics.

concepts of growth and development. The nature of skeletal growth and development occlusion.

sites and types of growth in the craniofacial complex.

cartilage as a determinant of craniofacial growth (cartilage replacement).

skeletal sutures.

bone apposition and resorption.

Practical exercises:

Methods for studying growth and development in the craniofacial complex:

cranial measurements

cephalometric measurements

growth pattern, variability and timing

stages of occlusal development

Estimation and assessment of skeletal age based on the developmental stages of the bones of the hand and wrist.

Estimation of skeletal age by comparing the degree of ossification of the wrist, hand and finger bones.

orofacial musculature

facial muscles

muscles of mastication

Practical exercises:

Methods of studying orofacial musculature.

the normal development of oral function:

breathing, swallowing (suckling) and speech.

methods for studying the airway

swallowing pattern

speech

the temporomandibular joint – anatomy and physiology

cartilaginous head of the condyle as a growth centre

relationships between the TMJ, musculature and function.

functional relationships of the stomathognathic system, relationships of the mandible to maxilla, basic habitual mandibular positions.

occlusion – tooth contacts, occlusal concepts. Articulation – occlusal glidings.

functions of the masticatory system, parafunction and dysfunctions.

functional analysis and registration of mandibular movements.

masticatory function, characteristics, chewing efficiency tests.

Practical exercises:

anamnesis and clinical examination: occlusion, function, parafunction, mandibular positions and movements (pairs of students mutually).

measurement of the vertical face height (subnasale to pogonion distance) in

habitual intercuspal (centric) position and in the rest position. The clearance space assessment.

analysis of the mandibular and maxillary tooth contacts in 4 habitual positions – intercuspals, protrusive, left and right lateral on working and balancing sides.
classification of occlusal categories: I unilateral balanced, II bilateral balancing and III anterior segment or canine mutually protected occlusion.
complete data from examinations in questionnaire.

4. Hours in the curriculum.

Seminars and practical training 30 hours

5. Method of learning/teaching.

Seminars

Demonstrations

Practical training.

6. Assessment methods.

Evaluation of theoretical knowledge and practical skills during each session. MCQ exam in physiology at the end of the 2nd year, where 25% of questions are related to physiology of the masticatory system.

7. Strengths.

Introduction of elements of diagnostic investigation as the first contact of 2nd year students with patients in the clinic.

8. Weaknesses.

Large student groups.

9. Innovations and Best Practices.

seminars with active participation of students.

introduction of elements of clinical diagnostics in the practical part.

10. Plans for future changes. Introduction of modern audiovisual methods.

Visitors Comments

Please see comments following Section 7.

Section 7.1 Name of course: Pharmacology

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

Name: Dr hab. med. Ewa Widy-Tyszkiewicz, M.D., P.h.D.
Department of Experimental and Clinical Pharmacology
Address: 00-927 Warsaw, ul. Krakowskie Przedmieście 26/28
e-mail: aczlonk@plearn.edu.pl fax: (48 22) 826 21 16

An introductory paragraph:

The course is offered in the spring term of the third year and in the autumn term of the fourth year of the curriculum.

Primary Aims:

To provide a grounding study of pharmacology, i.e. effects on the human body by altering biological function in health and disease, and therapeutic usefulness, indications and contraindications, side effects and toxicity of drugs.

Main objectives:

To provide student with the updated information on the mechanism of action of drugs and clinical pharmacology:
pharmacokinetics and pharmacodynamics
drug used in chemotherapy
drug used in gastrointestinal diseases
drug used in cardiovascular diseases
drug influencing the central and peripheral nervous systems
local and general anaesthetics
drug used in dental practise
prescribing and prescription writing

Hours in the curriculum:

Seminars: 30 (spring semester)
Lectures: 15 (autumn semester)
Practical Classes: 45 (autumn semester)

Method of learning/teaching:

During the course students are expected to participate in seminars and practical classes on a previously assigned topic.

Assessment methods:

On completion of each term students are assessed on the grounds of their regular attendance at seminars, their active participation and at least satisfactory result of an oral assessment.

Strengths:

All students are expected to take final tests in prescribing and prescription writing.

Weaknesses:

Comparatively small total quantity of hours designed for the pharmacology course

Innovations and Best Practises:

The students who on completion of the course have obtained very good results are given credit, and are not expected to participate in the final examination.

Plans for future changes:

The Department of Experimental and Clinical Pharmacology is planning in future to introduce MCQ tests for examinations.

Section 7.1 Name of course: Clinical pharmacology for Dentists

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

Head of Department: Professor Janusz Piekarczyk MD, PhD
2nd Department of Maxillofacial Surgery
Address: 02-005 Warsaw, ul. Lindleya 4
e-mail:chirszcz@waw.1comnet.pl fax. (48 22) 621 24 02

An introductory paragraph:

This course takes place in the autumn term of the 5th year and completes the education in pharmacology.

Primary Aims:

to prepare students for rational pharmacotherapy.
to introduce students to new materials used in dental practice.

Main objectives:

antibiotics in dental practice
pharmacotherapy of dento-facial infections
dental materials

Hours in Curriculum:

Lectures: 10 hours
Practical training: 5 hours

Method of learning/teaching:

Lectures
Practical training at the II Clinic of Maxillofacial
Surgery

Assessment methods:

Assessment is based on attendance at lectures and practical classes. An oral assessment is held at the end of the course.

Section:7.2 Name of course: Medical Microbiology

Head of Department: Prof. Mirosawuczak MD, PhD

Department of Medical Microbiology

Address: 02-004 Warsaw, ul. Chałubińskiego 5

e-mail: mluczak@ib.amwaw.edu.pl

fax.: (48 22) 628 27 39

An introductory paragraph

This course is held during the 1st term of the 3rd year, and serves as an introduction to microbial infection and prevention and therapy of infectious diseases.

Primary Aims

To give students a theoretical knowledge and understanding of microbial infection and infectious diseases, including disease transmission, sterilisation, cross infection control and anti microbial therapy.

Main objectives

microorganisms – classification, morphology, physiology, properties

pathogenesis of infection, host response

sterilisation, disinfection, cross infection control

microbiological diagnosis

anti microbial therapy

oral microbiology

Hours in the Curriculum

Lectures – 22 hours

Practical classes – 68 hours

Method of learning / teaching

Lectures, practical classes.

Assessment methods

Active participation in practical classes.

Class examination at the end of the course.

Section 7.3 Name of course: General Pathology

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

Name: Professor Aleksander Wasitutski, M.D., Ph.D.
Department of Pathological Anatomy
Address: 02-004 Warsaw, Chaubińskiego 5
e-mail: alexwas@ib.amwaw.edu.pl fax: (48 22) 629 98 92

An introductory paragraph:

The course of General Pathology is taught during two terms (V-VI on the third year) of the Dental Curriculum.

General Pathology allows the students to study the theoretical and practical aspects of pathological processes and disorders, with particular emphasis on the maxillofacial region.

The autopsy and microscopic study understanding of diseases as up to date as possible.

Primary Aims:

comprehension of the microscopic structure of pathological changes of tissues.
comprehension of the relationship between diseases processes, their clinical symptoms and interpretation by clinical and pathologist.

Main objectives:

comprehension of microscopic recognition of main pathological changes of tissues, including vascular pathology, retrogressive change, hyperplasia and neoplasia, inflammation and repair; pathology of specific organs

comprehension of cytopathology of particular changes of tissues.

to prove sufficient details about common important diseases.

to emphasise the origin of functional and structural changes (aetiology and pathogenesis).

to consider the diseases in all its bearings:

aetiology

pathogenesis

morphological changes

clinical symptoms

prognosis

to give proper interpretation of morphological investigations

Hours in the curriculum:

Lectures: 45 hours

Practical Classes: 60 hours (histopathology 45 hours, autopsy classes 15 hours)

Method of learning/teaching:

Lectures

The lectures are intended to provide students with a general overview of each topic.

The newest achievements on each topic are emphasised

Practical Classes:

Autopsy classes:

Part of these practical classes has the form of a seminar. After the seminar students actively take part in autopsy and make the final diagnosis.

Microscopic classes:

Each practical microscopic class is preceded by a short. lecture. During practical classes students evaluate specimens microscopically studying the structure of each type of tissue disorders.

Strict correlation between lectures and practical classes is impossible. They only complement each other.

Self education is necessary.

Assessment methods:

There are four informal oral examinations during the course of General Pathology. When students complete the entire course and successfully pass all informal examinations they are allowed to take a final oral examination.

Strengths:

variety and multitude of microscopic specimens of human pathological disorders
variety and multitude of macroscopic specimens of human pathological disorders
variety of slides of specimens demonstrating human pathological disorders
up-to-date knowledge is given during seminars and lectures

Weaknesses:

some microscopes require replacement
not enough small classes

Innovations and Best Practises:

students are encouraged to use English textbook and scientific papers as supplementary material
students are encouraged to use the video- tapes which are available in our Department

Plans for future changes:

To improve the technical infrastructure so as to allow for access to multimedial pathology programs during the class.

Visitors Comments

The undergraduate programmes in Warsaw are delivered by a very large number of individual departments each teaching a separate course within the programme. The visitors were presented with information on a total of 15 departments contributing to the general areas of Biological Sciences including anatomy and physiology. Of these it was only possible to visit the departments of computer science, histology and embryology and medical microbiology.

With the exception of computer science, the teaching time and emphasis allocated to these subjects are grossly in excess of international norms. On the basis of the paperwork submitted there would appear to be considerable development and repetition in the teaching delivered by individual departments.

The teaching and laboratory facilities visited were excellent. All the teachers seen were enthusiastic and there is evidence that these courses are reviewed and modified on an annual basis. The visitors were pleased to see the attention given to teaching IT skills to undergraduates at an early stage in the course.

The visitors question whether the emphasis and level of detail taught in these courses is appropriate. This is not a matter of comparing odontology and stomatology. It is made a matter of prioritising information and promoting learning and understanding rather than teaching factual knowledge. Throughout the world both medical and dental undergraduate education has evolved with an emphasis on the understanding of basic concepts and an introduction to life-long learning.

Recommendation

The undergraduate dental course in the totality of the biological sciences should be thoroughly reviewed. Consideration should be given to reducing the total time allocated, which would release more time for clinical practice, and the development of an integrated course that crosses departmental boundaries.

Section 8.1.1 Name of course: General Medicine

Head of Department: Professor Danuta Liszewska-Pfejfer MD, PhD

Department of Internal Diseases

Address: 02-005 Warsaw, ul. Lindley'a 4

fax: (48 22) 628 25 96

Head of Department: Professor Wojciech Rowinski MD, PhD

Department of General Surgery and Transplantology-Institute of Transplantology

Address: 02-006 Warsaw, ul. Nowogrodzka 59

e-mail: klinika@txsurg.edu.pl fax: (48 22) 628 00 88

An introductory paragraph:

At the Faculty of Dentistry general medicine is taught during the third and fourth year of study. The Department of Internal Diseases is responsible for third year students. Their teaching programme lasts 120 hours divided in to 30 hours of lectures, 30 hours of seminars and 60 hours of bedside practical exercises. During the fourth year, the course in general medicine is continued at the Department of Immunotherapy and Internal Diseases of the Institute of Transplantology. This part of the course lasts 80 hours, comprising of 15 hours of lectures, 25 hours of seminars and 50 hours of practical exercises.

Primary Aims:

Primary teaching aims are to make students familiar with basic symptoms, physical examination and diagnostic procedures in selected internal diseases

Main objectives:

The programme for the third year students concentrates on basics of cardiovascular medicine, gastroenterology, and endocrinology with special attention paid to topics listed below:

Cardiology:

Atherosclerosis and its complications, diagnosis and treatment of ischaemic heart disease.

Acute coronary syndromes, myocardial infarction, heart failure. Pathophysiology and treatment principles of hypertension. Myocarditis, treatment and prevention of infective endocarditis, heart valve disease, heart defects, cardiorespiratory arrest, CPR, arrhythmias, cardiological problems in the dental office.

Endocrinology:

Diabetes mellitus, diseases of the thyroid, the parathyroid glands, the adrenal cortex, the pituitary gland.

Gastroenterology:

Peptic ulcer, cirrhosis, acute abdomen, diseases of the small and large intestine, diseases of the pancreas.

During the fourth year the course focuses on:

Respiratory diseases:

Bronchitis, asthma, pneumonia, pleuritis, cor pulmonale, neoplasms of the respiratory system.

Haematology:

Bleeding disorders, anaemia, haematological malignancy, leukaemia.

Gastrointestinal diseases:

Neoplasms

Renal disorders

Renal stones, neoplasms, glomerulonephritis, pyelonephritis, renal failure, dialysis and renal transplantation

Jaundice

Lymphadenopathy

Collapse, chest pain, dyspnoea (differential diagnosis, management)

Allergies, anaphylaxis

Acquired immunodeficiency, AIDS

Hours in the Curriculum:

Third year students spend 6 weeks at the Department of Internal Diseases: 3 weeks in the autumn term and 3 weeks in the spring term. There are 15 hours of seminars and 30 hours of clinical bedside exercises (2 hours daily) within every week period. 30 hours of lectures are held only in the autumn term. Fourth year students spend 5 weeks at the Department of Immunotherapy and Internal Diseases: 3 weeks in the autumn term and 2 weeks in the spring term. During these periods they have a 1-hour seminar and 2 hours of clinical bedside exercises daily. 15 hours of lectures are held in the spring term.

Methods of learning/teaching:

Each day begins with a seminar for a student group of 16-20 persons followed by two hours of practical Bedside exercises in subgroups of up to 4 students. Practical exercises are supervised by an experienced Assistant (one for each subgroup). Students obtain medical histories and examine patients and try to establish a diagnosis. They are asked to plan diagnostic procedures and lab tests. The assistant

Supervises the way physical examination and medical history are conducted and helps students in drawing the right conclusions from existing data. Third year students spend 3 days in the Intensive Care Unit and become familiar with acute coronary syndromes and resuscitation standards. The lectures are held once a week in the autumn term for all third year students and in the spring term for fourth year students.

Assessment methods:

The way in which students conduct interviews and physical examinations is supervised by the assistant.

Every 2 or 3 week teaching period in each semester is followed by an oral test conducted by the head of the department or a senior physician. Students are also asked to express their opinion about seminars and practical exercises. Following completion of the course, students sit a multiple –choice examination.

Strengths:

Students meet a large variety of patients with internal diseases ranging from chronically ill to acutely sick. They have a chance to visit the Intensive Care Unit. Because of small student groups their learning process is tightly supervised by assistants during practical exercises. There is also a possibility to broaden knowledge at extracurricular evening seminars, the topics of which are chosen by students. Much attention is paid to internal disease cases, which future dentists may encounter in their practice. Students are invited to take part in research and scientific programs conducted by the Departments.

Weaknesses:

Unfortunately there is no general medicine textbook or monograph for dentists and dental students, which would underline problems relevant in the dental practice.

Innovations and Best Practises:

The Department has introduced additional extracurricular evening seminars for students interested in selected aspects of general medicine. Students participate actively in research projects conducted by the Department. Periodic seminars on

the prevention of infective endocarditis and cardiological problems in dental practice are organised for students and young doctors.

Plans for future changes:

There are plans to edit a monograph for dentists and dental students, which would focus on medical problems likely to be encountered in the dental practice.

Section 8.1.2 Name of course: Paediatrics

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

Name: Professor Roma Rokicka-Milewska M.D., Ph.D.
Department of Paediatrics, Haematology and Oncology
Address: 00-576 Warsaw, ul. Marszałkowska 24
fax: (48 22) 621 53 62

An introductory paragraph:

This course is offered to fourth year students in the spring term and is based on lectures, seminars and bedside classes.

Primary Aims:

The aims of the course are to review the pathology of the respiratory, alimentary, immunological and haematopoietic systems as well as mastering the physical examination of paediatric patients (infants, children and adolescents).

Main objectives:

pathophysiology of the new-born
child development
the child nutrition
most common infectious diseases of childhood
disorders of the: respiratory, cardiovascular, gastrointestinal, urinary and endocrine systems (principles of the diagnosis and treatment)
lymphadenopathy
haematological and oncological diseases of childhood
stomatitis in children
life- threatening emergencies in the child patient

Hours in the Curriculum:

Lectures: 15 hrs

Seminars: 9 hrs

Bedside classes: 36 hrs

Method of learning/teaching:

The teaching is provided in small groups. Lectures and seminars are offered for groups of approximately 12 students whereas tutorials are run for two or three persons.

Assessment methods:

Assessment is done by mixture of intra-course evaluation and mandatory test at the end of the course.

Strengths:

Highly educated faculty members in a newly renovated department provide the teaching.

Weaknesses:

Relatively short duration of the course and a limited number of hours of instruction is considered a weakness.

10. Plans for future changes:

There are plans to make didactic films as an innovation to the teaching.

Section: 8.1.3. Name of course: Ophthalmology

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

Name: Joanna Olszewska, dr hab.n.med. Ewa Dróbecka-Brydak
Department of Ophthalmology
Address: 02-005 Warsaw, ul. Lindley'a 4
fax/tel.:(48-22) 628 41 87

1. An introductory paragraph:

The purpose of the course is to provide dental students with an understanding of basic ophthalmic problems. Fourth year students spend a week at the hospital and out-patient department of the Department of Ophthalmology during the autumn term.

Primary Aims.

A better understanding of the most important ophthalmic problems. Exposition of the role of external infections in eye diseases.

3. Main objectives:

eye trauma and emergency
first aid in ophthalmology
examination and interpretation of anterior chamber pathologies
examination of the eye fundus in different eye and systemic diseases.

4. Hours in the Curriculum.

Lectures,
Seminars
Practical training

5. Methods of learning/teaching:

The training is divided into theoretical and practical parts. The theory is presented during lectures and seminars (e.g. eye anatomy and physiology, cataract, glaucoma, retinal detachment, fundus in systemic diseases). Practical training includes visit during emergency duty, examination of patients and examination of the eye fundus.

6. Assessment methods:

Exam at the end of the course.

Section:8.1.4. Name of course: Laryngology.

Head of Department: Professor Andrzej Kukwa MD, PhD

Department of Otolaryngology

Address: 00-739 Warsaw, ul. Stepińska 19/25

e-mail: andrzejkukwa@usa.net.

fax.: (48 22) 41 91 36

1. An introductory paragraph:

This course is held during the 4th year in the autumn term, and lasts 3 weeks.

2. Primary Aims.

to reinforce knowledge of head and neck anatomy and physiology, with particular emphasis on the ear and upper respiratory tract.

to provide the knowledge necessary to recognise the most common ENT diseases, particularly those on the borderline between laryngology and oral medicine; basics of prevention and treatment.

3. Main objectives.

diseases of the nose and paranasal sinuses.

ENT anatomy and physiology.

diseases of the throat, larynx and salivary glands.

headaches, dizziness and neuralgia.

diseases of the ear.

ENT emergencies.

ENT malignancy, neck tumours.

physiology and pathology of the facial nerve.

swallowing disorders.

4. Hours in the Curriculum:

Seminars

Practical training.

5. Methods of learning /teaching.

The course comprises of theoretical and practical parts. The theory is presented during seminars. Practical training in groups of 2-3 students, and includes periods spent in the out-patient clinic and on emergency duty.

6. Assessment methods.

Exam at the end of the course.

Section 8.1.5. Name of course: Infectious diseases

Head of Department: Professor Jerzy Janeczko MD, PhD

Department of Infectious Diseases- Institute of Infectious and Parasitic Diseases

Address: 01 201 Warsaw, ul. Wolska 37

fax.:(48 22) 632 06 84

1. An introductory paragraph:

This course is held during the 4th year in the spring term and lasts 2 weeks

2. Primary Aims:

To familiarize students with the most common infectious diseases which a dentist may come across in daily practice, particularly those with oral and skin manifestation and lymphadenopathy.

To familiarize students with cross-infection and its control.

3. Main objectives.

prevention of infectious diseases

oral manifestations of infectious diseases

AIDS

practical aspects of HIV and viral hepatitis control

Herpes

exanthematous infectious diseases

infectious diseases of the gastrointestinal tract

wound infections, sepsis

lymphadenitis, actinomycosis

viral hepatitis

4. Hours in the Curriculum:

Seminars, Practical training: 36 hours

5. Methods of learning/teaching.

Seminars

Practical training.

6. Assessment methods.

Oral class-exam at the end of the course.

Section 8.1.6. Name of course: Dermatology

Head of Department: Professor Maria Baszczyk-Kostanecka MD, PhD
Department of Dermatology
Address: 02-008 Warsaw, ul. Koszykowa 82a
fax.(48 22) 622 57 87

1. An introductory paragraph.

This course is held in the spring term of the 4th year and lasts 2 weeks.

2. Primary Aims.

To introduce students to the most common skin and mucocutaneous disorders, which they may come across in their dental practice. Particular emphasis is placed on viral and fungal infectious, purulent skin diseases, autoimmune disorders, allergies, premalignant lesions and neoplasms and sexually transmitted diseases.

3. Main objectives.

fungal infections infestations and viral diseases of the skin, purulent skin diseases, tuberculosis.

allergies, drug-induced lesions, erythematous lesions.

connective tissue diseases, sarcoidosis, psoriasis, lichen planus, vesiculo-bullous lesions.

pre-malignant lesions and skin neoplasms.

Syphilis, gonorrhoea, AIDS, herpes.

4. Hours in the curriculum.

Seminars: 10 hours

Practical training: 20 hours

5. Methods of learning/teaching.

Seminars in groups of around 18 students, followed by practical training in groups of 4 students; video presentation.

6. Assessment methods.

Multiple choice exam at the end of the course.

Section 8.1.7. Name of course: Neurology

Head of Department: Professor Jerzy Bidziski MD, PhD

Department of Neurosurgery

Address: 02-097 Warsaw, ul. Banacha 1a

fax.(48 22) 658 36 53

1. An introductory paragraph.

This course is held in the autumn term of the 5th year and lasts 1 week.

2. Primary Aims.

To introduce students to selected neurological disorders and to the management of life-threatening neurological emergencies.

3. Main objectives.

disorders of the cranial nerves, headache and facial pain.

raised intracranial pressure, CNS tumours.

cerebrovascular disorders, subarachnoid haemorrhage.

sudden loss of consciousness, epilepsy, CNS infections.

CNS trauma.

Multiple sclerosis, Parkinson's diseases.

neuralgia, muscular dystrophy, myasthenia.

management of life-threatening neurological disorders.

4. Hours in the Curriculum.

Seminars: 5 hours

Practical training: 25 hours

5. Methods of learning/teaching.

Seminars

Practical teaching in small groups at bedside.

6. Assessment method.

Oral class-exam at the end of the course.

Section 8.1.8. Name of course: Physiology of pregnancy and delivery.

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

Name: Ewa Barcz

Department of Obstetrics and Gynaecology

Address: 02-015 Warsaw, Pl. Starynkiewicza 1/3

fax:(48 22) 621 27 96

1. An introductory paragraph:

This course is held in the autumn term of the 5th year.

2. Primary Aims.

To give students a general over view of the physiology of pregnancy, delivery and puerperium and their common pathologies.

To demonstrate the role of the dentist in the care of the pregnant patient.

3. Main objectives.

physiology of pregnancy, the most important pathologies of pregnancy.

physiological labour, caesarian section .

puerperium: physiology and pathology.

physiology and main pathologies of the neonatal period.

4. Hours in the curriculum.

Lecture: 2 hours

Case presentation: 8 hours

Practical training: 14 hours

5. Methods of learning/teaching.

Lectures, video presentation, case presentation during the word round and in the delivery room and operating theatre.

Section 8.1.9. Name of course: Psychiatry

Head of Department: Professor Waldemar Szelenberger MD, PhD
1st Department of Psychiatry
Address: 00-665 Warsaw, ul. Nowowiejska 27
fax.: (48 22) 825 13 15

1. An introductory paragraph:

This course is held during the 5th year and lasts 1 week.

2. Primary Aims.

To introduce dental students to the range of psychiatric disorders and their clinical pictures.

3. Main objectives.

psychopathology

major psychiatric disorders

specific psychological, psychiatric and social problems and their implications for the dentist; emotional factors and changes in the oral cavity.

4. Hours in the curriculum.

Seminars: 5 hours

Practical training: 10 hours

6. Methods of learning/teaching.

Seminars

Practical training with selected patient.

Section: 8.2 Name of course: General Surgery

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

Name :Piotr Fiedor MD, PhD

Department of General Surgery and Transplantology-Institute of Transplantology

Address: 02-006 Warsaw, ul. Nowogrodzka 59

e-mail:pfiedor@ib.am.waw.edu.pl fax: (48 22) 628 00 88

An introductory paragraph:

The Course in general surgery for dental students is held during the III and IV year.

The Basic of general surgery are taught including surgical infections, trauma and traumatic shock and acute abdominal disorders. Future dentists require a theoretical knowledge and clinical practise in surgical examination, diagnosis of surgical diseases and qualifications of patients for surgical treatment.

Primary Aims:

knowledge of basic surgical problems which can influence treatment decisions concerning treatment of dental conditions.

medical examination, diagnosis and treatment of traumatised patients.

Main objectives:

Diagnosis and early recognition of signs/symptoms of surgical problems for multidisciplinary management

surgical emergencies direct indications for hospitalisation of patients in the Surgical Intensive Care Unit {e.g. multiorgan trauma, hypoxia, haemorrhagic shock, burns, vascular trauma. }

the unconscious patient with head injury.

the patient with thoracic trauma, abdominal trauma pelvic trauma, limb trauma; management of the coma patient.

pre-operative patient care.

management of patients with disorders of hemostasis.

basics of surgical oncology [breast, stomach, pancreas, colon kidney etc.]and terminal patient care; non-operative cancer ;vascular surgery ;gastrointestinal surgery

patient with hepatic and biliary diseases;

principles of transplantation surgery, the patient after transplantation-immunosuppressive therapy, problems of viral infections [e.g. HBV,

HCV,EBV,HPV,CMV,HSV implications of immunosuppressive therapy for the dentist.
surgical infections, antibiotic treatment

Hours in the Curriculum:

	3 rd year	4 th year	Total
Lectures	15 hours	-	15 hours
Seminars	15 hours	15 hours	30 hours
Clinical Training	30 hours	30 hours	60 hours

Methods of learning/teaching:

Lectures

Seminars

Clinical training

operating room

SICU (surgical intensive care unit

Participation in surgery

Surgical out patient department

Assessment methods.

Class-exam after each 3-week part of the course. Final multiple-choice exam at the end of the course.

Strengths

Clinical experience meetings for students and surgical residents :clinical case report once a week patients from SICU medical examination, diagnosis, strategy, surgical care, other treatment discussed with Clinical Supervisor.

Weaknesses

Training should be extended to 6 hours daily, which would enable students to participate in the whole surgical procedure.

Innovations and Best Practices

possibility of an individual clinical program in the Emergency Rooms with the supervisor

medical/dental examination of patients before and after organ transplantation with the supervisor.

For some interested students a training program in laboratories is offered in experimental surgery, molecular biology in surgery, treatment of infections and drug toxicity .

endoscopy , operating laser and introduction of students to new surgical technology (laparoscopy, video, X-ray monitoring system, intraoperative ultrasonography)in the Dept. of Surgery for diagnosis and multidisciplinary management of traumatised patients.

Plans for future changes :

Provide basic science and clinical science courses in the same areas. Student participation in basic and clinical research projects .International scientific student exchange program .Student science awards.

Section :8.3 Name of course: Foundations of Resuscitation

Head of Department: Professor Bogdan Kamiski MD, PhD

Department of Anaesthesiology and Intensive Care

Address: 02-097 Warsaw, ul. Banacha 1a

fax: (48 22) 668 84 70

An introductory paragraph:

This course is held in the spring term of the second year, at the Department of Anaesthesiology and Intensive care.

Primary Aims:

To teach students the management of life-threatening situations.

Main objectives:

administration of cardiopulmonary resuscitation .
management of the unconscious patient.

Hours in the Curriculum:

Practical training: 8 hours (2 x 4 hours)

Method of learning/teaching:

Talks in 10-person groups, demonstrations, practical training on manikins.

Section: 8.3 Name of the course: Anaesthesiology

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

Name Marcin Rawicz

Department of Anaesthesiology and Intensive Care

Address: 02-097 Warsaw, ul. Banacha 1a

e-mail: oiom@pol.pl

fax 0226282988

An introductory paragraph.

The course in anaesthesiology is meant to present basic methods of general and regional anaesthesia, relevant pharmacology and anaesthetic equipment. Students are also taught first aid, resuscitation and basics of intensive care. During two weeks of lectures and practical classes students are expected to gain a general knowledge of the speciality.

Primary Aims

To teach how to provide elementary anaesthesia in adults and children

To provide training in first aid techniques and treatment of the most common life-threatening situations

Main objectives

history and basics of anaesthesia

pharmacology of anaesthetic agents

methods of general anaesthesia

monitoring

methods of regional anaesthesia

anaesthesia in paediatrics

anaesthesia in dentistry

basic resuscitation

shock

Hours in the Curriculum

Lectures: 10 hours

Seminars: 15 hours

Method of learning/teaching

The Course is realised by means of lectures given by senior staff members of the Department of Anaesthesiology and Intensive Therapy and practical classes during which students are shown how to give anaesthesia, secure i. V. And airways, how to ventilate the patient and perform regional blocks. Students also train on manikins how to resuscitate, perform i. V., intubate and ventilate. Basic methods of intensive care are presented during ICU classes.

Assessment methods

Gained the knowledge is assessed during an oral examination

Strengths

The course can give a good orientation in modern Anaesthesia and intensive care, sufficient for the dental practice. Students are given knowledge of basic life-support methods, based on the newest developments in the speciality, and during individual practical classes can practice elementary anaesthetic techniques.

Weaknesses

Lack of sufficient space, manikins and simulators does not allow us for more efficient training in our speciality. The internet-based simulators will be available soon, but for now students are limited to more traditional methods of tuition.

Innovations and Best Practices

Reestablishment of first aid as a permanent practical course for students at the beginning of their studies.

Plans for future changes.

Purchase of anaesthesia simulators should improve our abilities to teach modern anaesthesia without the difficulty of creating real clinical situations. Computer projectors will allow us to show simulated clinical situations and ways of solving them.

Visitors Comments

The aims and objectives of the course in Human Diseases are entirely appropriate and are very similar to the European norms. However the total hours allocated to this course are grossly excessive. The visitors were impressed with the level of commitment shown by staff. However, within the EU there has been considerable debate regarding the difference between “stomatology” courses as delivered in Warsaw and “odontology” courses delivered in the majority of Western European countries and the USA.

The students and staff argued cogently and persuasively that the “stomatological” approach is compatible with the high standards needed in clinical dentistry. However such an emphasis on human disease in general can only be at the expense of the acquisition of clinical dental skills. It must be remembered that the end product of the undergraduate course is to produce a clinician capable of delivering comprehensive dental care. It is not the intention to produce a general physician with some knowledge of dentistry.

Again in this course there would seem to be considerable development in the teaching delivered by separate departments. There are also timetabling anomalies that lead to the inefficient use of time and make it difficult for teachers to maintain continuity.

Section:9.1 **Name of course: Orthodontics**

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

Name :Barbara Sieminska-Piekarczyk
Department of Orthodontics
Address: 02-032 Warszawa ul. Filtrowa 30
fax 0228250603

An introductory paragraph

The V year of Dentistry includes a course Orthodontics .It is composed of 10 hours of lectures, 24 hours of seminars and 96 hours of clinical orthodontics.

Primary Aims

Education is based on an understanding of the aetiology of malocclusion, orthodontic diagnosis and prevention in orthodontics.

Main objectives

diagnosis and classification of malocclusion.
variations in facial development and growth, development of the occlusion
aetiology, prevention and early treatment of malocclusion in the deciduous dentition (pre-school children)
treatment of malocclusion in the mixed early permanent dentition (school children) including rehabilitation of oral functions :swallowing, breathing and speech.
extraction and non extraction treatment in the deciduous and permanent dentition.
cephalometric analysis for orthodontic diagnosis and treatment planning
orthodontic appliances-removable and fixed
temporomandibular joint disorders-aetiology and treatment
congenital craniofacial malformation.

Hours in the Curriculum

Lectures: 10 hours
Seminars: 24 hours
Practical training: 96 hours

Methods of learning/teaching

Lectures, seminars demonstrations and practical training

Assessment methods

Evaluation of theoretical knowledge at the end of the first part of the course.

Practical and theoretical exams at the end of the course.

Strengths

Students groups and composed of max 3-4 students

Weaknesses

Low quality of dental equipment (in the middle of year 2000, the Orthodontic Department will be moved to new place with new, high-quality equipment)

Innovations and Best Practices

seminars with active students participation.

many different orthodontic cases shown to students.

Plans for future changes

Introduction of modern audio-visual methods.

Section 9.2 Name of course: Paediatric dentistry.

Head of department: Dr n. med. Aleksander Remiszewski

Department of Paediatric Dentistry

Address: 00-246 Warsaw, ul. Miodowa 18

fax: (48 22) 635 11 03

1. An introductory paragraph.

Elements of prevention in paediatric dentistry are introduced during the 2nd year. The course in paediatric dentistry is held during the 4th and 5th year. It is aimed at the teaching of preventive and therapeutic procedures for the child patient.

2. Primary Aims.

preventive dentistry-preventive and therapeutic methods.

epidemiology of diseases and defects of the masticatory system in the child patient.

3. Main objectives.

Adaptation of the child patient in the dental office, with due consideration paid to the difficult child.

early caries-epidemiology, etiology, clinic, treatment and prevention.

the treatment of caries in deciduous and young permanent teeth.

pulpal pathology-diagnosis, classification and treatment.

focus of infection, indications and contraindications to extracting teeth in children.

dental materials used in pediatric dentistry.

dental trauma in children.

methods of preventing dental caries in children.

anesthesia and sedation in pediatric dentistry.

4. Hours in the curriculum.

	II year	IV year	V year	total
Lectures	2	20		
Seminars			5	
Practical		36 hours	44 hours	

5. Methods of learning/teaching.

Theoretical preparation – lectures and seminars;
Clinical work with patients.

6. Assessments methods.

Initial assessment prior to commencing clinical practice.

Evaluation of theoretical knowledge and practical skills at each session.

Final examination comprising of a practical and theoretical part after completing the course during the V year.

7. Strengths.

Large number and wide assortment of procedures performed independently by the student.

8. Weaknesses.

Low number of hours of clinical practice and lectures.

9. Innovation and Best Practices.

Introduction of new preventive and therapeutic methods during clinical practice and the use of audiovisual methods during theoretical sessions. Organization of a students research group.

10. Plans for future changes.

Increasing the number of teaching hours, further introduction of contemporary therapeutic and preventive methods.

Active participation in postgraduate training in the field of paediatric dentistry.

Visitors Comments

The aims and objectives in orthodontics and paediatric dentistry are equivalent to those in other European Schools. The teaching and service facilities are outstanding and exceed those in most European and USA Schools.

The two departments have enthusiastic and dedicated staff and are well administered by their Directors. There are good research and educational programmes directed towards the students, community and patients. Within paediatric dentistry programmes in “Bright Smile – Bright Future”, early caries detection, and early prevention in conjunction with the mother and child institute are particularly good. There are also excellent outreach programmes with kindergarten and elementary schools. There are good research study groups available to interested students.

The visitors were disappointed that exposure to these disciplines is late in the course. Also in paediatric dentistry students do not receive experience in treating children with special needs or of treating patients under relative analgesia.

Recommendations

Students should be introduced to these disciplines earlier in the course.

There should be closer integration between the two departments (would it be possible to transfer paediatric dentistry to Filtrona Street?).

Students should be exposed to children with special needs and should have the opportunity to treat children under relative analgesia.

Students should be exposed to the restorative/orthodontic/surgical interface on a scheduled programmed basis.

Section:10 **Name of course :Preventive Dentistry**

Head of Department: Professor Maria Wierzbicka MD, PhD

Department of Conservative Dentistry

Address: 02-046 Warsaw, ul. Miodowa 18

e-mail: dentaml@wawl.comnet.pl

fax.: (48 22) 635 21 05

1. An introductory paragraph

This course starts in the 2nd term of the 1st year at the Department of Conservative Dentistry with an introduction to the epidemiology, aetiology and prevention of dental caries and gingivitis. It is continued in the 2nd year at the Department of Basic Dental Sciences and Preventive Dentistry .Elements of prevention are also incorporated in the courses in other dental disciplines.

2. Primary Aims

The primary aim of this course is to provide students with a sound knowledge of the basic of prevention of caries and gingivitis, and to help them to achieve proficiency in assessing factors influencing dental and gingival health, and in performing preventive procedures. As this is the first course that is directly connected with dentistry, it is also aimed at developing interest in the chosen direction of studies.

3. Main objectives .

an introduction to the problem of oral diseases

epidemiology of dental caries and gingivitis

aetiology of dental caries and gingivitis

assessing oral diseases

diagnosis of dental caries

the use of indices in the assessment of oral hygiene, caries and gingivitis

prevention of oral diseases

oral health promotion

individual oral hygiene instruction and motivation

professional mechanical tooth cleaning

the role of diet in caries prevention

the role of fluoride in caries prevention, individual and group prophylaxis

the prevention of malocclusion

4. Hours in the Curriculum

9 h of practice

2nd year 5 h of lectures

33 h of practice

5. Methods of learning/teaching

1st year –lectures

discussion in groups

clinical practice –diagnostic and preventive procedures are performed by students on each other.

2nd year lectures

discussion in groups

clinical practice-diagnostic and preventive procedures are performed by students on patients.

assessment of occlusion at nursery schools and at the Dept. of Orthodontics

group fluoride prophylaxis at nursery schools

dietary analysis at primary schools

preparation of materials for oral health education and promotion suitable for different age groups.

These topics are continued and broadened during the 3rd, 4th and 5th years to include such topics as methods of assessing high risk patients, individual preventive programmes for this group and oral health promotion.

6. Assessment methods

Assessment of active participation in discussions and clinical practice by the group teacher

7. Strengths

The introduction of a specifically dental subject with elements of clinical practice at the start of the dental curriculum stimulates interest of students early contact with kindergarten and primary schoolchildren in the context of preventive dentistry. Elements of preventive dentistry, including oral health promotion, are included throughout the course of the dental curriculum during the teaching of specific dental disciplines. The course may help to achieve a preventive orientation of graduates.

8. Weaknesses

The students do not meet the children with whom they came into contact in this course, later on in their studies. There is therefore no chance to see the long-term effects of any prevention.

9. Innovations and Best Practice

Early contact with kindergarten and primary schoolchildren in the context of preventive dentistry.

Public Health, Prevention and Community Dentistry

- Preventive dentistry features specifically as a 1st year 9 hour course, and a 2nd year 38 hour course. It covers aetiology, epidemiology and practical basis of preventive dentistry both within the Dental School and at local nursery schools.
- Epidemiology and hygiene occurs in the third year as a 60 hour course of seminars and lectures covering many aspects of public health including biostatistics and health promotion.

Strengths

- Students are introduced at the start of their course to the concepts and possibilities of oral diseases prevention.
- Preventive dentistry is supported strongly by the orthodontic and paedodontic departments.

Weaknesses

- There is no single department responsible for integrating Public Health, Preventive and Community Dentistry.
- There appears to be little instruction provided in the planning and evaluation of oral health programmes or in health systems organisation and financing.

Opportunities

- Currently the evolving health services provide rich opportunities for health systems research and the development of a problem based learning approaches to provide education experiences to address the identified weaknesses.
- The Informatics Department provides an important opportunity to develop CAL materials for Dental Public Health and Prevention.

• **Section: 11.0** **Name of course: Manual training for dentistry**

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

Name: Dr W.Gowacki.

Department of Basic Dental Sciences and Prevention

Address: 02-032 Warsaw, ul. Filtrowa 30

tel: (48 22) 825 58 55

Head of Department: Professor Tadeusz Bczkowski

1. An introductory paragraph.

This pre-clinical course is held during the first term of the First Year of study as an introduction to dentistry.

2. Primary Aims.

To study the detailed anatomical shapes of primary and secondary teeth.

To study relationships of primary / secondary teeth; drawing and modeling teeth in plasticine and wax.

3. Main objectives.

morphology of hard tissues of the tooth.

classification of teeth.

anatomical relationships of the teeth (primary/ secondary).

methods of marking teeth.

details of tooth anatomy

recognition teeth.

4. Hours in the curriculum.

Practical training 30 – hours in the laboratory

5. Method of learning/teaching.

Demonstration of specific tasks to students, which they then carry out.

6. Assessment methods.

Individual conversation with every student, during which his knowledge and progress is evaluated.

7. Strengths.

Introduction of the subject during the First Year of Dental School.

8. Weaknesses.

Difficulties in evaluation of student knowledge and their ability to use this knowledge over five years of studying dentistry.

9. Innovations and Best Practices.

10. Plans for the future changes.

Introductions of new methods of visualization.

Section 11.0 Name of course: Basic dental sciences in restorative dentistry, with elements of paedodontics.

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

Name: Dr S. Reichert

Department of Basic Dental Sciences and Prevention

Address: 02-032 Warsaw, ul. Filtrowa 30

tel: (48 22) 825 58 55

Head of Department: Professor Tadeusz Bczkowski

1. An introductory paragraph.

This phantom course is introduced in the 2nd term of the 4th year.

2. Primary Aims.

The aim of this pre-clinical course is to introduce students to theoretical issues which are later expanded in the clinical course.

3. Main objectives.

morphology of the permanent and primary dentition.

tooth numbering systems.

Blacks classification of cavities.

instruments and equipment – their use and care.

dental cavities – clinical classification. Technique of cavity preparation for specific classes.

materials used for temporary restorations. Technique of placing temporary restorations.

materials used as bases. Technique of placing bases.

materials used for permanent restorations. Technique of placing permanent restorations.

pulpitis – clinical classification. Technique of mortal pulpotomy in primary teeth.

Technique of pulpectomy in permanent teeth. Technique of root of canal obturation.

necrotic pulp – clinical classification.

4. Hours in the curriculum.

Practical training 44 hours

5. Methods of learning/teaching.

Demonstration.

Practical training of phantoms.

Discussion.

6. Assessment methods.

Class-examination at the end of the course.

Section: 11.0 Name of course: Dental Materials

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

Name: Dr W. Michalski

Department of Basic Dental Sciences and Prevention

Address: 02-032 Warsaw, ul. Filtrowa 30

tel: (48 22) 825 58 55

Head of Department: Professor Tadeusz Bczkowski

1. An introductory paragraph.

This pre-clinical course is held during the first term of the second year of study, as a theoretical and practical preparation for the clinical part of the dental course.

2. Primary Aims.

The course aims at teaching students issues concerning the application of basic and auxiliary materials during clinical and laboratory procedures.

3. Main objectives.

basic dental instruments .General description of dental surgery equipment and the prosthetic laboratory.

impression materials (hydrocolloids, silicone, polysulphide, polyether, thermoplastic) and dental plaster. Technology of taking impressions using different substances on phantoms. Making plaster casts from impressions. dental waxes and casting (moulding) materials for mid- and high-melting alloys. materials for inlays, crowns and bridge work; precious metal and other alloys (gold, silver palladium, nickel chromium, cobalt chromium, titanium).

acrylic resin. Methods of polymerisation. Denture repair using acrylic resin. ceramics.

abrasive and polishing materials. Mechanical processing of acrylic and metal materials.

materials used in conservative dentistry (cements, amalgams, composites and other).

4. Hours in the curriculum.

Lectures: 8 hours

Seminars: 21 hours

Practical exercises 21 hours

5.Methods of learning/teaching.

Lectures

Seminar

Practical exercises, demonstrations

6.Assessment methods.

Credit for particular practical exercises with knowledge of the relevant lecture material.

Written examination covering all above mentioned topics at the end of the course.

Section: 11.1 Name of course: Conservative Dentistry and Endodontics

Head of Department: Professor Maria Wierzbicka MD, PhD

Department of Conservative Dentistry

Address: 00-246 Warsaw, ul. Miodowa 18

e-mail: m.wierzbicka@dentam.edu.pl fax.: (48 22) 635 21 05

An introductory paragraph:

Conservative Dentistry and Endodontics are taught together, and are based on the knowledge and skills obtained during the course in Prevention (1st and 2nd year) and during the pre-clinical part of the curriculum (2nd year). Students' contact with the Dept. of Conservative Dentistry starts during the 2nd term of the 1st year with a course in Preventive Dentistry, and continues with a course in Conservative Dentistry and Endodontics, which commences with lectures during the 2nd year, and continues with lectures, seminars and clinical training during the 3rd, 4th and final years.

Primary Aims

To help students to obtain the theoretical knowledge, understanding and practical skills necessary for the prevention, diagnosis and appropriate therapy of dental, pulpal and periapical pathology (including restorative and endodontic treatment) and for the formulation of a complex plan of oral health care. The course does not include crown and bridgework (covered by the Dept. of Prosthodontics). On completing the course, the student should be able to recognise health and disease, and have a knowledge of the factors influencing them. The student should be able to make appropriate preventive and therapeutic decisions on the basis of clinical examination, taking into consideration additional factors, such as risk factors.

Main Objectives

dental anatomy

epidemiology and aetiology of dental caries

prevention of dental caries, fluoride, oral hygiene instruction and motivation, oral health promotion

microbiology and histopathology of dental caries

diagnosis of caries, risk assessment, prognosis

treatment of carious lesions – non – invasive, minimally – invasive, invasive
 non – carious lesions – aetiology, clinic, treatment
 pulpal and periapical pathology – aetiology, histopathology, diagnosis, prevention,
 treatment, materials used, complications
 tooth discoloration – aetiology, treatment methods

Hours in the Curriculum

	2 nd year	3 rd year	4 th year	5 th year	Total
Lectures	15	30	10	5	60
Seminars		15	10	15	40
Clinical practice		75	110	75	260
Total	15	120	130	95	360

Method of learning/teaching

Pre – clinical course (phantom head) at the Dept. of Basic Dental Sciences and Prevention.

Clinical course: This is organised in groups of 3 – 4 students / tutor, 1 student / dental chair. The clinical training comprises of patient examination and diagnosis, patient management including formulation of a preventive and treatment plan, and performance of necessary procedures.

Lectures and seminars: The main topics are lectured in a traditional manner, with the use of slides and overhead projection. Seminars in groups of approx. 1 / 12, with discussion, demonstrations, slides and video presentations, as appropriate.

Assessment methods

Written test at the start of the 3rd year, prior to commencing clinical practice, covering material from the pre – clinical course and lectures from the 2nd year.

Written tests at the end of the 3rd and 4th year.

Oral class examination at the end of the 5th year.

In order to complete each year of the course, the student is obliged to show competence in performing specific procedures. Before finishing the final year, the student is obliged to perform endodontic therapy in each tooth type. Throughout the course, there is general assessment of clinical knowledge and skills by clinical teachers. This is taken into account in awarding the final examination grade.

After completing the course, students undergo a practical and case – related oral examination (including patient examination, diagnosis and presentation, treatment

planning and performance of a procedure). This is followed by an MCQ examination.

Strengths

The student has a possibility of observing the same patients throughout the 3 – year duration of the course. This allows for an observation of the effectiveness of preventive and therapeutic measures, as well as changes occurring in the oral cavity with time.

Weaknesses

Relatively low number of hours spent treating patients
Students do not routinely use a rubber dam

Innovations and Best Practices

The course includes time spent diagnosing and treating emergency dental patients during the 4th and 5th year.

Plans for future changes

Introduction of comprehensive dental care.
Introduction of problem based learning.
Introduction of radiovisiography.

Section 11.3 Name of course: Phantom course in Prosthodontics.

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

Name: Dr W. Michalski

Department of Basic Dental Sciences and Prevention

Address: 02-032 Warsaw, ul. Filtrowa 30

tel: (48 22) 825 58 55

Head of Department: Professor Tadeusz Bczkowski

1. An introduction paragraph.

This course is held during the 2nd term of the 3rd year, and the 1st term of the 4th year, as a preparation for the clinical course in Prosthodontics. It runs simultaneously with lectures and seminars which comprise part of the course in Prosthodontics.

2. Primary Aims.

The aim of the course is to teach the basic knowledge on the clinical and laboratory procedures connected with the construction of removable and fixed dentures. Laboratory exercises include some of the material connected with different kinds of dentures. The rest of the material is only in the form of demonstrations. The subject is a continuation of the course in dental materials, with clinical and laboratory implications.

3. Main objectives.

Part I

Removable dentures (3rd year)

demonstration and discussion of the clinical and laboratory stages of preparing full dentures.

demonstration and individual preparation of a special tray by the students.

demonstration and individual preparation of wax record blocks. Recording the occlusion on the phantom. Fixing the models in an articulator.

demonstration of tooth placing based on Gysi's method. Individual tooth placing by the student.

demonstration and individual modeling of dentures.

laboratory demonstration of further steps connected with polymerization, mechanical treatment and polishing. Corrections.

demonstration of the clinical and laboratory stages in making metal-frame partial dentures. Parallelometric analysis of models and designing metal-frame partial dentures by the student.

Part II

Fixed dentures (4th year).

Indications and contraindications. Discussion of the rules of designing and preparing fixed dentures.

post cores – demonstration and individual performance of clinical procedures on isolated teeth and on the phantom; demonstration and performance of laboratory procedures.

full veneer crowns – demonstration and individual performance of clinical procedures on isolated teeth and on the phantom; demonstration and individual performance of laboratory procedures.

fixed bridges – demonstrations and individual performance of laboratory procedures.

4. Hours in the curriculum.

Practical training 3rd year – 30 hours

Practical training 4th year – 45 hours

5. Methods of learning/teaching.

Introduction in the form of a short talk, demonstration of clinical and laboratory aspects with the use of phantoms, individual performance of certain clinical and laboratory procedures with the use of phantoms – no patients in this course.

6. Assessment methods.

Evaluation of students practical work. Evaluation of theoretical knowledge at the end of both.

Part I and Part II of the course.

Examination at the end of the course covering the whole material studied.

Section: 11.3 Name of course: Prosthodontics

Head of Prosthodontics Department: Dr. Elbieta Mierzwska-Nastalska
 Department of Prosthodontics
 Address: 02-006 Warsaw, ul. Nowogrodzka 59
 fax (48 22) 825 59 55

1. An introductory paragraph:

The programme introduces students to the principles indispensable in the management of the edentulous state, as well as in assessment and construction of fixed and removable prostheses. The first course devoted to occlusion and function of the masticatory system is meant to develop knowledge and understanding of the natural dentition, occlusion, mandibular positions and movements. In the first year the anatomy of the masticatory system is given to students. In the second year the physiology of the masticatory system is taught. In the fourth year the principles of clinical occlusion in the context of ageing and dysfunction presented by edentulous patients are taught. During the fifth year of the course emphasis is placed on integration of treatment for partially dentate patients. The clinical training of students in fixed and removable prosthodontics is supervised by specialist teachers, so that each stage of treatment is formally approved by them. Fifth year students have two clinical sessions (3h x 2) each week and as much time as is required in individual treatment planning and processing the fixed and removable prosthesis is being dedicated to this tasks.

2. Primary Aims:

The first course develops an understanding of occlusion and the function of the masticatory system.

To make students aware of the nature, scope and potential of prosthodontics for edentulous patients in order to ensure good function and patient satisfaction. Also to make the students familiar with the sequence of treatment and the further function of complete dentures.

To make students aware of the need for individual comprehensive planning in each case of partly dentate patients; as a consequence, being able to present a full range of options for rehabilitation of the partially dentate state.

3. Main objectives:

To understand – the anatomy of the dentition:

the functional anatomy of the masticatory system
the physiology of the masticatory system
the kinesiology of mandibular movements and reference positions of the mandible
the dental occlusal relationships (static and dynamic)

To gain enough knowledge and practice of complete dentures to integrate its principles with biological sciences and other dental disciplines. Graduated students should have a sufficient amount of theoretical knowledge and clinical, and laboratory practice related to the edentulous state:

to transit to complete dentures using immediate dentures
to provide primary dental care in this area
to provide maintenance of complete dentures

Knowledge & skill in carrying out tooth preparation and restoration of endodontically treated teeth

Knowledge & skill in carrying out tooth preparation for cast metal, ceramo-metal and porcelain restorations. Making provisional (temporary) restorations on teeth prepared for single unit crowns

Introducing the use of the dental surveyor to select a suitable path of insertion for RPD. and for the proper shaping of fixed prosthodontics on abutment teeth.

For removable prosthesis:

knowledge and skill in occlusal analysis, planning and clinical procedures for suitable construction of prostheses

knowledge and skill in designing all the standard components, so that the suitable supporting, retaining, stabilising and guiding alteration to the remaining dentition is provided.

knowledge and skill in evaluation of the fit of a prosthesis on a cast and in the patient's mouth.

Hours in curriculum:

Preclinical Introductory Laboratory Programme and Phantom Course
(removable and fixed prosthodontics)

Preclinical Problem Based Teaching (III and IV year lectures and seminars,
recommended reading)

complete dentures 25h

Preclinical Problem Based Teaching (III and IV year lectures and seminars, recommended reading)

Complete dentures 25h

removable partial dentures 25h

fixed prosthodontics 25h

Clinical practice supervised by specialist teachers:

complete dentures 30h (IV year)

fixed and removable prostheses 180h (V year)

Method of learning/teaching:

Supervised Laboratory Exercises

Problem – based learning

Recommended reading

Topic based learning

Case based learning

Lectures

Films

Assessment methods:

Preclinical competence

Clinical stages repeated until correct

Clinical and theoretical (MCQ) examination at the end of the course

Strengths:

The teaching underlines the importance of maintaining the health of the remaining dentition. For teaching, the integration of fixed and removable prosthodontics is extremely important, especially for adequate treatment planning in partial edentulism.

Weaknesses:

A time lapse between the introductory programme and clinical practice.

Innovations and Best Practices:

First steps have been made towards incorporation of the options offered by implants for the support of removable prostheses, into the teaching for fifth year students. The students are given lectures on “Overdentures supported on Branemark implants”, and also demonstrations of clinical cases are given during the clinical practical training.

Plans for future changes:

Solving problems referred to as Weaknesses

Incorporating overdentures supported on Branemark implants into the clinical training for the undergraduate curriculum, so that students will have a chance to perform this type of treatment, not only watch a demonstration.

Closer collaboration with other departments of the dental faculty, to be able to incorporate the interdisciplinary treatment planning approach into the dental curriculum.

Visitors Comments

A) Prevention

1. There is a great need to establish a preventive philosophy and direction from the 1st year of studies.
2. Most of the prevention and Public Oral Health issues are being discussed in seminars but there is lack of an organised plan or strategy to address these issues and help the community at large.

B) Operative Dentistry

1. Good exposure of students to contemporary principles of Operative Dentistry.
2. It seems that students are doing a variety of procedures which provide them with knowledge and experience.
3. Students questionnaires indicate that they feel very competent in doing operative dentistry procedures.

C) Endodontics

1. The students perform a large number of endodontic procedures and they obtain a very good experience in this area.
2. Students questionnaire indicates that they receive good education and knowledge in this area.

Strengths

1. Well structured and well directed department with well defined goals which are achieved during the undergraduate experience of the students.
2. Students are able to do a variety of clinical procedures in large numbers which provide them with experience and knowledge.
3. The science research group for the students is active and functions extremely well.

Weaknesses

1. There is no adequate cooperation with other departments mainly in treatment planning.

2. There is no routine use of the rubber dam in operative Dentistry and Endodontic procedures.
3. Major portion of the surgical endodontic procedures are performed in oral surgery.

Recommendations

There is a need to develop a preventive philosophy underpinning the entire programme.

Individual departments should be integrated in order to develop a philosophy of total (integrated) patient care.

More time should be allocated to the practical clinical aspects of dental practice.

4. Clinical dentistry occupies less than one third of the total curriculum time available.
5. There does not appear a formal system of testing clinical competencies during the undergraduate course.
6. The present course does not identify care of the elderly (gerodontics) as a special area.

Section 12 – Periodontology and Oral Mucosal Diseases

In Warsaw periodontology is taught in the Department of Diseases of the Oral Mucosa and Periodontium. Details of this course were presented in Section 14.

Visitors Comments

PERIODONTICS

STRENGTHS

1. Enthusiastic faculty members dedicated to the promotion of principles in Periodontics.
2. Very well equipped clinical facility.
3. Close co-operation of the department with other medical departments eg internal medicine and dermatology.

WEAKNESSES

1. There is limited exposure of students to Periodontics due to the restricted time allocated in the curriculum.
2. There is no organised preclinical course in Periodontics.
3. Teaching of Periodontics is initiated late in the curriculum (4th year).
4. There is very little co-operation of the department with other clinical disciplines and there is very little involvement of the department into the comprehensive treatment planning and comprehensive treatment for the patient.
5. There is no effort to organise a recall program for the patients but help is needed by the rest of the department to organise an effective recall program for all patients.
6. Students are not performing minor surgical procedures.

SUGGESTIONS

1. Lecture hours and clinical hours in Periodontics must be considerably increased.
2. Help must be provided to organise an effective recall program.
3. Initiate education and clinical exposure at an earlier stage in the curriculum.
4. Allow undergraduate students to perform minor surgical procedures.
5. Increase the co-operation and communication with all other clinical disciplines which have to respect the contemporary biological principles of Periodontics.

Section: 13.1 Name of course: Oral Surgery

Head of Department: Assistant Professor Andrzej Wojtowicz DDS,PhD

Department of Oral Surgery

Address: O2-006Warsaw,ul. Nowogrodzka 59

e-mail: awoit@kcs.amwaw.edu.pl

fax: (48 22) 625 52 40

1. An Introductory paragraph

Oral surgery is taught for 2,5 years (5 terms) from year 3 to year 5.

2. Primary Aims:

The goals of the training program in oral surgery are to:

train the student to be knowledgeable of the theoretical basis of oral & maxillofacial surgery,

be competent to practice the entire scope of oral and maxillofacial surgery:

prevention, diagnosis, non-surgical and surgical procedures for the treatment of diseases, dental trauma, abnormalities of teeth and surrounding tissues, special-needs patients with general diseases (e.g. heart diseases, hypertension, hematological diseases, cancer, leukemia and patients before and after organ transplantation) (students of year 5).

Main objectives:

to provide the students with a broad range of knowledge including: physical diagnosis, surgical and general medical aspects of patient care, trauma, preprosthetic considerations, craniofacial pathology, TMJ pathology, reconstruction, microsurgery, anaesthesia, dentoalveolar surgery;

to understand the etiopathogenesis of infection, inflammation and the ways of progression of infection in the maxillofacial region, surgical and pharmacological therapy

before practical education students should be able to communicate with patients during interview, manual examination, diagnosis and treatment planning

local anesthesia, nerve block, pain relief, dental emergencies

teeth extraction, minor oral surgery procedures done by the students themselves to diagnosis and treatment of dental trauma (tooth replantation, immobilization, surgical-orthodontic tooth releasing)

to diagnosis of tumors, surgical treatment of small tumors of the soft and bony tissues, the role of biopsy

to understand the principles of implantology and tissue engineering methods (bone substitutes, membranes, growth factors),

participation in the clinical and radiological examination of the patient after surgical treatment to evaluate the effects of implanted materials (bone substitutes, membranes, plate led-rich-plasma)

Hours in the Curriculum

Table. Educational commitments – theory-seminars/lectures and surgical procedures

Procedures (topics)	undergraduate VI term 15 hours, 93 students	Undergraduate VII-VIII term: 91 students	undergraduate IX – X term lectures 15 hours 94 students	diploma exams
patient examination (min.120 patients)	Seminar, clinical exercises	min. 40 patients class exam	min. 80 patients	clinical (practical)exams, MCQ(100 questions),
local anaesthesia (min 90 injections)	Seminar, clinical exercises	Local anesthesia:. 15 submucosal inj. 5 nerve block inj.	Local anesthesia. 50 submucosal inj. 20 nerve block inj.	1
tooth extractions (min.60 extracted tooth)	Seminar, clinical exercises	20 procedures	40 procedures	1
surgical tooth extraction (min. 3 assists)	Seminar, clinical exercises	Class exam	3 assists	1

The (standards) presented above is obligatory for each student and should be realized by students before partial exams and diploma exams.

274 students take part in clinical training at the Oral Surgery Department / 5 hours- for each student/week. About 450 patients weekly were are treated by students themselves.

5. Method of learning/teaching

Seminars 3 hours/ week for each student (groups of 12 students),

Lectures 15 hours/ years 3 to 5 (total 45 hours)

Pre clinical lectures/seminars:

Students learn the anatomy of the head and neck region:

the development of pharyngeal arch and derivatives,

the anatomy of the head and neck spaces,

the cranial nerves, especially trigeminal, facial, glosso-pharyngeal,

hypoglossal, vagus, and blood supply of the facial region

surgical instruments

infections, inflammations, abscesses: diagnosis, treatment

odontogenic cysts, tumors: classification, treatment

pain control

Students (12 students groups) receive a guidebook/information about the subject (oral surgery) and a handout of the topics and dates of seminars. Students are obliged to present basic knowledge of the seminar subject. Lecturers/assistants use bones, models of the cranium, jaws, teeth, instruments, charts, atlases of anatomy, oral surgery and other materials. Assistant and students discuss the topics.

Assistants use video and multimedial presentation of oral surgical procedures (for 4 and 5 year student). Students prepare short (10 minutes) lectures for colleagues. This form of activity encourages individual work and allows to learn the technique of public presentation.

Clinical learning (integration, examination, diagnosis with various oral radiology methods, treatment planning, surgical procedures under local anesthesia, early and late control after surgical treatment, pharmacology (two students for one patient – 1 assistant/teacher (one patient is examined and treated by a “surgical team” : 2 students, assistant/teacher (oral surgeon –first or second degree specialist), one nurse. This system is safe for patients, more effective for training/education and gives the opportunity for discussion, decision-making and control of treatment. The work of 5 – 7 teams/ 2,5 hours 3 times a day, patient selection (emergency, urgent, patient hospitalized) is carried out, organized and controlled by one senior-lecturer (II degree specialist in Oral Surgery).

Patients are admitted without any referral (except consultation procedures, special care patients, hospitalized patients – case records required). Admission procedure (not computerized) includes: case record, files search, complete data, filling out a chart. The Case record is completed by the students. Students examine patients, fill

out the chart, propose the radiological method for diagnosis (small, dental format of x-ray, panoramic, ortopantomographic or other projections).

6. Assessment methods (table),

The students should be able to:

know how to interview and examine a patient,

know the etiology, pathomechanism, ways of infections, progress, complications, symptoms of disease

diagnose, treat pain, traumatic injuries of teeth, bone and soft tissues,

pharmacological procedures (ant inflammatory, antibiotics, antihistamine),

The graduates should be able to:

be familiar with the ethical regulations in Polish law, accepted medical methods, safe patient data/files/history of the disease, be communicative towards the patient, (information about potential complications), obtain patient acceptance for treatment,

identify oral disease by using proper non traumatic diagnostic methods, analyze the patient treatment needs, present the diagnosis and treatment plan, considering the general condition of the patient,

perform oral surgery procedures

7. Strengths:

Students have the opportunity to acquire knowledge and clinical practice done by themselves. There are more than 1200 patients treated monthly in the Department, Students have clinical contact with special-care-patients (from the neighbouring Institute of Transplantology, the Department of Dermatology, Cardiology, Hematology and Oncology) and have the opportunity to learn and to treat these cases. The Department of Oral Surgery has a separate room for these patients. Students have the opportunity to study in the library of the Department; they have access to case data for epidemiological evaluation .

Students have the opportunity to evaluate the clinical symptoms, radiological diagnosis and histopathological report.

The educational system allows students to choose their interests.

8. Weaknesses:

The lack of an integrated “Dental Care System”.

Lack of funds to improve and change surgical instruments and equipment (e.g. new autoclaves B- class, lamps, disposable materials), and for implant materials. Some of the surgical procedures are not covered by the Public Health Care System (e.g. cystectomies, apicectomies).

Lack of a computerized system for files (history of cases) search. X-rays pictures are belong to the patients. Problems with long-term follow-up after surgery and epidemiological evaluation of the treatment .

No clear regulations between the Hospital (Public Health Care, patient treatment) and Medical University (student education).

The lack of standards of Oral Surgery education.

The main part of The Dental Education Departments is located in the old town part in Warsaw (minimum 30 minutes by bus).

The insufficient number of computers, educational waste, films and limited access to Internet in the library of the Department.

Limited access to modern radiological examination (CT, NMR, MI and other), because the high costs of these methods must be covered by the patient.

9. Innovations and Best Practices:

The Department of Oral Surgery has organized a Student Science Circle (20 members: students years 3-5). Seminars/lectures/presentations are organized (topics: implants, splint lock methodology, surgical methods in periodontology, basis of tissue engineering). Students have realized scientific programs e.g.:

cytokine expression in the oral mucosa in pathology,

HPV infection of the oral mucosa after immunosuppression,

Optical bone density in the mandible in patients after kidney transplantation,

BMP expression in rat tl/tl osteopetrotic mandible –a model of tooth eruption

The results of this research will be presented at a conference of Student Scientific Circles in May 2000 in the form of posters or oral presentations.

competition of the Student Science Circles (Conference, awards, diploma)

for the best students, a the postgraduate teaching position affiliated with the

Department of Oral Surgery,

international scientific exchange programs,

scholarship (for PhD thesis) affiliated with the Medical University of Warsaw,

research grants for the students and young researchers

This additional research program allows to:

increase opportunities for acquiring knowledge by the students,
realize small student-projects (mini-grants),
select the best students- future researchers/teachers affiliated with the Medical
University Warsaw,

Visitors Comments

Strengths

The aims and objectives of this course conform to European and USA norms. The requirements for practical clinical skills are satisfactory. The students are exposed to an excellent range of oral surgery and maxillofacial surgery. They are taught by dedicated and enthusiastic staff.

Weaknesses

In most European Schools the disciplines of oral surgery, oral medicine and oral pathology together with dental radiology and dental therapeutics are taught in an integrated manner which emphasises the interdependence of these disciplines. In Warsaw there appears to be little attempt to achieve this and therefore although there is duplication within the course, students are left with a fragmented knowledge base in these subjects.

Recommendations

Consideration should be given to organising an integrated teaching programme in Oral and Maxillofacial Surgery, Oral Medicine and Oral Pathology (including microbiology) and Oral Radiology.

This does not require the development of a new department but would require the contributing disciplines to integrate the timing and content of their existing teaching programmes.

Section: 13.2 Name of course: Oral/Dental Radiology and Radiography

Head of Department: Dr n. med. Hanna Markiewicz
Department of Dental Radiology and Maxillofacial Radiography
Address: 02-006 Warsaw, ul. Nowogrodzka 59

An introductory paragraph:

Dental and maxillofacial radiology teaching begins in the third year and is continued in the fourth and the fifth year of the study. The main purpose of the course in radiology is to help students achieve basic knowledge of radiology and the ability to apply it in the dental practice.

Primary Aims:

The primary aims of the course are to teach and to give an understanding of the principles of intraoral, panoramic and extra-oral radiographic techniques as well as to help students to achieve the skill to recognize symptoms of pathology in intraoral and panoramic radiographs.

Main objectives:

the students should understand the biological and physical nature of ionising radiation

the students should understand and know the indications and contraindications for intraoral views: bitewing, periapical and occlusal

the students should be able to produce good quality bitewing, periapical and occlusal views

the students should know the indications and contraindications for panoramic radiographs and extraoral views

the students should know the normal and pathological conditions of teeth and adjacent structures as seen on the intra and extraoral radiographs

the students should know the possibilities of alternatives to the conventional radiological imaging techniques

the students should know the errors which may arise during oral radiographic examination and the ways to avoid them

Hours in the Curriculum – 75 hours

	3 Year	4 Year	5 Year	Total
Lectures	5	15		20
Seminars			10	10
Practical instruction	10	35		45

Methods of learning/teaching:

The teaching of Dental and Maxillofacial Radiology begins in the 3rd and is continued in the 4th and 5th year of study. In the 3rd year the practical instruction/demonstrations are held in one-week cycles of classes of 2 hours duration with 5 students in the group. The major didactic part of the Dental and Maxillofacial Radiology course is carried out in the 4th year. The practical instruction and demonstrations are held in fortnightly cycles of classes of 3,5 hours duration with 5 students in the group. Teaching in the form of seminars is continued in the 5th year. One hundred specially chosen intraoral and thirty panoramic radiographs with written radiological reports are available to students of the final year as a didactic self-learning aid.

Assessment methods:

Dental and Maxillofacial Radiology is one of the final (diploma) examinations. It is divided into two parts: practical and oral (theoretical) examination. It is obligatory to pass the practical exam before the theoretical part.

The practical examination for each student consist of interpretation of 5 intraoral and one panoramic radiograph. The results of the interpretation are to be given in written form – in the form of radiological report, which is graded.

Strengths:

The Dental and Maxillofacial Radiology course has been worked out in collaboration with experienced senior staff members of the Dental and Maxillofacial Radiology Department and experienced representatives of the profession. It has been designed to match the curriculum of the dental course and the needs of the general (public) dental practice.

The teaching programme is under constant review to cope with the changes in dental and radiology technology and techniques available.

Weaknesses:

The limited budget and reduced financial resources from the Public Health Service might cause aging of the radiology equipment and might not allow to keep up with technical developments.

Innovations and Best Practices:

Digora-the intraoral digital x-ray system is incorporated in the examination of patients and in undergraduate teaching. Close co-operation with the other Departments of the Dental School in teaching and research.

Plan for future changes:

The implementation of panoramic digital imaging and the computerization of the Department.

Visitors Comments

The visitors were impressed by the range of diagnostic techniques available in this department. The equipment is in good order although some of it is becoming old. Digital imaging is available and is being extended throughout the dental school.

The students are given a thorough and extensive course in oral/dental radiology and radiography and the subject is assessed as part of the final diploma examinations.

Section: 14 Name of course: Oral Medicine

Head of Department: Dr hab. Renata Górska

Department of Diseases of the Oral Mucosa and Periodontium

Address: 00-246 Warsaw, ul. Miodowa 18

e-mail: isam@polbox.com fax: (48 22) 831 21 36

An introductory paragraph:

Oral medicine and pathology are taught together with periodontology, principally during the V Year, but some elements are included in teaching program of the Dermatology Dept (IV Year)

Primary Aims

The primary aims of the course are to develop in students an understanding of aetiology and pathology of the oral mucous membrane diseases.

Main Objectives

The student should be able to:

understand the pathology of oral red and white lesions and oral cancer

understand the causative mechanisms of oral ulceration, blistering and pigmentation

understand the pathology of the salivary glands

diagnose diseases of the oral mucous membrane which are of significance to general health

describe the relationship between oral and systemic diseases

understand the principles underlying the use of medicines for common oral diseases in the process of treatment

Hours in the Curriculum:

Lectures: 15 hours

Seminars and Clinical practice: 10 hours

Methods of Learning/Teaching:

Theoretical preparation is gained on seminars (8-10 students per lecturer), understood as the form of dialogue between student and periodontist. Clinical practice is supervised by periodontists and performed in the groups of 4-5 students. Each student has his own patient.

Assessment Methods:

Initial assessment prior to commencing clinical practice. Evaluation of theoretical knowledge. Final examination – together with periodontology – comprising of a practical and theoretical part after completing the V Year course.

Strengths:

Students have a possibility to discuss with periodontists research being carried out by overseas researchers. They can participate in scientific work of the Department and – through cooperation with other departments – enlarge their knowledge.

8. Weaknesses

Low number of hours spent on clinical practice and lectures.

Innovations and Best Practices

Close contact with Hematology Clinic, Dermatology Clinic and Transplantology Clinic.

Future Plans

Increasing the number of hours spent on teaching which would allow for better conditions to learn the subject.

To develop in students an understanding of diseases of the oral mucous membranes, of dental and oral diseases that have systemic complications, of the oral manifestations of systemic diseases, of drug therapy patterns and of the management of high risk dental patients such as suffering from infectious disease.

Visitors Comments

There is adequate teaching in Oral Medicine but it is unclear to what extent oral pathology is covered. The recommendation for an integrated course made earlier would ensure a reduction in repetition and in-depth coverage of the appropriate material.

Section 15 – Integrated Patient Care & Emergencies

Visitors Comments

There is no integrated patient admissions clinic for oral diagnosis and treatment planning. Furthermore there is no unified patient record system in use. Each department appears to use its own patient record which is not available when a patient attends another department. Patients attend individual departments for specific items of dental care but there is no philosophy evident of providing total patient care. The only emergency dental care available out of hours is for Oral and Maxillofacial problems.

Recommendations

- The visitors strongly recommend that a total patient care philosophy which includes patient assessment and oral diagnosis and treatment planning together with long term maintenance of oral health be introduced.
- The clinical curriculum should be patient focussed and rely less on separate clinical exercises practised on separate patients in individual departments.
- A central dental record system should be introduced.
- Undergraduates should gain experience in the diagnosis of dental pain and other emergencies.

Section: 16.0 Name of course: Medical Sociology

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

Name: Cecylia Łabanowska, PhD

Institute of Social Medicine, Department of Epidemiology

Address: 02-007 Warsaw, ul. Oczki 3

e-mail: zbylew@plearn.edu.pl

fax: (48 22) 621 52 56

An introductory paragraph

This course is held in the spring term of the 1st year, at the Institute of Social Medicine; Department of Epidemiology.

Primary Aims

The course offers foundations of general knowledge of man and society with the aim of broadening the student's basic understanding of the social context of health and illness and of the social determinants of medical practice and health service provision.

Main Objectives:

biological determinants of human behaviour, sociobiology

social determinants of human behaviour, role theory, group values

problems of doctor-patient communication, patient satisfaction studies

institutional determinants of human behaviour, the hospital as a social environment

social stereotypes in medicine, problems of social deviation in medical practice

medicine and the social system, consumer movements, rights of patient

individual and social health needs; effectiveness of medicine

social inequalities in health

doctors and patients in different health care systems

Hours in the Curriculum

Lectures: 30 hours

Seminars: 30 hours

Method of learning / teaching

Lectures and seminars

Assessment methods

This is accomplished on an in-course and of term basis. During the course students are required to make a presentation on a chosen topic. They are also expected to take a final test (10 questions) covering the problems presented at lectures.

Strengths:

Fostering the doctor-patient relationship, broadening the scope of medical topics

Weaknesses:

Seminars might be a better teaching mode than lectures

9/10. Innovations and plans for future changes;

Introduction of multimedia techniques of presentation

Section: 16.0 Name of course: Behavioural Sciences (Medical Psychology)

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

Name: Barbara Skuza
Department of Medical Psychology
Address: 02-109 Warsaw, ul. Ks. Trojdena 2
fax: 822 64 10

An introductory paragraph:

The course is held in the autumn semester and introduces students to psychological and psychosomatic aspects of medical practise.

2. Primary Aims:

To make students familiar with selected psychological concepts to broaden their appreciation of psychological mechanisms underlying patients' behavior.

3. Main objectives:

The students should:

to become sensitive to the emotional needs of the patient

to improve their interpersonal skills

to be aware of dangers of iatrogenic errors and to learn how to avoid them

to be taught appropriate techniques of conducting a psychosomatic interview and establishing a psychosomatic diagnosis.

to be taught effective attitude towards the child as a dental patient

to be taught how to cope and establish contact with the non-motivated patient.

Hours in Curriculum:

Seminars: 30 hours

5. Method of learning/teaching:

A basic methods of teaching is group discussion on given material (tape recordings, case studies) and practical training (especially in communication skills i.e. active listening and appropriate communication techniques)

6. Assessment methods:

a test

an individually recorded psychosomatic interview with a patient and a written psychosomatic diagnosis

7. Strengths:

Encouraging students in their own activity in contacts with another person, especially with patients.

8. Weaknesses:

Excessive numbers of students of each group

Innovations and Best Practises

Plans for future changes:

Assignment of each student to individual contact with a patient.

Section: 16.0 Name of course: Forensic Medicine

Person who will explain and show this to the visitors:

Name: Mariusz Adam Szabela M.D.

Department of Forensic Medicine

Address: 02-007 Warsaw, ul. Oczki 3

e-mail: mszabela@bibl.amwaw.edu.pl

fax: (48 22) 628 63 04

1. An introductory paragraph

This 3 – day course is held during the 5th year, and serves as an introduction to the main problems of forensic medicine: confirmation of death, examination of the time of death, medico-legal aspects of injuries, outline of medico-legal statements, malpractice.

Primary Aims:

A general acquaintance with the main problems of forensic medicine (including clinical forensic medicine and dentistry)

To present the implications of medical and dental knowledge for the legal system

Main objectives:

the role and purpose of forensic medicine

confirmation of death, examination of the body and estimation of the time of death, death certification, natural deaths, unnatural deaths and inquests

the doctor in court-statements

civil litigation, disciplinary proceedings

accidental injury and traffic medicine – medico-legal aspects

elements of forensic dentistry included differential diagnosis of bite mark injuries,

identification and age determination from the teeth

malpractice in general and dental medicine, negligence.

Hours in the curriculum:

15 hours (5 hours per day for 3 days)

Lectures-7 ½ hours

Practical classes-7 ½ hours

Method of learning/teaching;

Lectures, practical classes (demonstration, autopsies).

Assessment methods:

Attendance record. Self assessment in students' questionnaire

Strengths:

Medico-legal aspects of medicine include information about malpractice

Weaknesses:

unwillingness of students to study forensic medicine

short duration of the course

Innovations and Best Practices:

confirmation of death and the rule of reanimation

practical outline of statements in the case of injuries (included maxillofacial injuries)

Plans for future changes:

Lengthening the course in forensic medicine

Section 16.0 Name of course: Hygiene and Epidemiology

Person who will explain and show this to the visitors:

Name: Jerzy Szewczyski

Institute of Social Medicine. Department of Hygiene and Department of Epidemiology

Address: 02-007 Warsaw, ul. Oczki 3

e-mail: zbylew@plearn.edu.pl

fax: (48 22) 621 52 56

1. An introductory paragraph:

This course is held during the autumn and spring terms of the 3rd year, and serves as an introduction to the role of epidemiology, prevention and health promotion, Elements of medical statistics are also introduced.

2. Primary Aims:

The course is provided by teachers of preventive medicine, epidemiology and medical statistics. The programme provides an understanding of science fundamental to public health, with special reference to the problems of oral health. The training covers epidemiology, statistics, the principles of prevention of disease and promotion of health, assessment of health needs, nutrition, diet, environmental health, occupational health.

3. Main objectives:

prevention and health promotion

health behaviour and its determinants

human nutrition. food products and diet planning

assessment of nutritional status

environmental health (properties of air, biological and chemical contamination of water)

occupational health

epidemiology of human diseases

essentials of medical statistics

Hours in the curriculum:

Seminars and practical classes: 60 hours

Methods of learning/teaching:
Seminars and practical classes

Assessment methods:

This is accomplished on an in-course and end of term basis. During their course students are expected to make presentations on topics either in preventive medicine or epidemiology. They also take a 100 questions MCQ test.

Strengths:

The wide range of topics

Weaknesses:

Too little practical classes

9/10. Innovations and plans for future changes:

More practical classes. Introduction of multimedial techniques of presentation.

Section 17: Examinations, Assessments and Competences

1.The overall approach to assessments in the school

Specific departments have defined goals as to the knowledge, skills and attitudes that are required in different fields of dentistry, and which students are expected to achieve during particular courses. Methods of assessment vary between departments, and include oral and / or written and / or multiple choice tests during the course, after covering a given area or at the end of term; an evaluation of students' knowledge in a given field during seminars in the form of dialogue or of a presentation made by students, and in the case of clinical dental disciplines, an oral or written test prior to commencing work with patients. The majority of courses end with tests and / or exams (oral, written or multiple choice). In the case of the dental disciplines, this includes practical exams with patient history and examination, diagnosis and presentation, evaluation of x-rays and / or casts where appropriate, treatment planning and performance of a procedure(s), and multiple choice or oral theoretical exams. The final grade obtained in the examination depends in part on an evaluation of the student's work throughout the course. Grades for tests and exams are awarded on a scale from 2 (fail) to 5 (very good).

2.Exams and evaluations during the course play an important role in motivating students.

3.Strengths

Thorough medical background, particularly important in an ageing and increasingly medically-compromised population.

Case based learning.

The educational system allows students to choose their interests by joining students' research groups organised at specific departments.

4. Weaknesses

Lack of integrated dental care and a course in comprehensive patient care - disciplinary approach to education.

Traditional approach to teaching health and disease.

Lack of problem – based learning.

Lack of a computerised system for patient records at the Dental School.

No clear regulations between the Hospital (Public Health Care, patient treatment) and Medical University (student education).

Limited access to modern imaging techniques (CT, NMR, MI and others), because the high costs of these methods must be covered by the patient.

5. Innovations and / or Best Practices

Early exposure to problems connected with the oral cavity (from the 1st year), which stimulates interest in learning the basic sciences. Early introduction of clinical subjects gives students a chance to observe changes occurring in oral cavity resulting from progress of destruction and from preventive and therapeutic measures.

Integrated courses (Physiology of the Masticatory System, Prevention), with parts of the course organised outside the dental school environment (at nursery schools and schools). The character of these courses (early contact with children in a preventive context, preparing materials for oral health promotion in different age groups) encourages a prevention – orientated attitude in students.

Assessment of students' progress includes an evaluation of organisation and attitudes, clinical skills and knowledge. Results of assessment are discussed at

meetings within the departments and by representatives of each department in the Faculty at a meeting each term, and are taken into consideration when awarding grades for the final examination.

6.Plans for future changes

Introduction of problem based learning.

The use of computers on a wider scale in the didactic process.

7.External examiners

There are no external examiners at the examinations.

8.What formal completion of an exam is required of the school / university for students to qualify and register as dentists ?

In order to qualify as a dentist, it is necessary for the student to successfully complete each course, ended, where applicable, by a test or internal exam. After qualifying, graduates obtain a year's temporary registration, during which they undergo further vocational training. On completion of this training, graduates sit a state exam (starting from year 2000), after the successful completion of which they may register as dentists and obtain a licence to practice from the Chamber of Physicians.

9.The extent to which the school seeks those competences recommended by the EU Advisory Committee on the Training of Dental Practitioners.

Our school increasingly seeks those competences recommended by the EU Advisory Committee. However, this is largely dependent on the initiative of specific departments.

Visitors Comments

Examination/Assessment of Students

This is similar to assessments in other Dental Schools in relation to the preclinical area. Practical aspects of preclinical subjects are not tested.

Clinical Subjects and Dental Materials Science

Written and oral examinations are the chief methods. There are no formal tests in clinical competence. Clinical competence in different areas of restorative dentistry is judged as a feature which is part of the fifth year clinical exam and from the students clinical practice record. In the course of this examination a procedure is selected by the examiner which the student is asked to perform. Different students can be given different tasks.

The EU recommendations on competencies are suggested as a more comprehensive and uniform way of testing clinical skills. It is not clear how competence in Periodontal assessment and procedures is tested. Oral written exam only is listed later.

Aims and objectives are equivalent with these in other schools in Europe and America. The teaching and service facilities are excellent and better than in most European/American Schools.

Section 18: Other Influences

18.1 Regional oral health needs

Regional oral health needs significantly influence students' clinical training, which is mainly performed on the large number of patients from the Warsaw region seeking basic and specialist oral health care at the Dental School under the public health insurance system.

18.2 Evidence based treatments

The trend towards evidence - based dentistry has been recognised, although its implementation is still rather limited because of practical limitations connected with the obligation of the school to provide specific services under the health insurance system. However, contemporary knowledge and results of studies are presented during lectures and seminars, which are continuously up – dated in their contents.

18.3 Involvement in other university activities and sport

During the first 3 years of study, students participate in courses in 2 foreign languages (English plus French / German / Russian), organised at various levels. The aim of this, particularly with respect to the English course, is to enable students to take advantage of overseas dental literature.

During the 1st and 2nd years, students participate in sports activities such as swimming, athletics and indoor sports. Additional activities are organised for those older students who are interested.

18.4 Recreation

To be presented by students' representatives

18.5 Student selection procedures

Student selection is based primarily on academic ability. Candidates are required to sit an entrance exam (multiple-choice questions in biology, chemistry, physics, foreign language and general knowledge). Those candidates who score the highest number of points are admitted.

18.6 Labour Market Perspectives

Opportunities for graduates are reasonably good at present. Following a year's vocational training, graduates may undertake employment in the public or private sector. In the public sector, opportunities for employment are limited by sickness funds, which select those dentists / practices which are to provide services under the public insurance system in a given region.

Section 19: Student Affairs

19.1 Basis Data from Dental Schools

- a) Average number of dental students qualifying per year: 80
- b) Average number of dental students admitted to the first year: 80
- c) Length of course in years and / or semesters: 5 years / 10 semesters
- d) Is there a separate period of vocational training following graduation as a dentist in your country ?

YES

- e) If yes to d) above, is that organised by the University / Dental School ?

PARTLY

19.2 Different postgraduate courses

Programmes for specialisation in General Dentistry, Orthodontics and Oral and Maxillofacial Surgery (under the new system of specialisation since 1999).

Programmes for specialisation in General Dentistry, Conservative Dentistry, Paediatric Dentistry, Periodontology (including Oral Medicine), Oral Surgery,

Maxillofacial Surgery, Prosthodontics and Orthodontics for those graduates who have undertaken specialisation under the previous system, prior to 1999.

Individual departments organise short courses for graduates who are specialising, in co-operation with the Centre for Postgraduate Medical Education.

The Medical University also organises doctoral courses lasting 4 years, during which graduates employed at the University may follow research interests and prepare a doctoral dissertation.

The staff of the Dental School are actively involved in the organisation of the monthly meetings of the Warsaw Division of the Polish Dental Association. The purpose of these meetings is the continuing education of dental practitioners from the Warsaw region.

Section 19.3 Other courses

The Dental School does not participate in the training of auxiliary personnel.

Section 19.4 Student counselling services

A staff member is allocated as students' councillor for each year.

The Vice-Dean's office at the Dental School administration provides students with all formal information and also about the studies.

STUDENT AFFAIRS

- Students appeared enthusiastic, professional and very interested concerning the educational and personal development.
- Students have many opportunities to develop their cultural activities or involve in sports.
- Students feel that the emphasis on Biomedical Sciences is an advantage in their education.
- Results of the questionnaire indicate that they acquire most of their clinical experience in the 5th year.
- It is obvious through the research groups in the various departments that students have opportunities to expose themselves to international Literature and Research.
- There is active student association but it is the feeling of the visitors that students do not have any input on the curriculum or issues relating to their education.

Section 20: Research and Publications

20.1 Publications in refereed journals

	1997	1998	1999
Dept. Oral Surgery	12	12	8
Dept. Conservative Dentistry	21	15	17
Dept. Prosthodontics	33	39	36
Dept. Oral and Maxillofacial Radiology	6	6	5

20.2 Textbooks published by staff

	1997	1998	1999
Dept. Conservative Dentistry		1	
Dept. Prosthodontics	1	2	1

20.3 Chapters in books

	1997	1998	1999
Dept. Oral Surgery	1	1	
Dept. Prosthodontics	1	19 + 10	1 + 9

20.4 Grants received

1. Dept. Oral Surgery

1999 – 2001 KBN (Committee of Scientific Research) 160 000 PLN

2000 – 2002 KBN	199 400
1998 – 2000 Medical University	95 000
1998 – 2000 Medical University	75 000

2. Dept. Prosthodontics

1996 – 1999 Tempus Phare Project SJEP 11547/96	420,600 ECU
1997 – 2000 KBN	380,000 PLN

3. Dept. Conservative Dentistry

1998 - 2001 KBN	233.940 PLN
1998 – 2001 KBN	243,560 PLN
1995 – 1998 KBN	210,000 PLN

4. Dept. Oral Medicine & Periodontology

1998 – 2001 KBN	130,000 PLN
1996 – 1998 KBN	100,000 PLN
1999 – 2000 KBN	200,000 PLN

Visitors Comments

Research & Publications

- All departments are active in publishing scientific papers in peer reviewed journals.
- The volume of published work is good.
- With few exceptions the publications are in National Journals. All the staff have an impressive knowledge of the English Language and it would be beneficial for the development of staff within the school if they submitted more papers to International Journals.
- Many staff attend International Meetings on a regular basis.
- Many staff have undertaken periods of training overseas.
- There is little evidence of laboratory based research in the dental disciplines.
- Significant research grants have been awarded to individual departments.

Section 21: Quality Development

Recommendations on appropriate methods of promoting the development of quality assurance methods or a continuous improvement policy.

As far as the promotion of the development of quality assurance methods is concerned, conferences and workshops organised at the national and international level would be of great importance. This would give the higher education institutions a possibility of sharing their experiences, consulting their needs with experts, and learning about new approaches.

Plans for improving or implementing new quality development methods.

- 1) Establishing a School quality assurance committee
- 2) Seeking consultation with European experts on improving the quality of teaching
- 3) Making the reviewing process at the subject level faster and more effective by training new academic reviewers by senior ones, and, if possible, by external experts.

Faculty and staff development

At present, the School's authorities are discussing the future quality strategy and staff development policy, as well as the tools for their implementation.

Aims

- 1) To provide high quality undergraduate and postgraduate dental education for the benefit of the School's students
- 2) To ensure that the School's quality of teaching is continually improved
- 3) To ensure that the physical environment for learning is of a high standard
- 4) To develop the School's procedures for the monitoring of teaching quality
- 5) To encourage the academic staff to participate in the process of quality development

Implementation

The implementation of quality assurance methods is presently supervised by the Senate's Committee for Didactics whose work will be in the future supported by the quality assurance committee.

Evaluation

The School's undergraduate programme of study is subject to quality review by the School experts. The quality of teaching in different departments is evaluated by the School's assessors, who carry out assessment visits. Moreover, all departments and their academic staff are encouraged to prepare self-assessment in the subject taught.

Student evaluation

The most significant factor of the evaluating procedure is the feedback we get from students through the Student Questionnaire carried out every year. Through the Questionnaire, the students assess the quality of teaching at all departments. The Questionnaire is prepared and supervised by the Senate's Committee for Didactics and the Student Union.

Internationalisation

The School aims at establishing a truly international position in research and education, and encourages all its departments to expand their international links. The School is going to maintain its scientific and educational co-operation with many overseas institutions and seek new international partners to ensure the international dimension.

International Contacts – Undergraduate Programme

Student and staff visits abroad

Every year a number of students go to overseas institutions for summer electives which are fully recognised by the School. Both students and academic staff take part in international scientific conferences, which often results in establishing new links. Moreover, the School has started co-operation within the Socrates-Erasmus programme and is going to develop student and academic staff exchanges in the future.

Foreign students visits to the actual school

The School believes that the participation in European Union student exchange programmes will increase the number of incoming foreign students, and the authorities are working on introducing new teaching offers which would attract students from partner institutions.

Section 22 – Visitors Overall Comments on the School

The visitors wish to acknowledge the friendly and hospitable way in which they were received and the arrangements which were made particularly by Professor Maria Wierzbicka and Professor Andrzej Wojtowicz.

We have been very impressed with what we have seen and by the people with whom we have spoken. Overall the school adequately fulfils the norms of a modern European Dental School in its educational programmes, research and the range of patient care provided. Our suggestions are made simply as an aid to identify areas that, if attended to, would further enhance the school.

Section 22: Overall Comments on the School

1. Strengths

- Enthusiastic, dedicated and well – trained academic staff throughout the School.
- Close co-operation between oral health staff and the medical and basic science teachers. Some of the staff teaching basic sciences also have dental degrees. Because of this, they may find it easier to show students the clinical applications of some of the “theoretical knowledge” they learn.
- The integration of medical and basic sciences into clinical oral situations, with an emphasis on the relevance of basic science to clinical dental practice.
- The introduction of clinical situations early in the curriculum (during the first year).
- Thorough medical background – the basic medical sciences are practically the same as for Medicine.
- A holistic approach towards patient care, encouraged by both a solid medical background and by long – term contact of students with patients.
- Allocation of students to the different dental departments is longitudinal rather than in blocks. This allows a progressive development of the students’ clinical competence and the introduction of more complex problems with increasing experience. Medical subjects, on the other hand, are taught in blocks.
- Continuous revision and development of the curriculum.
- Most shortcomings are recognised.
- Continuous (self) assessment as a means of continuous feedback.
- Availability of patients is good, with a large variety of treatment needs. The service requirements and patient treatment needs play a significant role influencing the range of learning experiences available to students.
- Close collaboration with the Public Dental Service in patient care.
- Emphasis on health promotion, and on the development of efficacious health care services as appropriate to the needs and resources of the community, based on primary oral health care.
- Students are actively involved in the development of the School’s policies and the curriculum, and in research activities. Students actively participate in projects organised within Students’ Research Groups, based on both at the Departments of the Dental School and at Basic Science Departments.

2. Weaknesses

- Some of the Departments of the Dental School are localised at quite a distance from each other.
- Limited opportunities for international exchange.
- There is not an explicit philosophy of preventive dentistry running through the course.
- There is a lack of a total (comprehensive) patient care programme.

- There is no attempt to teach four handed dentistry and the team practice approach despite a generous allocation of dental nurses compared to many European and United States Dental Schools.

3. Recent Developments

Since re-opening in 1945, the School has never had its own building. For a number of years, the Departments of the Dental School were located at 4 different sites, at a considerable distance from one another. In the 90-ties, an effort was made to bring the parts of the Dental School together. One of the buildings in the hospital area was renovated, since 1994, the Department of Oral Surgery, the 1st Department of Maxillofacial Surgery, and the Departments of Prosthodontics and Radiology have been localised at this site. As a result of this move, facilities were significantly improved.

The building at Miodowa, at which 3 departments are located, has also been renovated during this period, and facilities for clinical education have also improved very much. The number of dental chairs available for education in Periodontology and Paediatric Dentistry has doubled, and new, ergonomic equipment was installed at all these Departments.

This year two other Dental Departments had the chance to move into the renovated and re-equipped building at the hospital, where most of the Departments involved in the education of dental students are located. Furthermore, all of the Dental Departments have been supplied with computers, and information technology is developing.

The Dental School, as a sub-faculty of the Medical University, has access to the educational facilities of the University, such as lecture and seminar rooms. The School also has its own 2 lecture rooms for 70-90 persons. One of them is well –equipped, and the other in need of modernisation.

The improvement of physical facilities has been a factor which has positively influenced both staff and students. Students are motivated to take more care of the instruments and equipment which they use at the School. Moreover, conditions are now better for hygiene and cross infection control.

4. Innovations and Best Practices

- Integrated oral health courses in the programme (Prevention, Physiology of the Masticatory System).
- Clinical elements introduced in the first year of the Dental Curriculum.
- Co-ordination of clinical training with the medical and basic sciences.
- Students' research projects are introduced at an early stage.
- Emphasis on clinical competence, with primary care being a priority.
- Continuous staff development programme.
- Student assessment of staff performance.

5. Recommendations

- Review the balance in the curriculum of Basic Sciences, Medical Subjects and Practical Clinical Dentistry.
- The development of an integrated care programme.
- Co-ordinate and strengthen Dental Public Health and Preventive Dentistry.
- Start Periodontology and Orthodontics earlier in the course and increase the time allocation.
- Consider an integrated OS, OM, OP, OR course not a new department.
- Introduce a central patient record system.
- More clearly specify the skills to be mastered by students by the end of the programme.