



**SECOND UNIVERSITY OF NAPOLI
MEDICAL SCHOOL**

**SCHOOL OF DENTISTRY AND DENTAL PROTHESIS
(CORSO DI LAUREA IN ODONTOIATRIA E PROTESI DENTARIA)**

REPORT FOR THE DENTED SITE VISIT

13–17 MAY 2000

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PREFACE: HISTORY OF THE UNIVERSITIES OF NAPOLI

On the fifth of June 1224, the king of Sicily and Southern Italy Frederic of the House of Hohenstaufen, (grandson of the Barbarossa and son of Constance, the last heiress of the Hauteville, the norman royal house of Sicily and Southern Italy) instituted the *Studium Generale (or Universale) Neapolitanum*. This Studium or *Universitas Studiorum* included the schools of law, medicine and art. This was the first State University created to supply laic clerks to the kingdom i.e. not formed in Church-administered Universities like Paris and Oxford or church controlled or Guelf (Welf) Universities like Bologna. The conflict between Papacy and Empire called for such a decision. Possibly the young king of Sicily, also king of Germany and Emperor of the Holy Roman Empire, known as Frederic the Second did not create the University “*ex novo*” but reorganised the *Studium* established by his maternal grand father Roger the second of Hauteville (Italianised as Altavilla). This is certainly true for the medical studies which had been regulated by Roger II in a law of 1134.

The teachers at the University were Kings employees and this remained true with the dynasties that followed in ruling Southern Italy (Houses of Anjou-Provence and of Aragon) and with the Spanish viceroys. Because of this, the University was closed during each military invasion or period of unrest and was reopened during periods of calm. After a short and uneventful period of Austrian rule at the beginning of 1700, the University and the Medical school were reformed during the reign of the first Bourbon King, Charles (1734-1759) later to become Charles III King of Spain. The strength of the Medical School during this period and the following centuries was the *Ospedale degli Incurabili*, a large hospital still existing nowadays where the teachers of clinical matters held courses at the bedside of, sick, poor people. The faculty was further reformed during the Napoleonic period. These reforms lasted practically until the reunification of Italy (1861).

On the 14th of October 1926 the first teaching of Odontoiatrics in Italy was introduced in the medical curriculum of the University of Naples as an optional course.

The first director of a service of odontoiatrics in the University of Napoli was Dr. Pasquale Scervini (1912-1921), followed by Raffaele D’Alise (Istituto di Odontoiatria e Protesi Dentaria (1921-1924, Clinica Odontoiatrica 1924-1942), Giosuè Giardino (Clinica Odontoiatrica 1942-1952, Istituto di Clinica Odontoiatrica e Stomatologica 1952-1976) and Augusto Marenduzzo (Istituto di Clinica Odontoiatrica e Stomatologica 1976-1983). Dentistry became a specialization of Medicine after a two year postgraduate course in 1950.

In 1983 the University of Napoli assumed the name of *Università Federico II* after the name of its founder. Prof. Fernando Gombos was appointed director of the Istituto di Clinica Odontoiatrica e Stomatologica and director of the newly founded (1980) school of Odontostomatology, always part of the medical school but with specific courses and degree separated from those for medical students.

On the 12th of May 1989 a government degree announced the splitting of the University into two universities: the Federico II University and the Second University of Napoli (SUN). In the intentions of the legislator and in spite of its name the SUN was destined to move in the near-by city of Caserta and in its province. These plans did not work out since funding was inadequate and the moving processes are still on the way. At present the administrative offices are part in Naples and part in Caserta province (NB an Italian province corresponds roughly to an Anglo-Saxon county or shire, to a French department, to an Hungarian comitat and is larger than most German kreis): the different faculties are spread over five townships in the Caserta province: Caserta, Santa Maria Capua Vetere, Capua, Aversa and Marcianise besides the Medical School in Naples. The Dental School is waiting for the achievement of the construction of the new building in Caserta which is expected within three years. Then it will move.

Prof. Fernando Gombos remained director of the Istituto di Clinica Odontoiatrica e Stomatologica until 1995 and then he was succeeded by Prof. Ferro until 1999 and then by Prof Laino, the present director. Prof. Fernando Gombos remained Dean of the Dental School from 1983 until today.

Two new laws give us great hopes: the law on University autonomy and that on experimentation in teaching. These new laws may allow us to short circuit the centralized, heavy, conservative and Byzantine administration and to move into a more modern and dynamic teaching/learning situation.

SECTION 1: INTRODUCTION AND GENERAL DESCRIPTION

AIM OF THE SCHOOL

The institutional purpose of the school is to train people in basic dentistry: i.e. at the end of the studies the student must be able to prevent, diagnose and treat the major pathologies of the stomatognathic system which may handicap or endanger the life of the patient and to prescribe the correct rehabilitation. Hence the students must acquire:

- a theoretical knowledge of biological subjects, integrated with the clinical applications and of clinical subjects integrated with community medicine.
- practical skills for the prevention, diagnosis and treatment of prevalent diseases and for the rehabilitation processes necessary for the correct function of the stomatognathic system.
- motivation and cultural background enabling him to professionally practice both dentistry for individual subjects or community dentistry.

Are, thus, considered objectives of the dentist profession all the activities aiming

- at preventing, diagnosticate and treating every disease and malformation (congenital or acquired) of mouth, jaws and related tissues and
- at rehabilitating function and aesthetics of the oral region lesioned by these diseases and malformations.

DESCRIPTION of the COURSE

This is a five year programme beginning with a biennium (where basic sciences, pre- and para-medical disciplines are taught), followed by three year of clinical training (theory and practice).

Attendance to courses is mandatory. Examinations in the triennium cannot be taken until a passing grade is obtained in all the exams of the biennium.

In order to graduate, the student must have

- obtained a passing grade in all compulsory subjects and in two optional ones.
- done a short (6 months) internship (tirocinio)
- satisfied all the requirements and practical tests in clinical subjects.

A written "Thesis" and a *viva voce* discussion are required for graduation.

The subject for the "Thesis" topics must be assigned at least one year before the expected graduation.

Visitor Comments

*Visit to the School of Dentistry, Second University of Napoli.
13th -17th May, 2000.*

The visitors' comments are presented in two formats. First, the comments are separated so that they can be related directly to each section of the School's Self Assessment Document (SAD). Second, the comments are brought together as a single narrative at the end of the SAD.

Section 1. Introduction.

We would like to extend our most grateful thanks to the Dean, Professor Fernando Gombos, and to the staff and students of the School of Dentistry for their warm welcome, their generous hospitality and most excellent co-operation. Throughout the visit Professor Giorgio Gombos was our shepherd; we thank him most sincerely for looking after us so well.

We were particularly appreciative of the quality of the documentation provided for the visit. The School is well situated in the middle of a big city. There is ready access for patients and, nearby, there are related university departments thus allowing convenient teaching and opportunities for collaborative research. Having said this the point should be made that some medical clinics are situated a distance from the School thus creating logistical problems for the students.

The aims of the School and of the undergraduate curriculum were clear and appropriate.

The staff have met the challenge of devising a five-year curriculum for dental students in place of the old style 3-year addition to the medical course.

At this introductory stage of our report we would like to put on record our admiration of the excellent staff/student relationship. The students specifically mentioned their gratitude for the effort of the staff in devising and promoting their educational programme.

Also, at this early stage, we must draw attention to the very major problems which have been created by the legal ruling which has effectively banned the numerus clausus. As a consequence, since 1997, the University has been obliged to admit well over 100 students per year instead of the normal 24 per year who were admitted on a selective basis. This increase has had to be accepted without any increase in resource. At the present time it is far from clear whether or not this ruling will continue.

The teaching and clinical facilities in the School were designed for the smaller intake. As we will point out later in this report it is our opinion that these facilities are inadequate for 24 students following a modern dental curriculum. The increased numbers of students entering the clinical course will put an intolerable burden on teachers and on the existing facilities. It is inevitable that the current limited clinical experience will be further diluted, that the quality of education will suffer and that there is a definite risk of patient safety being compromised because the new graduate has inadequate practical clinical experience.

The University and University Hospital administrations are fully aware of the problem. We understand that solutions can be found only at national level. We urge that the matter be considered urgently if the quality of dental education is to reach and be maintained at a level commensurate with European standards.

The visitors feel that they have no choice but to draw attention to this matter at the outset of the report as it goes to the very heart of the quality of dental education.

SECTION 2: PHYSICAL FACILITIES

Since 1980, date of its foundation, the Dental School has been hosted by the Istituto di Clinica Odontoiatrica e Stomatologica, being that it does not have its own building. The School will be located in the University Hospital in Caserta which is now under construction. (three more year are predicted for its completion).

Four Clinical Services are located in the above cited Istituto and they constitute the basis for the students' practical activity. Clinical activity and practical teaching use the same facilities.

The layout of the Istituto di Clinica Odontoiatrica e Stomatologica is the following: the Istituto covers 3000 square metres divided in four levels.

Ground Floor

- * Secretarial Staff offices
- * Library
- * *Giardino* Classroom 98 seats
- * Technical Classroom 24 manikins (fantom heads)
- * *S. Apollonia* Classroom 24 seats
- * 1st clinical room with 2 dental chairs for the first diagnostic visit

1st Floor

- Five Dental chairs for Prostodontics, Conservative Dentistry for malformed and disgnathic patients and Orthodontics
- One Clinical room with 6 Dental chairs for ortognatodontics
- One Clinical room with 5 Dental chairs for Conservative Dentistry and Endodontics
- One Clinical room with 3 Dental chairs for periodontology
- One Laboratory for Dental Technicians (4 work stations)
- One Laboratory for Kinesio-elettromiography
- One laboratory for Endo-Oral Radiology and orthognatomorphia
- One Technical classroom for orthodontics (4 benches of 6 stations each= 24 stations, 1 office)

2nd Floor

- Surgical complex
 - * areas for Narcosis, area for assistance to cardiopathic patients etc.
 - * Two surgical operating theatres for 10 in-patients

3rd Floor

- One technical classroom with 10 personal computers (PC)
- One small room with one dental chair to operate in local anaesthesia
- Fourteen rooms for 28 in-patients
- One laboratory for Cytology-Histology and immunofluorescence.

2.1 Clinical Facilities

Dental center-consultation clinics.

Clinical services and clinicians responsible for each of themEntrance Visit

Prof. Buonaiuto
Dr. Annunziata
Dr. Parlato
Dr. Rullo

Dental Pathology

Prof. Buonaiuto

Oral Pathology

Prof. Gombos

Periodontology

Prof. Caruso

Pedodontics

Dr. Guidetti

Conservative Dentistry
and Endodontics

Prof. Riccio
Dr. Annunziata

Dental Materials

Dr. Parlato

Prostodontics

Prof. Minervini

Conservative Dentistry in facially
Malformed and handicapped

Dr. Parlato

Orthodontics

Prof. Ferro
Dr. Perillo

Pre-Surgical Orthodontics

Prof. Minervini

Oral and maxillofacial surgery

Prof. Laino
Prof. Gombos
Dr. Rullo
Dr. Palomba

Implantology

Prof. Caruso

TMJ clinic

Prof. Ferro

Strength

- Satisfactory technical equipment
- Good average level of clinical and surgical interventions
- High satisfaction rate expressed by the patients

Weaknesses

- Insufficient Medical staff
- Insufficient Administrative staff

- Insufficient Auxiliary staff
- Insufficient Nursing staff
- Deficient coordination between different clinical services, this is a difficulty mainly due to the different duration of the various therapeutic services
- Difficult and sometimes insufficient student rotation

Innovations

- To improve coordination between different services (recently unified in Department Service)
- To give more spaces for students
- To increase medical and nurse staff

Visitor Comments

The School is now showing signs of age. A few units have been replaced in recent times while others appear to be coming towards the end of their useful life. We accept that little money can be spent on the existing facilities as plans are reasonably advanced for a move to a new School based in Caserta. This move is said to take place in three years but popular opinion suggests that five years is a more realistic time scale.

Radiological facilities meet the current standards of safety.

Much of the floor space in the Institute is made over to oral and maxillofacial surgery in order to support a well developed in-patient facility which serves the region.

The 24 dental units are used by staff, postgraduate students, hygienists and undergraduate students. Already these facilities appear to be inadequate. The situation can only get worse as the increasing number of undergraduates progresses to the clinical phase of the course.

At the present time there is no opportunity to practice 4-handed dentistry. As the new school in Caserta is in the process of being designed we hope that steps are taken to promote this aspect of team dentistry.

2.2 Teaching Facilities

Available to the school:

- One classroom with 98 seats (*Giardino* classroom)
- One classroom with 120 seats (Paediatric Clinic large classroom)
- One small classroom with 24 seats (S. Apollonia)
- One technical hall with 24 phantom heads
- One technical hall with 4 benches (6 places for each bench) for orthodontic work
- One library room

- Two surgical rooms with two beds
- One small surgical room with one dental chair
 - **NEW:** One room with 10 personal computers and Net connection (Sala della Rizagra)
 - **NEW:** Interactive teaching programs on CD Rom are available

Strengths

Weaknesses

The limited number of classrooms (particularly the large ones) complicates class schedule programming.

Best Practices

Innovations

Projectors allowing to project from computers to facilitate interactive courses.

Visitors Comments

We were very impressed with the facilities in the phantom head teaching laboratory. There are 24 modern manikin units and facilities for live TV demonstrations. Of course these very good facilities will become totally inadequate for the larger years of students.

We also noted, with pleasure, the most recent development - the very well equipped IT room.

The lecture theatres in the Dental School are just adequate for the current numbers of students. It is difficult to see how these facilities will be able to cope with the demands posed by the extensive lecture programme and the huge number of students.

We must draw attention to the very small technology laboratory. Only four work places are available for the 3 dental technicians and for all the undergraduates. We understand that facilities allow only for acrylic work to be undertaken. All metal work has to be sent to commercial dental laboratories. We will report later on facilities for dental students to gain experience in dental technology.

2.3 Teaching Laboratories

- One laboratory of optical microscopy with fluorescence attachments
- One odontotechnical laboratory with 4 work places at the bench

Strength

This is the only laboratory of cyto- and histodiagnostics of the Campania Region

Weaknesses

Extremely reduced space and staff.

Best practices

Innovations

In the future, facilities in Caserta teaching laboratories will be available in the clinical disciplines.

Visitor Comments

2.4 Library

Strength

A high number of specialistic journals and textbooks are present.

Weaknesses

- Because of lack of funds, subscriptions to journals were stopped a few years ago and the purchase of books is extremely reduced.
- there is no librarian.

Best practices

Professors make their own personal library (books and articles) available to students.

Innovations

In project are:

- a centralized library for the whole medical school
- an on-line access (paying) to the literature (texts) by the pooled Universities and Scientific Institutions of Naples

Visitor Comments

The Self Assessment Document (SAD) prepared by the School drew attention to inadequacies within the library. We would agree with this assessment. Particularly we draw attention to the lack of a librarian, the restricted access to books and the cancellation of subscriptions to journals since 1995.

Various measures have been taken to reduce this academic deficit. The students are able to make use of the dental library housed in the other dental school in the city. Also, members of the academic staff make available their own text books for the students. Again we hope that the move to Caserta will allow a normal library service to be re-established and properly financed.

SECTION 3: ORGANIZATIONAL AND ADMINISTRATIVE STRUCTURES

CLOPD

The School activity is regulated by the Consiglio del Corso di Laurea (CLOPD) or Dental School Council. The CLOPD is chaired by the Dean of the School (*Presidente del CLPOD*) and is composed of all the teachers (16 *Full Professors*, 9 *Associate Professors*, 10 *Assistant Professors*, 13 *Professori a contratto*) and five duly elected student representatives. There are no members representing nursing, administrative or auxiliary staff as these are hospital and not School employees.

Until recently, all decision of the CLOPD had to be approved and ratified by the Medical School General Assembly, and then by other University bodies and in many cases by the Ministry of Universities and Research; even for such matters as the number of students admitted, number and content of the courses taught and other points of the curriculum. The recent laws on University Autonomy and didactic experimentation have allowed some freedom in that, in some instances, the approval of the Medical School Assembly is all that is needed to introduce (sometime transiently) some new measures.

Curriculum

The reader must be aware that the Italian University System was (and to a certain extent still is) a highly centralized structure at national level: programs of courses and examination were decided at ministerial level and with national uniformity. Only recently a certain autonomy became possible and we could rapidly introduce in the curriculum courses to learn the use of the English language and of personal computers, this compensates for high School deficiencies. To our knowledge our School is the first Dental School in Italy to have the course on computer use. Other changes such as interactive teaching/learning did not need external approval but this is at variance with the teaching in most Italian Universities. Final oral examinations are an old tradition and their substitution with written tests or other system of control of the acquired knowledge will take some time.

Administration

Only the daily administration of patients is done at the Istituto, all other administrative activity is done centrally by the University Accounting Office (Ragioneria Centrale) and it will continue to be in this way until the School becomes a Department, thus acquiring administrative autonomy. The present situation is source of many problems due to the

archaic administration rules and the slow pace of the bureaucracy. It takes months or even years to repair building damage or broken instruments. This inefficiency creates waste and degradation.

Funds

Didactic activity

Some funds (about 45 million Lit per year) are earmarked for teaching and are administered by the Office of the Dean of the Medical School. The Petty cash revolving fund is of 1 million lire. Expenses above 50.000 Lit must be justified by a formal Bill-Receipt; while for inferior amounts a simple cash-register receipt is sufficient. Expenses above 2 millions lire requires bidding by three suppliers. (I just learned that the ceiling has been increased to 4 million lit).

For every expense, even if minimal, a request must be made and approved.

Clinical Activity

The money made by the clinical activity is send to the University Hospital Central Administration (Ufficio Economato della Azienda Universitaria). For every expense even if minimal a request must be made and approved

In the Dental Clinics, 1 and 2, and in Orthodontics only paying patients are accepted. Until 1998, Patients paid only the modulatory ticket while most of the bill was footed by the Health System of the Campania region. The agreement between Dental Clinic and Health System was interrupted for Economic reasons. This circumstance makes student practice difficult. The Health System of the Campania region pays for surgical interventions and for hospitalisation. In this case the agreement is still valid.

Technology system employed for administration by our school

The good old ways : Pen, ink, paper and a calculating machine. Plenty of PC for teaching/learning (cfr. infra)

Visitor Comments

The main committee governing the affairs of the School (CLOPD) is the Dental School Council (CCLOPD). Its membership is made up of the whole teaching staff together with student representatives. CCLOPD meets every one or two months.

We are very pleased to hear that a process of regular student feedback on the quality of courses is being introduced. This initiative is an important aspect of quality control. We hope that this feedback is used to inform CCLOPD on the progress of the curriculum and that the results will enable appropriate changes to be made.

We read with interest the criticism of the staff over the previously centralised control of the dental curriculum in Italy. We share the School's concern as the process would appear to stifle innovation in curriculum planning. It was therefore good to learn that a degree of flexibility has been introduced as it will encourage individual schools to be innovative. The school in Napoli has taken advantage of this flexibility and has introduced two important initiatives - the course in English language and the course in IT. We are delighted to hear of these developments which will be considered further in this report.

Whilst welcoming this change we do express some concern over the policy that the core curriculum remains under rigid central control, that this core amounts to approximately 40% of the total content and that the details of this percentage are unclear to the staff of the School.

Essentially there are two income streams, one for the hospital function and one for the educational function. We gained the distinct impression that both streams were tightly controlled from outside the School of Dentistry and that they remained quite separate. This inflexibility would seem to create obstacles for the Dean and his colleagues at a time when they are having to grapple with major logistical problems. We earnestly hope that the central budget managers are able to relax the arrangements and give more responsibility to the local managers. Such a change would help to overcome the problems graphically described by the School and would increase administrative efficiency.

One further financial problem became very obvious to us during the visit - the fees paid by patients for their treatment. We feel we must highlight this matter as it has a significant influence on the flow of patients to undergraduates, a point we will be referring to at a later stage. We understand that patients pay the same fee whether or not the treatment is provided by a senior member of staff or by a student. The inevitable consequence is that patients are unwilling to be treated by students. Whatever else is done to establish a basic level of clinical experience for the undergraduate, the measures are unlikely to be successful unless the fee structure is altered in order to provide a financial incentive for patients to receive treatment from students. It is common practice in other countries within Europe for such arrangements to be put in place, or even for the treatment by students to be free of charge.

SECTION 4: STAFFING

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

Name: Fernando Gombos

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Professors

Permanent staff

Full Professors

Clinical odontostomatology 7

Clinical Medicine 2

Non clinical 7

Associate professors 5

Clinical odontostomatology

Clinical Medicine 6

Non clinical 3

Assistant professors 5

Clinical odontostomatology

Clinical Medicine 2

Non clinical 3

Part time staff

Permanent Contracts 1

Temporary Staff

Clinical (Dentists) 10

Professori a Contratto for Didactic Activity 1

Administrative Staff

Administration Manager 1

Secretaries 5

Hospital Staff

Senior nurse 3

Nursing staff 20

Dental Assistant 2

Dental Technicians 3

Auxiliaries 6

Lab Technicians 1

There is no nursing, technical or administrative staff attached to the school

4.1 Strengths:

The prevalence of MDs specialised in odontostomatology in the senior staff and the osmotic relationship with the rest of the Medical School contribute to the formation of dentist who are physicians of the mouth, i.e. impregnated with general medical culture which constitute the basis of their specific professional odontostomatological culture.

As example, we may give the need for immunological notions for understanding a great deal of stomatological pathology

4.2 Weaknesses:

- Almost total absence of Junior Staff (i.e. instructors) for tutoring small groups of students during practical, specifically dental, clinical activity. At the present time the permanent (professors) or temporary (professori a contratto) staff perform this type of activity.
- Almost total absence of nurses and technicians exclusively or mainly affected to practical teaching activity.

4.3 Innovations

In June 1999 a detailed request on our needs for medical and nursing staff and equipment was forwarded to the administration together with proposals for restructuring the building. No answer has been received yet.

4.4 List of academic staff, by department, and their Qualification (List below)

NB Notice that in the Italian University system the term "DIPARTIMENTO " has a meaning different from the Anglo-American term "DEPARTMENT". "DIPARTIMENTO" refers to an administratively autonomous structure within the University and is generally derived from the coalescence of several "ISTITUTI"; For example the present dipartimento di Fisiologia includes the former Istituti di Fisiologia, di Biologia e Genetica and some biophysicists. This Dipartimento will coalesce with the Istituto di Farmacologia, some chemists and biochemists and, hopefully with that of Patologia Generale, to form the Dipartimento di Medicina sperimentale. Scientific, clinical and teaching homogeneity is not a necessary requirement for a dipartimento.

The "ISTITUTO" is a structure with scientific, clinical and teaching homogeneity but without administrative autonomy with regard to the Central University Administration. A section of activity within a clinical or a teaching structure is a "SERVIZIO" or a "DIVISION"

For the equivalence of qualifications see the introduction to "DENTAL CURRICULUM"

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Simona **Bonavita** Assistant Professor of Neurology. Istituto di Scienze Neurologiche. Medical School.

Curzio **Buonaiuto** MD, Full Professor of Oral Pathology. Istituto di Clinica Odontoiatrica e Stomatologica Servizio di Odontoiatria I.
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Filippo **Caruso** MD, Full Professor of Periodontology. Istituto di Clinica Odontoiatrica e Stomatologica Servizio di Odontoiatria II (Head).
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Gennaro **Carrino** *Professore a contratto*, teaching prosthodontics

Maria **Carteni** PhD, Full Professor of Biochemistry. Dipartimento di Biochimica e Biofisica "Francesco Cedrangolo". Medical School.
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Visitor Comments

We understand that the staff/student ratio is within the range 1:4 - 1:8. We regard this figure as providing a suitable basis for clinical education. It will of course become totally inadequate when the larger years enter the clinical phase of the curriculum.

With regard to staff development we were pleased to learn that there has been increased opportunity for graduates to undertake a programme of study leading to a PhD. We also understand that opportunities exist for members of staff to visit foreign universities. We applaud both these initiatives and hope that they can be developed further.

We were delighted to discover that a school for dental hygienists has been established. We hope that having both dental undergraduates and hygiene students under one roof will be seen as a golden opportunity to further encourage interdisciplinary co-operation and thus promote the concept of team dentistry.

THE DENTAL CURRICULUM (Considered by DENTED)

All the subject areas described in the DENTED protocol are listed here. Those subjects taught in the school but not considered in the DENTED protocol are listed separately afterwards.

We give in the table below the equivalence between the Italian terms and the Anglo-Saxon terms used here.

For the title, appointment or charge of	We have used the quasi equivalent title of
Professore ordinario	Full professor
Professore associato	Associate professor
Ricercatore*	(approximately an) Assistant professor
Dottore in Medicina e Chirurgia or Medico Chirurgo	Medical Doctor (MD)
Dottore in Biologia, Chimica, Fisica	PhD
Dottore in Odontoiatria e Protesi Dentaria	DOPD rather than DDS or DDM
Professore a contratto	<i>Professore a contratto</i> **
Cultore della Materia	<i>Cultore della Materia</i> ***

*Literally “researcher” which is a misnomer

** Teacher bound by a yearly contract. Generally participating in other non-university structures.

***A member of the staff with expertise in a given field without a specific University appointment in the same field. We cannot think of an equivalent term in English.

SECTION 5: BIOLOGICAL SCIENCES

5.1 Biochemistry

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

Name: Prof. Dr. Maria Carteni

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1. Introduction

The course intends to provide the students of Dentistry with a scientific understanding of the molecular nature of life. The course is divided in 2 parts (chemistry and biochemistry) with separate exams. The length of the course is of three semesters. The first semester of the 1st year provides the basic knowledge on the structure of matter at molecular and atomic level, the second semester is centred on the study of structure and function of biomolecules and the third semester (first of the 2nd year) deals particularly with metabolism and its regulations.

2. Primary Aims

The primary aim of the course is to provide Dental students with:

1. an understanding of the biological phenomena
2. a knowledge of structure and function of Biomolecules and their interactions

3. Main Objectives

Students are expected to have an understanding of:

- Structure of matter at atomic and molecular level
- Chemical reactions and the thermodynamic principles which regulate them
- Chemical equilibrium
- Organic chemistry: Functional groups and mechanisms of reaction
- Carbohydrates and cell surfaces
- Structure and biological functions of proteins: a) Fibrous proteins, Keratins and Collagen, b) Globular proteins, haemoglobin and myoglobin, Enzymes
- Lipids and membranes
- Nucleic acids
- Bioenergetics
- Metabolism and its regulation
- Principal biochemical techniques

4. Hours in the Curriculum

The course is divided in 2 parts with separate exams for chemistry and biochemistry, it includes a total of 150 hours of lectures, 120 hours of tutorials and 30 hours dedicated to test student's understanding of the subjects taught.

5. Method of Learning/Teaching

The learning of Chemistry and Biochemistry is based on lectures and interactive group study.

6. Assessment Methods

The examination for chemistry is held at the end of the first part of the course, The examination in Biochemistry is held at the end of the second part of the course (i.e. third semester of the second year).

7. Strengths

One strength of the courses in Chemistry and Biochemistry is the improvement of the scientific basis for the clinical subjects taught during the Course in Dentistry as it continually refers to problems particularly related to stomatognathic organs and to dental and oral pathology.

8. Weaknesses

Lack of teaching laboratories.

9. Innovation and Best Practices

Chemistry: many tutorials on stoichiometric calculations, interaction with students about different problems.

Biochemistry: interactive teaching/learning about different odontostomatological problems.

10. Plans for Future Changes

It is planned to increase the proportion of interactive teaching over the number of formal lectures

11. Visitor Comments

We make some general comments before progressing to the subject areas.

The courses have been designed for dental students and are taught by staff who have the interests of the dental students very much to heart. A comprehensive theoretical programme is provided and there is an almost universal wish to develop further the concept of interactive teaching.

There are no facilities for practical sessions in laboratories.

5.1 Biochemistry

The programme is designed specifically for dental students and the Professor of Biochemistry takes a particular responsibility for the delivery of the course. Clinical input to the course is sought on an informal basis. It has been a policy to develop an interactive flavour to the course. We were sad to hear that the major increase in student number is thwarting that ambition.

12. Staff

Carteni Maria PhD Full Professor

Dr. Manna Caterina PhD Assistant Professor

5.2 Molecular Biology and 5.3 Genetics

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

Name: Prof. Dr. Michela d'Istria

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1. Introduction

The basic course in General Biology is held in the first semester the first year, molecular biology and genetics are two important components in this course.

2. Primary Aims

The primary aim is to provide students with the necessary knowledge to understand and appreciate biological processes from gene to those proteins that direct the development and functions of the whole organism.

3. Main Objectives

Students should have an understanding of basic concepts:

- * the relation between structure and function;
- * the dynamic nature of subcellular components;
- * the conversion and use of energy in cellular activity;
- * the control of gene expression;
- * cell growth and division;
- * germinal cells and fertilisation.

4. Hours in the curriculum

The course includes a total of 80 hours.

5. Method of Learning/Teaching

A combination of traditional lectures and problem-based tutorial exercises is used.

6. Assessment Methods

Students' knowledge is assessed on the basis of frequent written tests and of a final oral examination.

7. Strengths

Interactive teaching/learning

8. Weaknesses

The increased number of students

9. Innovations and Best Practices

see below

10. Plans for Future Changes

Increase of interactive teaching. Integration in multidisciplinary courses

11. Visitor Comments

Again we were advised that the wish to maintain and develop further the interactive nature of the teaching is prevented by the large number of students. We believe that this adversely affects the quality of the educational experience. We were also advised that the motivation of many of the large number of students is variable. A consequence is that only 20% passed a recent examination and that this figure is in stark contrast to the success rates of the smaller years.

We were told that there is a wish to integrate the departmental teaching with that of other areas and so develop multidisciplinary courses. We applaud that approach.

12. Staff

Michela D'Istria PhD

Full Professor

SECTION 6: PRE-CLINICAL SCIENCES

6.1 Anatomy

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

Name: Prof. Dr. Bartolomeo Valentino

e-mail: bartolomeo.valentino@unina2.it

1. Introduction

The full name of the course is “Institutions of Normal Human Anatomy and of the Stomatognathic Apparatus”

The course intends to provide students with the most modern knowledge on the macroscopic, microscopic and ultrastructural organisation of the human body.

2. Primary Aims

Students must know the general morphological organisation of the human body and, in particular, that of the stomatognathic apparatus. They also must know the main anatomico-functional relationship between the organs of the body particularly those between the stomatognathic apparatus and other organs.

3. Main Objectives

Students must learn:

- the general organisation of the human body and of its apparatuses and organs.
- the organisation of the stomatognathic apparatus from a macroscopical, microscopical and ultrastructural point of view.
- the stomatognathic apparatus at the light of the new concepts on osteo-artro-muscular functional sequences.

4 Hours in the Curriculum

The course includes a total of 54 hours.

Starting from the present academic year the course will be divided in two semesters, in the 2nd semester of the first year students will study the anatomy in general while in the 1st semester of the second year they will concentrate their attention on the anatomy of the stomatognathic apparatus.

5. Methods of Teaching/Learning

Formal Lectures

Interactive study with small student groups in day hospital

Practice

6. Assessment Methods

Assessment is done by various tests during the course and a final oral examination.

7. Strengths

Anatomy is studied with frequent reference to clinical cases. Interactive study with small student groups in day hospital.

8. Weaknesses

Insufficient number of hours.

9. Innovations and Best Practice

Frequent use of technological equipment. (I.E. electromyograph)

10. Plans for Future Changes

Request for renewal of the technical equipment.

11. Visitor Comments

The course has been designed for dental students. Most of the teaching is given through lectures and by reference to text books. There are no or only few opportunities for dissection. No alternatives are offered.

The self-assessment document alluded to some teaching being delivered to small groups in an out-patient clinic. We understand that such an arrangement is not in place at the present time.

12. Staff

Bartolomeo Valentino, MD Associate Professor

6.2 Physiology

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

Prof. Dr. Dr. Giorgio Gombos

Email addresses: giorgio.gombos@unina2.it

1. Introduction

The name of the course is "*Physiology, human and of the stomatognathic apparatus*".

2. Primary Aims

The aim of this course is double. One aim is to provide the future dentist with the basic knowledge on the most important regulatory mechanisms, both humoral and nervous, of human body functions and on the keeping of its homeostasis. The other aim is to learn the function of the stomatognathic apparatus (i.e. mouth and masticatory structures).

3. Main Objectives

At the end of the course the student should have a deep knowledge of the specific functions of the stomatognathic apparatus and of its components. In addition he/she should be acquainted with the basic functions of human tissues, organs and apparatuses and of their constitutive cells. He/she should also be able to correlate a) the functions of a given organ with its morphology b) the functions of the different organs with each other

4. Hours in the curriculum

100 hours during the third semester.

5. Method of Learning/Teaching

Teaching hours are distributed as follows: about one half by using computerised programs of Physiology and Biology (next year this part will be increased to attain 2/3 of the total). The other half consists of classical lectures which include the specific teaching on the stomatognathic apparatus.

Interactive teaching/learning: the students have access to computers on which the same programs as those used during the lessons are installed. Until recently The computers were located next to my office and the student could easily ask explanations at any time.

Group Study : the 24 students were distributed in 6 groups of 4 student each. Each group received a different assignment on complementary subjects and was required to carry out a bibliographic research on Medline, write a report and give a talk on the subject.

No practicals are held.

8. Assessment methods

The progress of student learning is assessed by written multiple choice (and Yes/No) tests at the end of each cycle of lessons on a given subject and by oral questions asked during the classes. Self assessment is also used by those students who, in small groups, consult computerised teaching programs on CD Roms.

A final *viva voce* examination covering the whole program is taken at the end of the whole course. [*NB As for the other subjects and as it is customary in Italian Universities the note given will be in 30/30th, the passing grade being 18, the maximal note being 30 (cum laude)*]

9. Strengths

The strength was in the interactivity and the small number of students. This situation deteriorated because of a court decision stating that entry examination to the school were against the right-to-study guaranteed by the Constitution of the Italian Republic. Because of this, student increased from 24 to 110.

10. Weaknesses

The major problems in this type of interactive courses are that:

- a) the computerised programs are in English and most students are not proficient in this language (even though English is taught in intermediate school)
- b) the computer culture has not touched yet the majority of dental students
- c) the increased number of students in this academic year interrupted the direct personal contact between teacher and all the students.

No more than 20% of the class takes advantage of the availability of computers and computer programs for studying physiology. These students are also those who interact with the teacher and come to the exams shortly after the end of the courses.

- d) the absence of additional teaching staff in physiology and the inordinately high number of students are an obstacle to efficiently carry out other learning methods such as PBL.

9. Innovation and Best Practices

Because of the above cited student limitations a course on English language and one on computer use were begun last year and this respectively. (see after chapter 16.4)

10. Plan for Future Changes

A) We are beginning to shorn from the teaching program many details of human physiology not absolutely necessary for understanding the physiology of the stomatognathic apparatus. At the same time we are trying to present a more modern and scientific view of trigeminal neurophysiology, salivary gland secretion control, sense of taste etc.

B) We are discussing with other teachers a project by which Physiology, Biology, Histology, Anatomy, Biochemistry and Pharmacology will each be split into two courses. One dealing with the general subject specific to each discipline and another course in which the teaching of the various discipline will be integrated in a multidisciplinary teaching organ by organ.

11. Visitor comments

We were impressed by the efforts being made to extend the concept of interactive teaching and to encourage self-learning. Computer aided learning is being adopted wherever possible. We noted a positive desire to integrate teaching with other disciplines. All these approaches are praiseworthy.

We do have a worry that the increased numbers of students will thwart these ambitions. We also were told that the variable motivation of the larger intake makes the introduction of self-learning an uphill struggle.

12. Staff :

Giorgio Gombos MD, Dr Sci Full Professor

6.3 Histology

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

Name: Dr. Gianpaolo Papaccio

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gianpaolo.papaccio@unina2.it

1. Introduction

This course intends to provide the students of Dentistry with a scientific understanding of morphological cytology, whole histology, general and special histology of the oral cavity organs

2. Primary Aims

The primary aim of the course is to provide Dental students with an understanding and knowledge:

1. of cell and tissue general morphology and histophysiology;
2. of the main mechanism of differentiation and development of the human body.

3. Main Objectives

At the end of the course the students are expected to know the:

- major and recent methods in morphological investigation;
- cell structure and ultrastructure;
- tissue organisation (structure and histophysiology);
- differentiation and growth processes;
- human body development (embryology), with particular interest for oral cavity development.

4. Hours in the Curriculum

The length of the course is of one semester and includes a total of 150 hours (90 hours of lectures, 30 of tutorials and 30 dedicated to test student's understanding of the subjects).

5. Method of Learning/Teaching

The method used in Histology is based on lectures with interactive group study including practical observations of images (on slides, in computers and with light microscopes) with continuous follow-up.

6. Assessment Methods

At the end of the course, Students obtain a passing grade at the final examination of histology if they

- a) have learned the principles and the main methods of cytology, histology, histochemistry, immunohistochemistry and embryology;
- b) are able to describe the cell structure and their submicroscopic components, the processes of secretion, growth and differentiation;
- c) are able to recognise, at the light microscope, all human tissues and particularly those of the oral cavity;
- d) have understood the development of the body and of the oral cavity in particular, also with reference to malformations.

7. Strengths

During the course, students are tested at the end of the teaching of each chapter (cytology, embryology and histology).

The knowledge acquired improves their understanding of other disciplines, in particular with dental and oral pathology.

8 Weaknesses

Lack of technicians and personnel.

9. Innovations and Best Practices

We hope to be able to purchase computers and programs for teaching and self-evaluation

10. Plans for future changes

We hope to be able to increase the number of computers, microscopes and Key personnel.

11. Visitor Comments

Histology is taught by one member of staff who has the interests of dental students very much to heart.

The number of microscopes (30) is sufficient for 24 students but is insufficient for the increased number. This has resulted in a 60% reduction in practical work. To overcome this handicap images on interactive CD ROMs are being prepared.

Educational links with Anatomy appear to be somewhat tenuous but this is not due to any lack of effort on the part of the histology staff.

12. Staff

Gianpaolo Papaccio M D Assistant Professor

SECTION 7: PARA-CLINICAL SCIENCES

7.1 Pharmacology

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

Name: Prof. Dr. Liberato Berrino

E-mail: liberato.berrino@unina2.it

1. Introduction

The course intends to provide students of Dentistry with scientific understanding on how drugs act, how they should be used and prescribed. The first part of the course provides students with the basic knowledge of the general principles (pharmacokinetics, pharmacodynamics, principles of therapeutics and toxicology) and molecular aspect of drugs, the second part is centred on the drug affecting the function of the different systems and chemotherapy.

2. Primary Aims

The primary aim of the course is to provide Dental students with: a knowledge of

- a) the therapeutic use of drugs;
- b) drugs administration.

3. Main Objectives

Students are expected to have an understanding of the following:

- General principles: pharmacokinetics, pharmacodynamics, therapeutics and toxicology
- Chemical mediators;
- Individual variations and drug interactions;
- Drug used for treatment of dental diseases;
- Drugs affecting the function of major systems: the heart, the circulation, homeostasis and thrombosis, the respiratory system, the kidney, the gastrointestinal tract, the endocrine system, the haemopoietic system, the central nervous system, the peripheral autonomic system;
- Drug therapy of inflammation and pain ;
- Drug used for immunomodulation;
- Chemotherapy of microbial and neoplastic diseases;
- Toxicology.

4. Hours in the Curriculum

The course is carried out during the second semester of the 2nd year (fourth semester). It includes a total of 60 hours of lectures, 30 hours of tutorial and 10 hours dedicated to test student's understanding of the subjects.

5. Method of Learning/Teaching

The learning of pharmacology and toxicology is based on lectures and interactive group study.

6. Assessment Methods

At the end of the course of Pharmacology students must pass a separate oral exam.

7. Strengths

One of the strengths of the course in Pharmacology is the improvement of the scientific basis for the different clinical disciplines taught in the Course in Dentistry as it continually refers to problems particularly related to dental and oral physio-pathology.

8. Weaknesses

Lack of teaching laboratories.

9. Innovation and Best Practices

Interactive teaching on different odontostomatological problems.

10. Plans for Future Changes

Increase the proportion of interactive teaching over the number of formal lectures

11. Visitor Comments

The aims and objectives of this course are appropriate and the content has been tailored to the interests of the dental student. There is a desire to seek further integration with the teaching of Oral Medicine. We encourage that desire.

We share the view of the teaching staff that the course is given rather too early in the curriculum when the student has little knowledge of disease processes. If teaching could be put back by one semester there would be definite educational advantages.

12. Staff

Liberato Berrino MD, Associate Professor.

7.2 Microbiology

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

Name: Prof. Dr. Piera Valenti

E-mail: valenti@axrma.uniroma1.it

1. Introduction

The name of the course is “Medical Microbiology”. The course provides students with basic knowledge of microbiology focussing on structure, metabolism, and genetics of medically relevant micro-organisms.

Are explained and discussed:

- The most important pathogenic bacteria discussed in terms of the clinical, therapeutic, and epidemiological aspects of diseases caused by them,
 - The molecular mechanisms of pathogenesis, their identification in the clinical laboratory and relationships with host.
 - Human diseases, their transmission, prevention and treatment
 - Microbial susceptibility to antibiotics
 - The molecular biology of viruses and virus-host interaction with emphasis on the molecular mechanisms of viral gene expression and regulation.
- Molecular genetics with description of fundamental genetic processes such as mutation, repair, genetic exchange, recombination, and gene expression.
- Formation and composition of plaque and calculus. Specific microbial floras of acute and chronic gingivitis, early onset forms of periodontitis, and adult periodontitis are studied.

2. Primary Aims

The primary aim of the course is to provide Dental students with an understanding of:

1. the biological bases of infection, infective disease, host-bacteria or virus interactions.
2. the capability of some pathogenic bacteria to survive within phagocytes and non-phagocyte host cells
3. the virulence mechanisms of micro-organisms correlated to gingivitis and periodontitis

4. Main Objectives

Students are expected to have an understanding of the following:

- Bacterial morphology, cell wall structure and synthesis, Bacterial metabolism, growth, adhesivity, invasivity, genetics
- Antimicrobial agents
- Laboratory diagnosis of bacterial diseases
- Neisseria spp, Staphylococcus spp, Streptococcus spp, Corynebacterium diphtheriae, Mycobacterium spp, .Enterobacteriaceae.
- Anaerobic Gram-positive bacteria (C.tetani and C.botulinum) and Gram-negative bacteria (Porphyromonas gingivalis, Actinobacillus actinomycetemcomitans, Prevotella spp)
- Mechanisms of viral pathogenesis, Antiviral agents, Human Herpesviruses, Picornaviruses, Orthomyxoviruses, Retroviruses, Hepatitis viruses

4. Hours in the Curriculum

The course is taught during the fourth semester (second semester of the second year) and includes a total of 50 hours of lectures, 10 hours of tutorials and 20 hours for student's testing.

5. Method of Learning/Teaching

The learning of Microbiology is based on lectures, interactive seminar and discussion of scientific literature pertaining to selected pathogenic bacteria and viruses.

6. Assessment Methods

At the end of the course students must pass an oral examination for microbiology.

7. Strengths

One of the strengths of the course in Microbiology is in the discussion between teachers and students (i.e., on the mechanisms of microbial pathogenesis, on the understanding, at the cellular and molecular level, of interaction mechanisms of the microbial organisms with one another and with the environment).

8. Weaknesses

Absence of didactic laboratories.

11. Innovation and Best Practices

Interactive seminars and discussion of scientific literature pertaining to selected pathogenic bacteria and viruses

10. Plans for Future Changes

To increase the proportion of interactive teaching over that of formal lectures. Because of the strong interdisciplinary nature of the microbial pathogenesis, numerous collaborative efforts between our faculty and those in other science departments will be developed.

11. Visitors Comments

As with other subjects there are no facilities for practical work.

Again, as with other subjects, there is a desire to seek integration with other related subjects. Plans for such an approach are at a very early stage. We support any approach to accelerate the development. For example, it should be possible to relate closely to periodontology.

12. Staff

Piera Valenti PhD Full Professor

7.3 General Pathology

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

Name: Prof. Dr. Vincenzo Nigro

e-mail: Vincenzo.Nigro@unina2.it

fax: 0815665695

1. Introduction

This is the first year that Prof. Nigro teaches this course

2. Primary Aims

The primary aims are: to learn

- a) The known molecular and cellular mechanisms of human diseases
- b) The recent advances in diagnostic methodologies

3. Main Objectives:

The student should be able

- a) to understand the transmission of monogenic and polygenic diseases
- b) to recognise the different classes of pathogens
- c) to individuate the general mechanisms of hypertrophy, necrosis and apoptosis
- d) to follow the course of acute and chronic inflammation
- e) to classify and interpret neoplastic changes, including DNA mutations
- f) to understand the cellular and molecular mechanisms of normal and abnormal immune response
- g) to evaluate the pathogenesis of diseases in differentiated organs

4. Hours in the Curriculum

50 hours during the fourth semester

5. Method of Learning/Teaching:

The lessons are highly interactive, with questions posed to the students about the general mechanisms underlying diseases. The questions are then solved in the course of lesson, often with citation to the general strategies used by investigators.

6. Assessment Methods:

Final oral exam

7. Strengths

The body of information is not restricted to specific situations and therefore the formation of the student is wide-ranging

8. Weaknesses

The General Pathology is not General Dental Pathology

9. Innovations and best Practices

- 1) the reduction of the number of details with a improved focusing on the comprehension of pathogenic mechanisms
- 2) the external contribution, for specific aims, of experts in various fields of pathology

10 Plans for future changes

To introduce a debate among groups of students about the study of general pathology.

11. Visitor comments

There was a new organiser for this course and he had tried to emphasise the relevance of general pathology for dental students. We supported the inclusion of the course in a dental curriculum as it was vitally important for the student to understand the principles of disease processes.

We note the very strong influence of pathology within the curriculum. To 50 hours of general pathology can be added 144 hours of pathological anatomy, 52 hours of oral pathology and 165 hours of oral medicine. We believe there must be a risk of duplication and suggest that the course organisers re-examine the programmes with a view to streamlining the teaching.

12. Staff

Vincenzo Nigro MD Associate professor

SECTION 8: HUMAN DISEASES

8.1. General Medicine

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

Name: Prof. Dr. Pasquale Federico

E-mail: pasquale.federico@unina2.it

1. Introduction

The name of the course in General Medicine is “Internal Medicine”.

2. Primary Aims

- to develop a basic working knowledge of internal medicine and related fields (i.e. microbiology), sufficient for the safe care of patients of dental practitioners.
- to enable students to develop the basic clinical skills in the examination of patients and in taking the medical history.

3. Main Objectives

After the successful completion of this curriculum our students should be able to:

- properly take a medical history;
- monitor pulse, blood pressure and other vital signs of the patients;
- auscultate a chest, discuss a radiograph and an electrocardiogram;
- understand blood formation and coagulation;
- recognise bleeding disorders and understand the principles of anticoagulation;
- differentiate between the various types of anemia.
- understand the symptoms of renal, cardiovascular and respiratory systems;
- have a working knowledge of the consequences of cardiac ischemia, arrhythmias, thrombembolism and hypertension;

4. Hours of the curriculum

The duration of the course is of 40 hours of theoretical teaching in the 1st semester of the third year (5th semester) including seminars and lectures and is taught at the Medical School.

5. Method of Learning/Teaching

The course is delivered according to the problem based learning approach (PBL) hence includes simulated cases, seminars and lectures.

After finishing a particular block, keynote lectures are supplemented. The practical part is delivered with the aid of simulated case presentations.

6. Assessment Methods

Continuous assessments during the courses and oral examination at the end of the course.

7. Strengths

This course is organised by a collaboration between the Department of Geriatrics and Metabolic disease, the Department of Clinical and Experimental Medicine and the Istituto di Clinica Odontoiatrica e Stomatologia with the involvement of academic physicians.

8. Weaknesses

The Medical School is dispersed in several sites in the city, some at a relative great distance, In a City with heavy traffic like Naples, movement of students from one site to another is not easy.

The main disadvantage is that the number of attending students from various disciplines is too high for the tutors and patients available.

9. Innovation and Best Practices

- continuous revision of the subjects during teaching
- problem based approach of the learning activities, simulated cases and problem solving
- the teaching quality of this course is evaluated by a questionnaire filled by the students.

10. Plans for Future Changes

The weaknesses reported must be solved before plans for future changes could be made.

11. Visitor Comments

We were very pleased to learn that the responsibility for teaching dental students is given to specific members of staff. The method of teaching has been expanded to include simulated case presentations which are used to instruct the students in practical aspects.

Students need to travel some distance to attend hospitals in the Naples area.

We were told that the increasing number of students was putting constraints on clinical teaching. We must assume that this problem can only get worse.

We noted in the self-assessment document that the Department of Geriatrics and Metabolic Disease was partly responsible for organising the course. We hope that this collaboration might play an important role in strengthening the teaching of gerodontology in order to meet the demands of the future.

12. Staff

Sandro Gentile, M.D. Associate Professor

Pasquale Federico, M.D. Associate Professor

8.2 General Surgery

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

Name: Prof. Dr. Umberto Parmeggiani

e-mail: parmeggi@unina2.it

1. Introduction

The name of the course in General Surgery is "Special Surgical Pathology and Clinical Propaedeutics".

2. Primary Aims

The principal aim of the course in General Surgery is to provide the student with in-depth knowledge of the main surgical diseases, their epidemiology, aetiology, pathogenesis, diagnosis and prognosis.

A further aim is to help the student to recognise the relationship between stomatologic disease and the pathological changes of the main organic functions.

3. Main Objectives

The student should:

- Demonstrate complete familiarity with the clinical approach to the patient awaiting surgery: diagnosis and selection of surgical procedures.
- Perform clinical procedures under supervision of post-graduate students
- Formulate diagnosis of principal pathologies and recommend appropriate therapy

4. Hours in the Curriculum

This course is taught throughout the third year. It includes three hour lectures or other theoretical activity and three hours of practical activity every week for about ten weeks every year for a total of 60 hours per year.

5. Method of Learning/Teaching

The hours of theoretical activity (30) include an average of 8 hours for optional learning activity. The practical activity takes place in the surgical ward at the bedside.

6. Assessment Methods

Oral examination at the end of the course.

7. Strengths

This course for the students of the school of Dentistry is taught at the Department of General Surgery of the Medical School by the teaching and clinical staff of the Service of General and Thyroid gland Surgery. The contribution of the clinical staff is an asset of this course.

8. Weaknesses

Space limitations of the Service within the Department of General Surgery.

9. Innovations and Best Practices

We are trying to implement our practical activity with the learning of basic surgical techniques (i.e. suture materials, types of tissue suture, the use of instruments and prothesis for general surgery).

10. Plans for Future Changes

The quality of the practical activity could improve if the space of our Service is increased.

11. Visitor Comments

Again, we were very pleased to learn that the responsibility for teaching general surgery to dental students is invested in specific members of staff. Cross-infection control is taught in this programme. The theory is given to all students whilst a few are able to gain practical experience.

We were glad to hear that facilities were available for students to attend the hospital wards on a compulsory basis. Students also have the opportunity to carry out minor practical procedures such as suturing; this activity is optional.

12. Staff

Umberto Parmeggiani MD Full Professor

With the collaboration of the staff of the clinical Service of the Medical School directed by Prof. Parmeggiani:

Alberto Gentile MD Associate Professor

Alfonso Barbarisi MD Associate Professor

Alberto Piatto Instructor in Surgery

Massimo De Falco Instructor in Surgery

8.3 Anaesthesiology

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

Name: Prof. Dr. Dora Diana

E-mail: dora.diana@unina2.it

Dr. Corrado Cafaggi

1. Introduction

The name of the course is Anaesthesiology, General and Special in Odontostomatology. The length of the course is of one semester at the 4th year. During the course students Should learn the following principal concepts of anaesthesiology:

- pre-surgical evaluation;
- risk evaluation;
- psychological approach;
- preparation of patients;
- "conscient" sedation;
- Cardio-Pulmonary-Resuscitation (CPR)
- therapy of pain;
- medical emergencies;
- regional analgesia;
- general anaesthesia.

2. Primary Aims

The primary aim of the course is to provide Dental students with:

- a) awareness of the causes and relief of stress and anxiety;
- b) understanding of theoretic principles of anaesthesia and of all modern techniques to control pain and anxiety during dental treatment;
- c) knowledge of risks incurring during anaesthesia;
- d) teaching basic and advanced resuscitation.

3. Main Objectives

Students are expected to be able to:

- assess the patient conditions before anaesthesia;
- choose between different anaesthetic techniques;
- use anaesthetic drugs for pre-medication, general and regional anaesthesia in adults, children and disabled patients;
- use monitoring equipment;
- administrate CPR and first aid.

4. Hours in the Curriculum

The course includes:

- 25 hours of formal lectures
- 10 hours of interactive activity in groups of four students giving assistance in the operating theatres
- 4 hours of practical activity on manikins for CPR and first aid for groups of 8 students.

5. Method of Teaching/Learning

The learning of anaesthesiology is based on lectures and interactive group study.

6. Assessment Methods

Until two years ago students only took a final oral examination. Starting from next September they must also show their competence in applying CPR to manikins.

7. Strengths

Clinical practice, which is very much enjoyed by the students.

8. Weaknesses

The number of 24 students permitted an easy management of their clinical practice. From next year the inordinately large number of students will necessarily require to establish turns for clinical practice.

9. Innovation and Best Practice

Until now the course was at the second year. To further the integration with other clinical subjects, the course will be held during the fourth year, starting from next September.

10. Plans for Future Changes

The creation of a post-graduate practical specialisation course on medical emergencies which may arise in the dentist office.

11. Visitor Comments

We were delighted to hear that this course had been re-timed so that it is to be given at the beginning of 4th Year. This is much more appropriate than the previous timing in 2nd year.

As can be seen from the SAD, the staff in anaesthesiology are responsible for teaching many vitally important aspects of theoretical and practical knowledge. Their remit includes teaching the control of pain and anxiety of adults and children and involves the teaching of local anaesthesia.

We understand that the Italian dentist is allowed, by law, to administer intravenous and inhalational sedation but is not allowed to administer a general anaesthetic. The teaching prepares the student for these future responsibilities.

We understand, though, that the dentist does not have to attend further instruction in intravenous sedation before practising this technique independently.

We were very pleased to learn that the formal assessment of students' competence will now include a test of ability to perform cardiopulmonary resuscitation on a manikin. We would like to suggest that experience in this technique is extended to the final year of the curriculum so that the dental student maintains competency.

12. Staff

Dora Diana MD Associated professor

Olimpia Di Bella, MD *Professore a Contratto*

SECTION 9: ORTHODONTICS AND CHILD CARE

9.1 Orthodontics

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

Prof. Dr. Adolfo Ferro

Dr. Letizia Perillo

E-mail: adolfo.ferro@unina2.it

1. Introduction

Orthodontics is a two-year course starting from the 4th year.

2. Main Objectives

The students must learn about craniofacial growth anomalies, their correct diagnosis and possibilities of treatment.

3. Primary Aims

Students must achieve the following proficiencies:

- to have a good comprehension of the craniofacial growth
- to be able to perform correct and detailed clinical examinations of static and dynamic occlusion
- to make a differential diagnosis
- to trace a cephalogram and to understand the main cephalometric analyses
- to individualise potential risk factors
- to understand the importance of the early treatment
- to use simple procedures to prevent malocclusions
- to diagnose a TMJ dysfunction
- to recognise malocclusions presenting a high risk for generating TMJ problems

4. Hours in the Curriculum

4th year: 26 lectures, 26 Practice hours (cephalometric and space analysis)

5th year: 26 lectures, 26 Practice hours (treatment planning and patient observation)

for a total of 104 hours.

5. Methods of Learning/Teaching

Orthodontics is both a theoretical and practical course. Both lectures and tutorials make use of audio-visual multimedia and live video demonstration of orthodontic procedures.

Topics of the 4th year teaching are the following:

post-natal craniofacial growth and development and related controlling factors, occlusion development, static and dynamic occlusion features, soft tissue morphology, tongue, lip, breathing and swallowing, anatomy and physiology of the TMJ. Basic concepts of biomechanics.

Topics of the 5th year teaching are the following:

dental and skeletal class I, II, III malocclusions with particular attention being paid to their aetiology, prevention, diagnosis and treatment goals. Basic concepts regarding fixed and removable orthodontic therapy are introduced while TMJ dysfunctions are studied in depth.

Practice and clinical experience

Students are divided into 6 groups for clinical observation and 4 groups for practical teaching. Tutors and post-graduate students demonstrate how to report a clinical case using patients records, photographs, impressions and dental casts, radiographs and tracings. They also demonstrate orthodontic tools, the basic laboratory techniques such as lingual arch, lip-bumper, palatal bar and Hawley bite, and the basic clinical techniques such as those of Ricketts and Tweed.

Students also work on tracing and cephalometric analysis such as Ricketts, Steiner and Tweed analysis, study model and space analysis and spend a great deal of time observing the treatment of patients.

6. Assessment Methods

Assessment is made during lectures, practical exercises, clinical observation and with a final oral examination.

In order to verify the achieved degree of knowledge, the student must plan an orthodontic treatment during the 5th year of the course,

7. Strengths

Impact of many clinical audiovisuals

Introduction to practical management of the patient

8. Weaknesses

The low number of staff member does not allow to offer individual attention to the students

9. Innovations and Best Practices

Interdisciplinary collaborations

10. Plan for Future Changes

Plans are being made to hire more staff, dedicate more time to student progress and obtain funds for improving teaching and research.

11. Visitor Comments

As the title of the course suggests there is considerably emphasis placed on the diagnosis and treatment of TMJ problems within the clinical area; this accounts for about 20% of the course. This particular activity is in addition to that which is undertaken in Oral Surgery and Prosthodontics. This shared interest did not seem to have encouraged integration. In fact we understand that the approach to TMJ problems is different to that in the other departments. This is in contrast to the integration which has been established with Periodontology.

As with other clinical areas there is great pressure on clinical facilities which have to be shared with a sizeable number of postgraduates. We were told that the undergraduate clinical experience is obtained mostly through observation over a period of one month. There must, therefore, be limited opportunity to see the long term consequences of treatment. We were advised that the practical experience accounts for 50% of the teaching time and is limited mainly to diagnosis and to early interceptive therapy.

There appeared to be little integration with Paediatric Dentistry.

12. Staff

Adolfo Ferro MD Full Professor

Letizia Perillo MD Assistant Professor

9.2 Paediatric Dentistry

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

Name: Prof. Dr. Anna Maria Guidetti

1. Introduction

Undergraduate students are taught clinical paediatric dentistry during the fifth year.

2. Primary Aims

The main purpose of the Course in Paediatric Dentistry is to provide the students with the basics on the stomatognathic apparatus in the evolutive phase. Particular attention is paid to child psychology, to the study of deciduous and permanent denture's physiopathology, to dental and maxillary development, to the mechanisms of caries development. Also are taught the basics on the interceptive treatment of malocclusions and teeth's dislocations. The students are trained on the clinical diagnosis of the most common inflammatory, displastic and traumatic diseases occurring in the child mouth and maxillofacial regions.

3. Main Objectives

The student should learn to organise a therapeutic scheme, to write up a prescription for a child, to acquire the correct "doctor-patient" and "doctor-parents" relationship; furthermore he must become be able to perform an endodontic-restorative treatment on the deciduous denture and to realise a treatment scheme for the therapy of malocclusions on the deciduous and mixed denture. The student should also learn how to treat dental and alveolar traumata, to train the patient to the oral care practice. The acquirements of the specific competence will be obtained by means of both theoretical and practical lessons associated to clinical training.

4. Hours in the Curriculum

The course total duration is of 30 hours .

5. Method of Learning/Teaching

The learning of Paediatric Dentistry is based on lectures, interactive group study and pre-clinical and clinical practice.

6. Assessments Methods

At the end of the course students must pass an oral examination with a preliminary practical test.

7. Strength

The course is introduced at the end of the Course in Orthodontics, students are already cognizant on the prevention of malocclusion.

8. Weaknesses

The students should be introduced to the management of a child dental patient at earlier stage in the dental curriculum.

9. Innovation and Best Practice

We would like to give more autonomy to the students in the planning of patient treatment.

10. Plans for Future Changes

More emphasis should be put on teaching on how to prevent malocclusions.

11. Visitor Comments

The course organiser had been appointed during the current academic year.

In our opinion this clinical discipline has to work under very considerable constraints. There is no dedicated clinic for the treatment of children, there is a shortage of teaching staff and there appear to be relatively few patients.

Teaching in this subject is restricted to 30 hours during the last semester of the curriculum. We were told that the best students will obtain about 15 hours of clinical experience whilst the others will do rather less. Apparently the student makes the choice.

Within the limited time devoted to Paediatric Dentistry we were pleased to learn that considerable emphasis is placed on behavioural management. However, preventive dentistry was not included in this course.

We understand that plans are being made to deal with the shortcomings.

12. Staff

Guidetti Anna Maria MD Assistant professor

SECTION 10: PUBLIC ORAL HEALTH AND PREVENTIVE MEDICINE

10.1 Hygiene

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

Name: Umberto Del Prete

E-mail:umberto.delprete@unina2.it

1. Introduction

Issues of community dentistry are covered in the course of Hygiene, Preventive and Social Dentistry and Epidemiology. In this course, undergraduate students learn about epidemiological methodology, management and delivery of oral health care, prevention and treatment at individual and community level.

2. Primary Aims

- To provide students with a basic knowledge about
 - infectious and non infectious dental diseases.
 - public health, including public dental services.
 - understanding, evaluating and. Implementing preventive programmes at community and individual level.

3. Main Objectives

- To learn
 - what is the current status of public health, of health care and what are the social and environmental issues that influence health outcome.
 - how to choose correct preventive measures for individuals and groups in different population subgroups.
 - to design and carry out preventive programmes for special groups or for the whole population.
 - about the way of implementing a research project and evaluate epidemiological situation in selected populations.
 - about competences, attribution and articulation of the health care services including those of dentistry.

4. Program

Introduction to the study of hygiene; primary, secondary and tertiary prevention, outlines of sanitary education methodology.

Epidemiology: definition and methodology applied to the study of odontological diseases (descriptive, population-based, case-control and cohort study).

General epidemiology and Prophylaxis (indirect, specific, direct) of infectious diseases. Disinfecting and sterilisation with particular consideration for the odontologist office. Hospital infections. Epidemiology and prophylaxis of tetanus, tuberculosis, hepatitis A, B, C, AIDS. Epidemiology and prevention of the principal diseases concerning primarily the oral cavity (caries, periodontal disease, malocclusion, tumours).

Environmental Hygiene: water supply, microclimate, waste water and solid wastes.

Outline of the organisation of the National Health Service and legislation in the Odontological field..

5. Hours in the Curriculum

The course covers a total of 30 hours in the fourth year.

Undergraduate training in Public Dental Health and Prevention is an important part of the curriculum of the 4th year.

6. Method of Learning/Teaching

Undergraduate students have theoretical lessons and seminars. Some time is spent in the clinic evaluating patient's oral health status.

The students are requested to design preventive programmes and present them to the teacher.

7. Assessment Methods

A Continuous assessment method is used to measure both theoretical knowledge and skills acquisition. The assessment of theory is carried out by an oral exam which verifies students' knowledge and skill in practical problem solving.

8. Strengths

Theoretical learning in depth about epidemiology and sanitary education with particular regard to dental prevention.

9. Weaknesses

Ideally students should have a broader experience outside the school, working in the community clinics or institutions.

10. Innovations and Best Practices

Public health should be incorporated into the whole curriculum and not be a separate discipline. The importance of prevention should be emphasised to the students by all staff members.

11. Plans for Future Changes

Preventive programmes and research projects should provide some practical experience in research methodology.

Students should have the opportunity to present their research and to lecture to parents and to school and kindergarten teachers.

12. Visitor Comments

The comment is made in the SAD that the importance of prevention should be emphasised to the students by all staff members. Indeed, we gained the impression that the concept of prevention being an important theme throughout the whole curriculum was rather weak. This may reflect outside influences as we were told by dentists, who we met for a most interesting discussion, that the general emphasis is placed on cure rather than prevention and that the public dental health system is viewed rather negatively and is limited in its scope.

13. Staff

Umberto Del Prete MD, Full Professor

SECTION 11: RESTORATIVE DENTISTRY

11.1 Conservative Dentistry

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

Name: Prof. Dr. Carlo Riccio

e-mail: carlo.riccio@unina2.it

1. Introduction

The course of Conservative Dentistry starts from the second year and lasts for two years, It is coupled with Endodontics which accounts for a third year (cfr. infra). The Course aims at supplying students with the theoretic-practical notions necessary for making a diagnosis and for designing the prevention and therapy of the diseases of the hard tissues of the tooth, the dental pulp and the apex of the parodonton.

2. Primary Aims

The students must know the theories on the aetiology of the caries; the histopathological aspects of the dental pulp with reference to its diseases; they must learn how to read the X-rays of the normal and pathological odontostomatognathic apparatus. The student must be able to apply an accurate technique, to set up a relationship of confidence with the patient and to be able to operate with autonomy. The student learns first on simulators (manikin) and then on the patient.

3. Main Objectives

Students are expected to have an understanding of the following:

- Anatomorphology of the dental elements
- Histomorphology of the enamel, dentin, pulp, cement and alveo-dental ligament
- Dental formula: nomenclature and classification of the teeth
- Gnatology and anatomorphology of the occlusal plate
- Dental caries: definition, aetiology, (macroscopical and microscopical) pathological anatomy, symptomatology, diagnosis
- Classification of the caries
- General principles of the preparation of a cavity: temporary closing, amalgam, composite, dentinal adhesives
- Traumatic lesions of the teeth

4. Hours in the Curriculum

The first two years include a total of 120 hours of lectures plus 20 hours dedicated to test the student understanding during the courses.

5. Method of Learning/Teaching

The learning of Conservative Dentistry is based on lectures, interactive group study and pre-clinical and clinical practice.

6. Assessments Methods

At the end of the third year of the course the student, after a preliminary practical test, must pass an oral examination based on the program of the entire course.

7. Strengths

One strength of the course in Conservative Dentistry is the extensive theoretical knowledge of the subject gained by the students.

8. Weakness

Limited facilities for clinical practice.

9. Innovation and Best Practice

Student seminars

10. Plans for Future Changes

Improvement of the practical aspect of the course based on learning on simulators for the pre-clinical and clinical practice.

11. Visitor Comments

This course also includes teaching in oral health sciences and oral epidemiology.

A thorough practical grounding is provided on manikins. Although there is apparently a good supply of patients the clinical facilities do not permit the students to gain very much practical clinical experience. It was suggested to us that a student might complete 10 amalgam restorations and 10 composite restorations during the curriculum. From our discussions with students the reality appears to be that rather less is achieved.

The design of the curriculum is such that experience in Conservative Dentistry is completed at the end of the 4th year. There is the real risk that the limited clinical experience is further diluted by the passage of time between 4th year and graduation. As mentioned earlier we believe there would be benefits in stressing the preventive dentistry theme rather more during this course.

12. Staff

Riccio Carlo M D Full Professor

Annunziata Antonio MD Assistant Professor

11.2 Endodontics

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

Name: Prof. Dr. Carlo Riccio

e-mail: carlo.riccio@unina2.it

1. Introduction

The course of Endodontics is coupled with and follows the course of Conservative Dentistry. It is devoted to the diagnosis and management of pulpal diseases

2. Primary Aims

The aims of the course are to develop:

1. Knowledge and understanding of the normal and pathological status of the pulp
2. Diagnostic skills
3. Clinical skills required to carry out endodontic treatment;
4. Understanding of the reasons for success or failure of an endodontic treatment.

3. Main Objectives

Students are expected to have an understanding of the following:

- Root anatomy
- Pulp and periodontal inflammation
- Treatment of the common endodontics emergencies
- Pulp hooding
- Preparation of the access cavity
- Preparation of the root canal, closing of the root canal
- Endocanal irrigation
- Intermediate medications
- Retreatments, restoration of teeth already subjected to endodontic treatment
- Endodontic treatment on deciduous teeth
- Endodontic surgery
- Reinlays

4. Hours in the Curriculum

Endodontics is taught in the third year of the course, with a total of 60 hours of lectures and 80 of pre-clinical and clinical practice and 10 hours for testing student progress.

5. Method of Learning/Teaching

The learning of Conservative Dentistry is based on lectures, interactive group study and pre-clinical and clinical practice.

6. Assessments Methods

At the end of the course students must pass an oral examination based on the entire program, including Conservative Dentistry, with a preliminary practical test.

7. Strengths

One of the strengths of the course in Endodontics is that students gain a good theoretical knowledge of the subjects.

8. Weaknesses

Limited facilities for clinical practice.

9. Innovation and Best Practice

Students' seminars

10. Plans for Future Changes

Improvement of the practical aspect of the course based on learning on simulators for the pre-clinical and clinical practice.

11. Visitor Comments

The teaching of practical endodontic techniques is restricted to the manikin. Apparently the reasons for this include lack of clinical facilities, lack of instruments and the fact that students are not allowed to take radiographs. We will return to this particular point in Section 13.

Teaching of this subject occurs in 5th year and therefore is somewhat divorced from the instruction in conservative dentistry although it must be said that the same members of staff teach both subjects.

12. Staff

Riccio Carlo M D Full Professor

Annunziata Antonio MD Assistant Professor

11.3 Prosthodontics (Fixed and Removable Prosthodontics)

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

Name: Prof. Dr. Gennaro Minervini

E-mail:gennaro.minervini@unina2.it

1. Introduction

Undergraduate students are taught prosthodontics during the third, fourth and fifth year. The purpose of the course (articulated in three years of theoretical lessons, seminars, laboratory practice and simulated on manikins) is to endow the student in dentistry with sufficient knowledge and skill in the examination, diagnosis, prophylaxis and treatment of functional and aesthetic problems of the stomatognathic system. At the end of the course the student should be familiar with gnathology and removable and fixed prosthesis, and should be able to plan and to execute prosthetical restoration.

Fixed and removable prosthodontics programmes introduce the student to the options available for restoration of partly dentate or edentulous patients on an acceptable and appropriate biological and functional basis. These programmes develop the principles involved in assessment and construction of the fixed and the removable types of prostheses, and management of edentulous state.

2. Primary Aims

After completion of this course the student should be able to:

- understand physiological phenomena which influence the need for prosthetic treatment
- understand and present different options available for the rehabilitation of the edentulous as well as the partially dentate patients.
- present well supported different prosthetic treatment concepts about both removable alternatives and fixed measures
- maintain and restore good oral health and functions and obtain the patient satisfaction during the treatment as well as after treatment completion.
- have a theoretical and practical knowledge of properties and characteristics of prosthetic materials

3. Main Objectives

The student should:

- know the compositions, properties and qualities of dental materials used for prosthetic work.
- be aware of the alterations that these materials suffer in the biological environment. And act accordingly.
- know the clinical procedures and the laboratory protocol necessary for the fabrication of various prosthesis.
- know the scientific basis for implant oral rehabilitation.
- be able to present the considerations necessary for individual evaluation of a patient's needs and satisfaction with prosthodontic measures.

4. Hours in the Curriculum

The amount of hours is of 52 h of lectures and 20 h of clinical activities per year.

5. Method of Learning/Teaching

The main principles of the teaching method are lectures, laboratory exercises followed by clinical activities, recommended reading. As mentioned above the student is exposed to theory and to practice and learns to deal with simple cases as well as with complex prosthetic treatment. A student gradually develops competence to handle clinical situations of increasing complexity.

6. Assessment Methods

At the end of the three year course must face a board of examiners composed of three professors. A practical trial is given and an evaluation of the degree of theoretical learning is made. The practical exam generally consists of execution of tooth preparation of middle complexity simulated on phantom heads or executed in laboratory. The theoretical exam consists of a conversation with each professor who appraises the degree of learning with a general evaluation.

7. Strengths

- Prosthodontics is considered as an integral part in oral health rehabilitation.
- Emphasis is given to the importance of maintaining the health of the natural dentition.
- Patients with pathologies of various complexity are studied.

8. Weaknesses

- The selection of patients not always corresponds to the teaching needs since the patients treated in the clinic at a given time not always undergo the treatment suitable for the concomitant stage of teaching.
- Limited access to relevant dental literature.
- Practice on patients is not allowed to students not yet graduated.

9. Innovations and Best Practices

The curriculum is designed to allow a gradual introduction of students to the different parts of prosthodontics.

10. Plans for Future Changes

To solve weakness aspects reported in point n. 8.

11. Visitor Comments

Prosthodontics occupies a large portion of the curriculum. During 3rd year the teaching is devoted to removable partial dentures and TMJ problems. In 4th year the emphasis is on complete dentures while the 5th year is devoted to fixed prostheses. In each of these subject areas we were told that the balance of teaching is about 70% theoretical and 30% practical. Much of the latter is restricted to experience on manikins. Students are exposed to patients with TMJ dysfunction and to those with cleft palates.

There is no laboratory course in which the students can learn how to make the various prostheses. They may therefore not acquire the depth of knowledge needed to allow them to communicate and discuss treatment with the dental technician effectively.

Our discussions with students and graduates led us to the conclusion that although they can observe the clinical stages there was very little opportunity to actually undertake programmes of treatment for patients. Experience in preparing teeth for fixed prostheses is provided on the manikin. However, the 'course of treatment' is not taken beyond the preparation stage and so the student does not gain the experience of seeing what can be achieved. The whole matter of clinical experience will be discussed further in Section 18.

12. Staff

Gennaro Minervini MD Full Professor

Gennaro Carrino MD, *Professore a contratto*

Roberto Minini MD, *Professore a contratto*

Felice Scioli MD, *Professore a contratto*

Section 12: Periodontology

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

Names: Prof. Dr. Filippo Caruso

E-mail: filippo.caruso@unina2.it

1. Introduction

Periodontology is taught during the 4th and 5th year of the course. During the 4th year the course is theoretical and deals with etiopathogenesis, prevention, diagnosis and treatment of the periodontal diseases. The 5th year is an introduction to the basic clinical practice in Periodontology:

2. Primary Aims

Following the course of lectures, tutorials, and clinical experience, students must learn and diagnose all forms of periodontal diseases, and should be able to manage patients with periodontal pathologies not requiring a complex treatment.

The Student must know the basic concepts in implantology and for systemic and topical antibiotic therapy.

3. Main Objectives

At the end of the 2 year course, students should be able to:

- perform a correct and detailed clinical examination
- learn to diagnose the different periodontal diseases
- recognise risk factors
- manage oral hygiene measures for the prevention of diseases
- perform non surgical treatment
- evaluate the results of surgical procedures (resection, conservative, regenerative techniques and osteointegrated implants)
- comprehend complex surgical techniques
- perform the simplest surgical procedures

4. Hours in the Curriculum

4th year: Lectures 50 h

5th year: Practice 15 h on phantom heads and 35 h on patients.

5. Methods of Learning/Teaching

- Lectures and tutorials with audio-visual multimedia
- Live video demonstrations of surgical procedures.

-Students are divided in 4 groups (each one with a tutor) for practice on simulators (phantom heads). To learn:

- the correct work position
- the use of periodontal instruments and their maintenance.
- probing depth
- scaling and root planing

- Clinical documentation is used as support for learning about diagnosis and treatment of any given patient.

Students are divided in 4 groups (each one with a tutor) for practice on patients.

They learn:

- how to collect the anamnesis and to do a periodontal charting.
- how to do scaling and root planing
- how to give surgical assistance for the procedures of scaling and root planing (with surgery)

The patients follow-up by the students is limited to 3 Months even if the patient is followed for longer time.

6. Assessment Methods

Continuos assessment is done during practice exercises and clinical practice. A final oral examination is given at the end of the 5TH year.

7. Strengths

- Impact of audio-visual multimedia.
- Initiation to surgical procedures.
- Presence in the School of dental hygiene students as a support for dentistry students.

8. Weaknesses

The scarce teaching staff does not allow for overall management and re-examination of treated patients.

9. Innovations and Best Practice

Interdisciplinary collaborations

10. Plan for future Changes

Introduction in the staff of Dental Hygienists for SPT (i.e. Supportive Periodontal Therapy).

11. Visitor Comments

The small number of units in Periodontology are well equipped. As they must service the needs of staff, postgraduates, student hygienists and undergraduates there is little opportunity for the latter group to obtain clinical experience. As a consequence it is not possible for the students to follow up or evaluate treatment performed on their own patients or on patients treated by other students or dentists in order to gauge the degree of success.

The following comment relates to all three limbs of restorative dentistry, namely conservative dentistry and endodontics, prosthodontics and periodontology. We did not gain the impression that integration of these subjects was well established. This no doubt is one reason why integrated (comprehensive) patient care is not taught.

12. Staff

Filippo Caruso MD Full Professor

Dr. Roberto Marra DOPD *Professore a Contratto*

Dr. Claudia Fusco DOPD *Professore a Contratto*

Section 13: Oral Surgery and Dental Radiography and Radiology

13.1 Oral Surgery

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

Prof. Dr. Gregorio Laino

e-mail: gregorio.laino@unina2.it

1. Introduction

Oral surgery is taught during the 3rd and 4th year. The course is theoretical and practical.

Theory

- Principles of asepsis and antisepsis in oral surgery
- Principles of general and local anaesthesia
- Surgical anatomy, innervations and function of the organs of the head and neck
- Techniques, indications and contraindications for surgical procedures (from extractions to complex surgery)
- Prevention of postoperative complications
- Pathology of the mucosa and jaws (Traumatic lesions, odontogenic and non-odontogenic inflammation and neoplasm of the jaws, oncological diseases, salivary glands, surgical diseases, tmj diseases, soft tissue tumours, pathology of the sinuses, facial pain, disorders of maxillo-facial development, syndromes of maxillo-facial area, surgical treatment of facial malformation, orthognatodontic surgery).

Practice

- Surgical charting
- Correct use of surgical scalpels and instruments
- Minor surgical procedures (with tutors)
- Tooth extraction (with tutors)

2. Primary Aims

To teach students to examine the patients, to make diagnosis, and give the best treatment for surgical diseases affecting the oral mucosa, the jaws and the teeth.

3. Main Objectives

At the end of the two years of studies, the student should be able to perform

- a correct and detailed clinical examination
- local anaesthesia
- a surgical procedure for biopsy
- a surgical procedure for minor benign lesions of soft tissues
- a complex surgical treatment

have learned

- the principles of general anaesthesia
- the management of risk patients
- to diagnose the different oral surgical diseases
- to diagnose oral cancer

know

- about common tooth extraction and impacted tooth extraction
- about complication of surgical procedures and their management
- the basic concepts in implantology
- how to evaluate the results of surgical procedures

4. Hours in the Curriculum

3rd year: lectures 40 h, practice 12 h (patients with tutors)

4th year: lectures 35 h, practice 17 h (patients)

5. Methods of Learning/Teaching

Lectures and tutorials with audio-visual multimedia

Live demonstrations of surgical procedures

The students are divided in 4 groups, each directed by a tutor for practice on patients.

6. Assessment methods

Student progress assessment is done during practical exercises, clinical practice, and tutorials. An oral exam is held at the end of the 4th year of the course.

7. Strengths

- Introduction to surgical procedures
- Practical classes take place in two surgical halls, where students perform minor surgical procedures with tutors.

8. Weaknesses

Scarce teaching and auxiliary staff does not allow for overall management and follow-up of the patients

9. Innovations and Best Practice

Interdisciplinary collaborations with the Oral Medicine and Pathology departments

10. Plans for Future Changes

To try to involve students in the off-work hours in the department work and increase their practical skills.

11. Visitor Comments

This department has no shortage of patients and so students do gain experience in extracting teeth and other minor oral surgery procedures. We were pleased to learn that, from time to time, seminars are conducted by teachers from other schools. This cross-fertilisation is to be encouraged.

The course finishes at the end of 4th year. We can see value in the students obtaining some exposure to the subject in the final year so that the limited clinical experience is reinforced.

12. Staff

Gregorio Laino MD	Full Professor
Dr. Rosario Rullo MD	<i>Professore a Contratto</i>
Dr. Rossella Santoro MD	<i>Professore a Contratto</i>
Dr. Dardo Menditti MD	<i>Professore a Contratto</i>

13.2 Oral/Dental Radiology and radiography

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

Prof. Dr. Francesco Silvano Sasso

with the collaboration of Drs Diego Sandro Giordano MD.and Mario Gargiulo and Giuseppe Sasso MD.

e-mail: francescos.sasso@unina2.it

1. Introduction

The course is called General and Oral Radiology and is taught in the 3rd year (6th semester), as a theoretical and clinical course, with practical exercises.

2. Primary Aim

Primary aims are to develop the students' understanding and knowledge in radiology, so that graduates should be able to:

- Explain basic physics principles, techniques and methods of Diagnostic Imaging and Radiation Oncology, biological and radiopathological effects of ionization and non-ionization radiation, practical and legal aspects of radioprotection, oral and perioral diagnostic imaging related to different pathologic conditions.

3. Main Objectives

Graduates should be able to:

- know how x-rays are produced and how they interact with matter and living organisms. Know principles and means of radioprotection.
- assess ionization radiation and its biological effects, implement radiation protection and evaluate diagnostic efficacy of radiography and diagnostic imaging in comparison with other diagnostic method and its relevance for diagnosis, treatment decision and prognosis.
- use the best selection criteria for radiographic examination in dentistry and the most appropriate views in different clinical situation also with reference to cost/benefit ratio.
- Interpret intraoral and extra oral radiographs and master radiographic examination's techniques in the oral region.
- Explain the radiographic image quality and its influence in diagnostics.
- Describe performing techniques of oral diagnostic imaging examination and their interpretation with particular reference to bitewing, periapical and panoramic radiographs.
- Understand the normal dental and maxillofacial anatomy as seen on common radiographic projections
describe the radiological appearance of common pathological conditions affecting teeth and maxillofacial structures.
- manage radiographic records and the storage of radiographic images.
- Describe radiopathology and radiation oncology principles mainly in relation to therapeutical indications and assistance to irradiated patient.

4. Hours in the Curriculum

Fifty two hours in General and Oral Radiology:lectures (26 hours) and seminars (26 hours)

5. Method of Learning/Teaching

Lectures on relevant radiation physics and radiation biology, radiographic technique and general radiology. Dental and maxillofacial radiological anatomy and radiological presentation of common dental and maxillofacial pathological conditions are introduced to students in lectures and seminars.

6. Assessment Methods

Written and oral examinations.

7. Strengths

The student clinics are one and the same as the University Dental clinic. The clinical and academic staff are available for students all day, which facilitates the integration of theory and practice.

8. Weaknesses

The course in Oral Radiology is taught by general radiologists and the practical activity is optional.

9. Innovation and Best Practices

Exposure to realistic clinical situations in Oral Radiology and how they correlate with others subjects of dentistry.

A didactic module in Radioprotection will be added to the course beginning from the present academic year.

10. Plans for future changes

we plan:

to combine lectures and practical works in General Radiology and Oral Radiology so that the students will have the possibility to make intraoral radiographs during more than 26 hours of didactic activity.

To combine seminars on Oral Radiology with other subjects of dentistry, to increase understanding in diagnostic, treatment decision and prognosis.

To arrange opportunities for students to develop competence in performing radiographs with digital image systems.

11. Visitor comments

Students receive a comprehensive theoretical course with the main focus being on the physics of ionizing radiation and biological effects of radiation. We note that the subject is touched on in the course of Medical Physics taught in the 1st year. There may be value in exploring the possibility of integration in order to avoid unnecessary duplication.

In our opinion the current legal situation creates a considerable obstacle to the student gaining an acceptable level of practical experience. The practical experience is limited to knowledge in interpretation of normal radiographic anatomy and also the radiological appearance of pathological conditions in 10 full-mouth examinations. We were told that an undergraduate student is not allowed to take radiographs. It is therefore somewhat surprising to learn that the newly qualified dentist is able to do so without any further training.

In a number of countries in Europe students are permitted to take radiographs under supervision. In others, where the law is similar to that in Italy, the student gains the experience of positioning the patient, film and X-ray tube but then leaves the qualified member of staff to 'press the button'. We see this as a useful approach and one which is far preferable to graduating students who have had no experience at all.

We were heartened to see the plans for future changes and hope that they can be delivered at the earliest opportunity.

12. Staff

Prof.Dr. Francesco Silvano Sasso MD Associate professor

SECTION 14

14.1 Oral Medicine

Persons in school who will explain and show this to the visitors

Prof. Dr. Fernando Gombos

e-mail: fernando.gombos@unina2.it

1. Introduction

Stomatology is a theoretical and practical biannual course taught during the 4th and 5th year.

The theory deals with:

- History of dentistry; Embryology, histology, anatomy of the face, mouth, teeth and the jaws; Physiology; Microbiology; Immunology; Genetic disorders involving mouth and face; Malformations of the mouth and jaws; Sinus diseases; Tmj diseases; Pathology of the salivary glands; Infectious diseases (bacterial, viral and mycosis); Immunological diseases; Dermatological diseases involving face and mouth; Oral manifestations of internal diseases; Trigeminal neuralgia and facial pain; Osteomyelitis of the jaws; Cystic lesions of the jaws; Oral soft tissues tumour like lesions; Jaws tumour-like lesions; Neoplasm of the jaws and oncological diseases; Precancerous lesions; Cancer; AIDS.

The course is completed with oral pharmacology and the common diagnostic techniques.

The practice deals with:

in the 4th year:

The techniques for correct collection of specimen by swab or biopsy; the learning of techniques of Cytology, Histology; Immunofluorescence; Immunohistochemistry; the management of a specimen; the mounting of a specimen; Microtomy, Optical Microscopy; The student learns the surgical procedure on phantom head and on animal tissues.

In the 5th year:

the practice (on patients with tutors) includes: the observation of patients; the charting; the swab, the cytology; the biopsy, the diagnosis, the management of therapy, the follow up.

2. Primary Aims

To teach students:

- what is the appropriate dentist-patient human relationship
- how to examine patients and to make a global diagnosis
- how to plan and establish a therapeutical program aiming at restoring function and aesthetics
- correctly treat the diseases of oral mucosa, jaws and teeth from Pathologies at the border with Physiology (i.e. linea alba, Fordyce syndrome etc) to cancer.

3. Main Objectives

At the end of the 2 years of studies, the student should be able to:

- make a correct and detailed clinical examination
- learn to diagnose the different oral diseases
- learn to treat the different oral diseases
- plan and establish a global therapeutical program aiming at restoring function and aesthetics
- correctly make swabs
- carry out a cytological examination
- carry out a common histological procedures (haematoxylin/eosin)

- excise a bioptic specimen
- prescribe a medical treatment
- evaluate the results of surgical procedures
- evaluate the results of medical treatment
- understand complex surgical and medical procedures.

4. Hours in the Curriculum

4th year: Lectures 60 h, Practice 10 h (animal tissues and phantom heads)

5th year: Lectures 70 h, Practice 25 h (patients).

5. Methods of Learning/Teaching

- Lectures and tutorials with audio-visual multimedia
- Live demonstrations of surgical procedures.
- Tutorials for practice on simulators and on patients
- Students are divided in 4 groups (each one with a tutor) for practice on animal tissues, and 3 groups (each one with a tutor) for practice on patients.

6. Assessment Methods

Assessment of student progresses is done during practical exercises, clinical practice and tutorials. The final oral examination is the last examination of the undergraduate curriculum.

7. Strengths

- Great integration of dentistry with medicine
- Practical work during the 2 years of course (use of microscopy for histology, immunofluorescence and immunohistochemistry).
- Introduction to clinical and surgical procedures (with animal tissues and patients)

8. Weaknesses

- The teaching staff scarcity does not allow for a proper overall management and follow up of patients.

9. Innovations and Best Practice

Interdisciplinary collaborations with basic sciences

10. Plan for future Changes

Try to increase the practice for diagnostic, clinical and surgical procedure.

Try to involve the students in the off-work hours in the department work and improve their practical skills.

11. Visitor Comments

These two subjects are closely related to each other and to oral surgery. We were pleased to note this degree of integration and also to learn that efforts have been made to avoid duplication of teaching material.

12. Staff

Fernando Gombos MD Full Professor

Dr. Francesco Palomba MD Assistant Professor

Dr. Giovanni Maria Gaeta DOPD *Professore a Contratto*

Dr. Felice Femiano MD *Professore a Contratto*

14.2 Oral Pathology

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

Prof. Dr. Curzio Buonaiuto

e-mail:curzio.buonaiuto@unina2.it

1. Introduction

Oral Pathology is taught during the 3rd year.

The course is theoretical and practical.

Theory includes etiopathogenesis and diagnosis of the common oral diseases of the tooth, jaw and oral soft tissues.

Practice includes:

- Clinical charting
- Clinical exam of the patients
- Management of patients suffering of oral diseases (with tutors)

2. Primary Aims

To teach students to examine the patients, to make diagnosis and correctly treat the diseases affecting the oral mucosa, the jaws and the teeth (from dental caries to cancer).

3. Main Objective

At the end of this course, the student should be able to:

- perform a correct and detailed clinical exam
- be able to diagnosticate and to treat the different oral diseases

4. Hours in the Curriculum

3rd year: Lectures 42 h, Practice 10 h (animal tissues and phantom heads)

5. Methods of Learning/Teaching

- Lectures and tutorials with audio-visual multimedia
- practice (with tutors) on simulators and on patients

6. Assessment Methods

Assessment is made during tutorials, and by final oral examination.

7. Strengths

- Good integration of dentistry with medicine
- Introduction to clinical procedures (with patients)

8. Weaknesses

Small teaching staff

9. Innovations and Best Practice

Interdisciplinary collaborations with basic sciences

10. Plan for Future Changes

Try to improve and to increase the practical aspect.

11. Visitor Comments

12. Staff

Curzio Buonaiuto MD Full Professor

SECTION 15

15.1 Integrated (Comprehensive) Patient Care

There is no specific courses on this topic. Integrated Patient care is taught in the course of Oral Medicine (Section 14.1)

15.2 Dental Emergencies

There is no specific courses on this topic. Each teacher includes in her/his lessons notions on the handling of dental emergencies.

15.3 Care of special need patients

There is no specific courses on this topic. Each teacher includes in her/his lessons notions on care of special need patients

Visitor Comments

There are no specific courses in these subjects. We have already drawn attention to what we see as the great value in developing the concept of total patient care.

Within the area of 'special needs' we suggest that the School might consider more formal programmes which deal with the care of elderly people and those with various handicaps.

SECTION 16: PRACTICE MANAGEMENT AND COMMUNICATIONS

16.1 Behavioural Sciences

Psychiatry

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

Name: Prof. Dr. Paolo Gritti

e-mail:paolo.gritti@unina2.it

1. Introduction

The course is focused on the analysis of the psychological implications and psychopathological features of dental pathology, providing students with some advice on the management of the dental patient. Hence, the course is divided in three mainstream topics (psychology of dental patients, psychopathology; principles of treatment).

2. Primary Aims

The primary aims of the course are to provide dental students with:

- basic understanding of the bio.psycho.social models in psychology and psychiatry.
- knowledge of psychopathology and psychiatric treatments.

3. Main Objectives

Students are expected to have an understanding of the following:

- Psychological assessment of dental patients
- The dentist-patient relationship
- Psychological issues in orthodontics
- Psychosomatics and dental diseases: oral lichen planus; burning mouth syndrome
- Bruxism
- Psychiatric interview
- Sign and Symptoms of psychiatric illness
- Psychiatric issues in Dental Diseases
- Psychopharmacological treatments in dental patient
- Psychological treatments in dental patients

4. Hours in the Curriculum

The course is an optional course taught during the first semester of the fourth year. The course includes a total of 26 hours of lectures, 20 hours of tutorials and 5 hours of problem-based learning.

5. Method of Learning/Teaching

The learning of psychiatry is based on lectures and problem-based learning.

6. Assessment Methods

At the end of the course the students are required to pass a single examination covering the three mainstream topics.

7. Strengths

Integrating psychology and psychiatry into dentistry according to a bio.psycho.social model is the strength of the course.

8. Weaknesses

Lack of interdisciplinary clinical practice

9. Innovation and Best Practices

Problem-based learning of clinical psychology and psychopathology;
Supervision of selected cases with broad implications for the dental practice.

10. Plans for Future Changes

Improve the clinical practice in an interdisciplinary context.

11. Visitor Comments

We were impressed by the aims and objectives of this course. There may be value in splitting the teaching so that behavioural science is introduced before the students start to see patients in the clinic whilst psychiatry is taught when the students are more mature clinically.

This course is optional. We heard that as few as 5-10 students attend. This surely is not acceptable for such an important subject. We do urge that it is made compulsory.

12. Staff

Gritti Paolo MD, Associate Professor of Medical Psychology.

16.2 Communications

There is no specific courses on this topic. Doctor-patient communication is taught in the course of Oral Medicine (Section 14.1)

Visitor Comments

No comment.

16.3 Ethics and Jurisprudence

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

Name: Prof. Dr. Enzo Durante Mangoni

e-mail: enzo.durante_mangoni@unina2.it

1. Introduction

The course is called “Legal Medicine of Insurances and Deontology in Odontostomatology” and takes place in the first semester of the fifth year (9th semester).

2. Primary Aims

Students must have a knowledge of the :

- most important laws in the Constitution, and the Civil and Criminal Codes of the Italian Republic, legal institutions which regulate the main and auxiliary medical professions, relationships between different categories, legal duties and professional responsibility.
- institutional elements of Legal Medicine: general, criminal, civil, of insurance and social security (welfare).
- damaging causes and their biological consequences, with reference to the traumatology of the stomatognathic apparatus, ability to evaluate biological damages in the different juridical fields;
- problems related to personal identification in the living and in the dead, with reference to the odontostomatological apparatus.

3. Main Objectives

The course intends to:

- contribute to the legal and social development of future dentists, correlating bio-medical knowledge with the rights and needs of patients and State law.
- culturally prepare graduating students in dentistry to specialistic services of medical and legal relevance.

4. Hours in the Curriculum

The course includes a total of 45-50 hours.

5. Method of Teaching/Learning

Traditional lectures and interactive study.

6. Assessment Methods

Assessment is done with an oral exam at the end of the course.

7. Strengths

Great interest for ethical and deontological matters and evaluation of damage.

8. Weaknesses

Short number of hours.

9. Innovations and Best Practice

To increase interactive study and its employment in practical activity.

10. Plans for Future Changes

To increase interactive study and its employment in practical activity.

11. Visitor Comments

This course occupies 45-50 hours of the curriculum. In a curriculum which already has a very heavy theoretical load we do wonder whether the important matters can be taught in rather less time. Certainly we have difficulty in supporting the plea in the SAD for more hours.

12. Staff

Enzo Durante Mangoni MD Full Professor

Luigi D'Ancora MD Assistant Professor

16.4 Practice Management

A specific course on this topic is not taught anymore

Visitor Comments

No comment.

COURSES NOT CONSIDERED BY THE DENTED CURRICULUM BUT TAUGHT AT THE SCHOOL

Compulsory courses

A.1.1. Basic and Applied Medical Physics

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

Name : Dr. Loretta Rosa Cicchiello

e-mail: lcicchi@tin.it

1. Introduction

The course is aimed at the study of physics law with implication for the dental material science, security instrumentation, physiological systems, health-related phenomena.

2. Primary Aims

To deepen as much as possible the knowledge of physics principles.

Understanding the physics principles underlying physiological mechanisms and the functioning of medical equipment.

3. Main Objectives

Students are helped to acquire an understanding of the following physics principles.

- Fundamental forces: Fields
- Centre of mass
- Harmonic Oscillator
- Electromagnetic waves
- The human eye
- Physics of Respiratory and Circulation systems
- The Laws of Thermodynamics

4. Hours in the Curriculum

The course is taught during first semester of the first year and consists of 72 hours of lectures and a maximum of 48 hours tutorial.

5. Method of Learning/Teaching

Lectures and tutorial are interactive: helping students to understand and solve certain physics problems.

6. Assessment Methods

At the end of each topic the students are requested to undertake a written partial test followed by a colloquium with the lecturer.

At the end of the course there is a final oral examination.

7. Strengths

Improvement of the mathematical and physical basis of physiology, dental material science, orthodontics, dental radiology.

8. Weaknesses

Poor preparation in physics of the students at the beginning of the course.
Limited teaching time for many topics
Lack of experimental facilities

9. Innovation and Best Practice.

More experimental facilities to teach the use of instruments in health care.
More teaching in data processing should help the interpretation of biomedical data.

10. Plans for Future Changes

Practical work with experiments

11. Visitor Comments

We understand that this course is given because some students enter the University without a scientific background.

The course is very detailed and some of it appears to be quite loosely related to dental materials and to radiology. There may be opportunity for streamlining here.

12. Staff

Loretta Rosa Cicchiello PhD Assistant professor

A.1.2.Dental Materials.

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

Name. Prof. Dr. Michele Parlato

1. Introduction

Dental materials is taught during the 1st and the 2nd year of curriculum

The course teaches the chemical, physical and biological features and the product analysis of every material, instrument and tool used in dentistry.

2. Primary Aims

The primary aim of the course is to teach Dental students how to choose and use materials, instrument and tools for dental practice, more specifically, in anaesthesia, surgery, prophylaxis, restorative dentistry, dental prosthesis, periodontology, endodontics, orthodontics, materials, sterilisation, odontotechnical laboratory.

3. Main Objectives

Following the course of study the students should be able to choose and to use correctly instruments, tools and products for dentistry.

4. Hours in the Curriculum

26 h of lectures, 10 h of practice during the second semester

26 h of lectures, 20 h of practice during the third semester

5. Methods of Learning/Teaching

Lectures and tutorials with audio-visual multimedia

Practice on materials with phantom heads

6. Assessment Methods

Assessment is done during tutorials, and by a final oral exam.

7. Strengths

This is the first contact with dental materials and dental instruments.

The students begin to use their manual skills

8. Weaknesses

The course is not simultaneous with the teaching of the other "Dental" topics.

9. Innovations and Best Practice

Interdisciplinary collaborations with basic and clinical sciences

10. Plans for Future Changes

Introduction of two semester courses, one at the first and one at the second year of curriculum.

11. Visitor Comments

Reference to the self-assessment document indicates the extensive nature of the course. As well as conventional dental materials science the students receive instruction on such subjects as cross-infection control and adverse reactions to dental materials. We are of the opinion that the course is positioned far too early in the curriculum. We suggest it should be so positioned that the information is delivered at about the same time that the students use the materials.

12. Staff

Michele Parlato MD Assistant Professor

A.1.3 Pathological Anatomy and Histology

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

Name: Prof. Dr. Franca Ferraraccio

Fax: +39 081-459224

1. Introduction

The course intends to provide students in Dentistry with the basic knowledge on morphopatology and histopathologic lesions of the oral cavity and odontontological apparatus; by this mean students are able to correlate morphopathological observation with the clinical picture.

2. Primary Aim

Knowledge of unhealthy processes through morphopathological observation.

3. Main Objectives

- At the end of the course the future dentist should be able
- to carry out histopathology and immunohistochemical techniques
- to recognise flogistic lesions of the oral cavity
- to recognise Arterioschlerotic vasculopatic processes in the ischemic lesions of myocardium
- to recognise odontostomatologic lesions in renal failure.
- to recognise Neoplastic processes of the tissue and glands of the oral cavity
- to make differential histopathological diagnosis of the neoplastic processes of the oral cavity
- to correlate systemic diseases with odontostomatologic pathologies

4. Hours in the Curriculum

The course covers two semesters of the third year and is divided in two parts: the first is specialistic and covers the odontostomatologic apparatus, the second regards all other apparatuses.

The overall length of the course is of 144 hours, 20 of which are dedicated iconographic examples of anatomo- and histo-pathological lesions.

5. Method of Learning/Teaching

Traditional lessons and/or lectures and interactive theoretical and practical training with discussion in anatomo-clinical cases.

6. Assessment Methods

A final oral examination the end of the two semesters.

7. Strengths

Correlation between anatomo-clinical systemic pathologies and their effects with odontostomatologic histopathological lesions.

8. Weaknesses

9. Innovation and Best Practice

Teaching laboratories equipped with additional audio-visual equipment and optical microscopes for histopatologic practice would represent a great improvement.

10. Plans for Future Changes

To increase teaching equipment, books and scientific reviews for students.

11. Visitor Comments

As mentioned earlier in the report, we suggest that the organisers of the various related courses collaborate in order to examine the contents for unnecessary duplication of subject matter.

12. Staff

Luigi Cuccurullo MD, Full Professor
Franca Ferraraccio MD, Associate Professor

A.1.4. Neurology

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

Name: Prof. Dr. Gioacchino Tedeschi
e-mail: gioacchino.tedeschi@unina2.it
fax: +39 081 5666787

1. Introduction

The course deals with neurology and is held during the fourth year.

2. Primary Aims

- to master the anatomy and physiology of the human nervous system;
- to know the major neurological syndromes, and in particular the ones which can involve the cranio-facial district.

3. Main Objectives

- to learn about the anatomy and the physiology of the human nervous system;
- to learn about the mechanisms of disease, the diagnostic criteria and the management of the major neurological disorders;
- to learn about the clinical features of the major neurological syndromes.

4. Hours in the Curriculum

The course is based on 25 hours per year of teaching and 4 clinical sessions per year on selected neurological patients.

5. Methods of Learning/Teaching

The course is based on the constant use of audio-visual material, on the integration of acquired knowledge and practical examples derived from neurological literature, as well as from students' experience.

6. Assessment Methods

A committee of three teachers bases the final examination on oral examination; after passing the final examination students are asked to fill up a questionnaire about the global validity of the teaching.

7. Strengths

Simplicity of approach to the complexity of the course, especially when given to Dental students.

8. Weaknesses

The time spent with neurological patients is too short.

9. Innovations and Best Practice

On completion of the course students should be able to recognise the major neurological disorders and interact with the neurologist in the best interest of the patient.

10. Plans for Future Changes

To improve the practical aspects of teaching with the use of professional videos, like the ones developed by the American Academy of Neurology.

11. Visitor Comments

This course is directly and importantly tailored to the needs of dental students. The topics are related mainly to oral and facial problems. The students are given the opportunity to see selected patients with relevant neurological problems.

12. Staff

Gioacchino Tedeschi MD Full Professor

Simona Bonavita MD Assistant Professor

COMPLEMENTARY COURSES

A.1.5 Paediatrics

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

Name: Prof. Dr.Laura Perrone

e-mail: laura.perrone@unina2.it

1. Introduction

Undergraduate students are taught paediatrics in the third year as a complementary course.

2. Primary Aims

The primary aim of the course is to give the basic knowledge for the diagnosis of the odontostomatologic paediatric diseases and to enable the future Dentist to help the general paediatrician in the prevention and precocious diagnosis of the most common paediatric diseases.

3. Main Objectives

- to develop understanding of the importance of oral diseases in children;
- to teach students
- to evaluate children's growth, pubertal development, blood pressure, cardiac and respiratory frequency and the physiological values of the common laboratory data;
- to perform the physical examination of a paediatric patient;
- the common and the rare paediatric pathologies;
- to make a differential diagnosis and interpret findings of the clinical and laboratory examinations of paediatric diseases;
- the basics of paediatric pharmacology (the undergraduate students should know the most common drugs and should be able to use them to treat the patient in the daily practice).

In Particular are taught

Pathology of growth and pubertal development, paediatric immunisations, Down syndrome, Turner syndrome, allergic diseases (rhinitis, asthma, urticaria, anaphylaxis), rheumatic fever, rheumatoid arthritis, infectious diseases (diphtheria, pertussis, measles, rubella, chicken pox, mumps, infectious mononucleosis, cat scratch disease, viral hepatitis), pharyngitis, bronchitis, bronchopneumonia, pneumonia, congenital heart disease, iron deficiency anaemia, haemolytic anaemia, leukaemia, Hodgkin lymphoma, non-Hodgkin lymphoma, histiocytosis, aplastic anaemia, haemorrhagic diseases, acute nephritis, diabetes mellitus, hypothyroidism, dwarfism, paediatric pharmacology, laboratory examination.

4. Hours in the Curriculum

The course is held during the second semester of the third year (6th semester) and consists of total of 26 hours between theoretical lectures and practical experience.

5. Method of Learning/Teaching

During the 26 hours students treat patients and discuss the clinical situations with the Professor.

6. Assessment Methods

Assessment of theory during the course is carried out using multiple choice questions including true/false, short answer questions, short essay questions. An oral examination is used to assess theoretical knowledge at the end of the course.

7. Strengths

The student is being introduced to the management of the child patient and learns to cooperate with the general paediatrician.

8. Weaknesses

Too little clinical practice in the paediatric ward.

9. Innovations and Best Practices

Comprehensive supervision for the growing child is being provided.

10. Plans for Future Changes

It is planned to publish a specific textbook of paediatrics for this course.

11. Visitor Comments

Complementary Courses

The courses listed under this heading are optional.

A.1.5 Paediatrics

This course highlights the specific importance of illnesses in children. In a way its inclusion draws attention to the lack of corresponding teaching in geriatrics. It is a pity that there are no direct links with the teachers of Paediatric Dentistry.

12. Staff:

Laura Perrone, M.D. Associate Professor

A.1.6 Dermatology

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

Prof. Dr. Rocco Alfredo Satriano

e-mail: centaurus@usa.net

Prof. Dr. Andrea Villano

1. Introduction

Dermatology is a complementary course held in the 4th year of study. .

The students are introduced to anatomy, physiology, microbiology, immunology and histology of the skin and oral mucosa.

2. Primary Aims

Students must have an understanding of common oral and skin diseases such as:

- Dysplastic epithelial lesions (congenital)
- Genodermatosis
- Vascular disease
- Infectious diseases (viral, bacterial, and mycotic)
- Immunological diseases
- Benign neoplasm
- Precancerous lesions
- Cancer of the skin and oral mucosa
- Oral and skin manifestations of internal diseases
- AIDS

3. Main Objectives

Following the course of study the students have to learn to diagnose the common dermatological diseases affecting oral cavity by means of laboratory and clinical tests.

They should know how to manage the patients and realise a modern and suitable treatment for each disease.

4. Hours in the Curriculum

52 h of Lectures.

5. Methods of Learning/Teaching

- Lectures and tutorials with audio-visual multimedia
- Tutorials with patients

6. Assessment Methods

Assessment is done during tutorials, and a final oral exam.

7. Strengths

Clinical evaluation of oral and skin diseases with patients in the department of dermatology

8. Weaknesses

Small teaching staff

9. Innovations and Best Practice

The students during the off-work hours can visit patients in the department and improve their practical skills.

10. Plan for future Changes

Try to improve and increase the practice.

11. Visitor Comments

This optional course is delivered as a series of lectures. We understand that most students attend.

The course covers topics of major importance. We do believe that there would be value in collaboration with Oral Medicine and Oral Pathology. Although this does occur within the area of research it might also usefully occur when examining the various teaching programmes.

12. Staff

Rocco Alfredo Satriano MD Assistant Professor

Andrea Villano MD Assistant Professor

A.1.7 introduction to Otorhinolaryngology, Phoniatics and Audiology

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

Name: Prof. Dr. Umberto Barillari

e-mail: umberto.barillari@unina2.it

1. Introduction

The course is a complementary course held during the 5th year. It intends to provide students with the basic knowledge on otorhinolaryngoiatric diseases with particular reference to audio-phoniatic pathologies, emphasising simptomatology and differential diagnosis.

2. Primary Aims

Knowledge of pathologies regarding voice, language and hearing.

3. Main Objectives

To learn physiology, pathology, semeiotics, diagnostics and instrumental methods in otorhinolaryngoiatry, phoniatic and audiology.

4. Hours in the Curriculum

The course covers a total of 20 hours.

5. Methods of Teaching/Learning

Traditional lectures.

Theoretical and practical lessons.

6. Assessment Methods

Students are assessed by an oral exam at the end of the course.

7. Strengths

Continuous correlation between the topics taught in the course and Dentistry, with the intention to deepen the knowledge on related pathologies.

8. Weaknesses

Lack of spaces and equipment.

9. Innovations and Best Practice

A better interaction between the Institute of Odontostomatology and the Phoniatic Service.

10. Plans for Future Changes

Request for more technological equipment.

11. Visitor Comments

The strong dental link with this course is through the care of the large number of cleft palate patients.

12. Staff

Umberto Barillari MD Associate Professor

New courses

A.1.8 Scientific English

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

Name: Dr. Paola Castagna

e-mail: maria.dalcalabrese@unina2.it

tel: 081/5665870

1. Introduction

This is a new course started in the academic year 1998-1999. The aim of the course is to provide students of Dentistry with knowledge of English to achieve a linguistic and scientific competence. The course is organised in 2 years of two semesters each, with two separate exams. In the first year, the first semester is based on a course for beginners, the second semester is at an intermediate level and the students are introduced to effective reading of scientific texts. The second year intends to provide students who already master scientific English with a selection of up-to-date articles from scientific magazines and well-known English and American publications. The course covers a total of 60 hours, for the first and second year, which are equally dedicated to lectures and to test students' understanding of the subject matters.

2. Primary Aims

The primary aim of the course is to provide dental students with an effective understanding of scientific English.

3. Main Objectives

The aim of the course is not to teach medicine, but to have students acquire the linguistic structures to communicate and understand scientific passages in English. In order to reach this purpose they have to master the four skills that represent the basis of language teaching.

- Listening comprehension
- Speaking: communication in a new language
- Reading: comprehension on written texts
- Writing: Summarising scientific articles, taking notes, writing abstracts after reading a dental article, writing an article after reading an abstract.

4. Hours in the Curriculum

The course is divided in two parts of one year each, with two separate oral and written exams, and covers a total of 60 hours.

5. Method of Teaching/Learning

The learning of scientific English is based on lectures and interactive study.

6. Assessment Methods

At the end of the first year course students pass an exam for the beginners and intermediate level; at the end of the second year course students pass an exam for the upper intermediate and advanced levels.

7. Strengths

The use of multimedial devices and up-to-date scientific articles.

8. Weaknesses

Lack of a linguistic laboratory. Due to the fact that the University lacks funds, the present plan of the English course allows the staff to teach only 60 hours per year (for both years).

9. Innovation and Best Practice

The possibility of having specific tutorials.

10. Plans for Future Changes

To increase interactive teaching and hoping for a higher priority in the students' curriculum.

11. Visitor Comments

The introduction of this course is a most welcome and important innovation.

It is therefore sad that we have to report that the increased number of students entering 1st year makes it impossible to maintain the concept of interactive learning within small groups. There can be no doubt that the quality of the course will have suffered as a consequence.

12. Staff

Paola Castagna PhD. *Professore a Contratto*

A.1.9 Computer Data Access

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

Name: Dr. Massimo Finizio

e-mail: massimo.finizio@unina2.it

1. Introduction

This is a new course started in the academic year 1999-2000. The course intends to provide students with the basic knowledge on the utilisation of data communication and data processing systems for their study and their professional activity. The course also provides the basics for correct scientific and interpersonal communication utilising instruments of the net.

2. Primary Aim

Computer, internet and data processing literacy.

3. Main Objectives

Students are expected to have an understanding of the following:

Terms used in computer science

Elements on the use of the main programs

Internet and various instruments available from the net

Rules of the etiquette

Data search on the net

Interaction between students and professor

Creation of a personal web page on subjects of the course

4. Hours in the Curriculum

The course takes place in the second semester of the first year covering a total of 20 hours of lectures and tutorials, in addition to interaction between students and professor utilising E-mail.

5. Method of Learning/Teaching

Traditional lessons

Interaction utilising E-mail

Web page of the course

Computer practice

6. Assessment Methods

Theoretical and practical final exam in which we take into account not only the students' theoretical preparation but also the web page created by them and the quality of their interaction during the course.

7. Strengths

A continuous relation between the subjects of the course and Dentistry.

8. Weaknesses

Short number of hours

Limitations of spaces and instruments

Lack of non-teaching staff skilled in the field.

9. Innovation and Best Practice

Continuous interaction employing E-mail. Use of computers for every didactic activity.

10. Plans for Future Changes

Request for more technological equipment. Enlargement of the communication band for computers of the structure.

11. Visitor Comments

Again we would like to congratulate the School on this important initiative. It has been introduced because students leave high school with limited knowledge of IT skills.

Because of the lack of staff there inevitably has to be limited access to the laboratory and therefore there is a reduced opportunity for the students to practice and improve their skills. We recommend that thought be given to integrating the IT facilities with those of the library as a means of combining personnel needed for supervision and therefore of increasing the student accesss to these two important learning facilities.

12. Staff

Massimo Finizio, DOPD *Professore a Contratto*

SECTION 17: EXAMINATIONS, ASSESSMENTS AND COMPETENCES

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

Name: Prof. Fernando Gombos

The increased number of students (the reasons are described elsewhere) further reduced the number of hours devoted by each student to practical activities and, therefore, the level of performance of the student was lowered.

Given the rate of technological progress, often our equipment soon becomes obsolete; annual expenditure even on a reasonable level is hindered by the University's budget limitations.

Innovations and Best Practices

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

Prof. Fernando Gombos

Assessment and examinations are dependent on the subject/ discipline and are presented in the paragraph "Method of Assessment" of each of the sections from 5 to 16. In short the situation is the following

For many basic subjects/ disciplines there are one or several written examinations which precede the final oral examination. For non-dental clinical subjects there is only an oral examination whereas for those relating to odontoiatrics there is a practical training period at the end of which the skills are assessed by the teacher. For oral medicine and oral surgery there is an observed and assessed 'live' face-to-face situation between the student and a patient.

Strengths

Our present approach provides for continuous development and updating of teaching and, as a result, for development of the curriculum and student's learning.

Tests for subject/discipline have been standardized and formalized by the Italian Conference of Dental School Teachers.

From the year 2000, the assessment by students of the quality of the teaching of each professor staff has been introduced. This action will take effect at the end of the current academic year (end May/beginning of June).

Weaknesses

Considering that the new credit system has only recently been installed (actually from this current academic year), evidence regarding related innovations and best practices are not yet available. In the past, on the other hand, quality, rather than quantity, of the clinical work done took precedence, so that if a student carried out 50 fillings only five of them were assessed.

Plans for Future Changes

With the new credit system only just in force, no definite plans for changes in the immediate future are envisaged.

Explain as to what level examiners are involved

The system of external examiners is non-existent.

What formal completion of an exam is required of the school for students to qualify and register?

Once the student is awarded the degree, she/he has to complete the State qualification examination to become a fully qualified dental practitioner. There is no compulsory additional practice between degree and state qualification examination.

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

The system of competence testing outlined above is developed according to the guidelines of the EU Advisory Committee.

Visitor Comments

We were advised that the concept of external examiners is not recognised in Italy.

In each section of the SAD the means of assessment of the students is described. Specific portions of the year are devoted to examinations. Most of these take the form of an oral examination in front of the professor of that subject together with two co-examiners. For some subjects practical competence is judged by a manikin test. There do not appear to be any examinations of dental subjects where patients are seen except for the last examination (Oral Medicine) where the student examines a patient, establishes a diagnosis and plans treatment.

SECTION 18: OTHER INFLUENCES

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

Name: Prof. Fernando Gombos

18.1 Regional Oral Health Needs

Here is no Regional Observatory on the oral health needs of the population. The University is not involved in raising the awareness of school children regarding oral health and dental care. This is the competence of the school doctor and of the Public Health system. A cooperation on this subject, however, between the University Clinics, the Dental Association (Ordine dei Medici e Dentisti) and the Public Health System would be a great improvement.

18.2 Evidence Based Treatments

Students deal separately with each specialty of Dentistry with the teacher of the specialty. Teaching with an holistic approach was not tried yet.

18.3 18.4 Recreation

Sporting and recreational activities are not coordinated by the School of Dentistry but by the University itself.

18.5 Student Selection Procedures

Students are required to have passed the State "maturità" examination (This corresponds to the French baccalaureat or the German abitur). The score is taken into consideration. Furthermore, there is a written entrance examination (multiple-choice), which is set by the Ministry for Higher Education and Research. This entrance test must be passed by prospective candidates who are then ranked.

18.6 Labour Market Perspective

The perspective for the free profession are rather good. There is no migration to other countries.

Visitor Comments

Many of our comments in this section arise from comprehensive discussions we held with members of the profession outside the Dental School, recent graduates and the students themselves.

a) Quality of the undergraduate programme.

It is quite clear that the theoretical part of the curriculum is taught in a very thorough manner.

It is also quite clear that the fundamental problem is the lack of practical clinical experience on completion of the undergraduate course. This message came to us loud and clear from each group to whom we talked.

We have already mentioned some of the factors which lead to this perceived deficiency, the problem of patients' fees for treatment and the lack of space in the School. We were also told that there is apparently no established tradition for patients to be treated by students. It has to be said that such an arrangement is common practice in most countries within Europe.

b) Demand for treatment

It was not, of course, our brief to conduct a survey of dental health. The following points were made to us at the various meetings and we mention them as they have some bearing on dental education.

There has been a reduction in dental caries and an increased need for the treatment of periodontal disease.

Public awareness of dental health is rather low.

Little demand by the public for preventive regimes. Most preventive dentistry is provided on a private rather than a public basis.

The dental public health system is viewed negatively. It is seen as offering a very limited service much of which is devoted to emergency work.

There is no effective relationship between the School and the dental public health system.

There is a demand for aesthetic dentistry and implantology.

There is a belief that there are too many dentists and too many dental students.

c) Postgraduate education.

The new graduate cannot practise until he or she has passed the state board examination. This examination is regulated by a decree which was issued by the Italian Ministry of Public Education in 1985. In this examination the candidate must submit him or herself to oral and practical tests on medical odontostomatology and related medical subjects or on odontostomatology surgery. The practical test lasts for 45 minutes and involves establishing a diagnosis, planning treatment and considering the prognosis. The examination is held after the graduate has completed a period of clinical experience called 'Tirocinio'.

We were told that the 6 months is the average time spent on the Tirocinio. We subsequently discovered that, during the last two years it has been possible for the best students to discharge the Tirocinio commitment during the undergraduate course as long as all 3rd year assessments have been completed successfully. Such an arrangement may be appropriate for, perhaps, three students per year. It was not clear to us how much practical clinical work could be accomplished during the training period.

We were told that approximately 20% of the graduates are able to obtain the further clinical experience in the Dental School; this group usually comprises the best students and those who can afford a further period of study without remuneration. The remaining 80% will seek tuition from a general dental practitioner.

There is a recognition that when the larger number of students progresses to the clinical years there could well be an adverse effect on the quality of training during the Tirocinio, on the amount of clinical experience available for the undergraduate, or both.

There is no scheme for vocational training nor is there a requirement for continuing professional education. The dentists hope that this situation will change but they explained that there are financial and legal obstacles to be overcome.

SECTION 19: STUDENT AFFAIRS

Name of ad-hoc student representatives (english speaking) who will discuss this:

Final year: **Fabio Capristo**
e-mail : fabiocapristo@hotmail.com

Fourth year: **Andrea Cotrufo**
Phone: +39 081 646321
or 0329 2237005

Ernesto Farina
e-mail: ernesto.farina@unina2.it

Third year: **Brunilde Albanese**

Second year: **Viviana Biondi**
Fausto Illiano
Dorothy Parlato
e-mail: dorothyparlato@libero.it

First year: **Antonio Graziano**
e-mail: deagra@libero.it
Marco Russo
Sergio De Lizza
e-mail: delizza@hotmail.com

NB Regularly elected 5 student representatives seat at the school council. (The council composition is given in Section 3)

19.1 Basic Data from Dental School

- a) About 20 students graduate per Year. Two point need to be stressed
- not all students graduate at the end of the fifth year. The present Italian system allows graduation after more than five years.
 - Graduation is not equivalent to professional qualification. An additional examination called "Esame di Stato" is necessary. A practical training of 6 months (TIROCINIO) is done before graduation.
- b) Student admission was determined by an entrance examination. The best 24 students were admitted. Starting from the academic year 1998/1999, a court decided that the entry examination to the school were against the right-to-study guaranteed by the Constitution of the Italian Republic and ordered the admission of all those candidates who had gone to court (NB not of all the rejected candidates) even if they had not reached sufficiency. In this way the number of dental students admitted to the first year was of 105/120 students per year for the last two years. This is way above the possibility to give a proper training to

these students. No money was allocated for the purchase of extra equipment, additional staff or classroom space.

c) The length of courses in years and semesters is shown in table

Duration of the course	Name of the course	Number of courses
4 semesters	Oral Medicine, Oral Surgery, Orthodontics, Prosthodontics, Periodontology, Conservative Dentistry.	6 courses
2 semesters	Anatomy, Biochemistry, Anatomical pathology, Dental materials, Oral pathology, Endodontics	6 courses
1 semesters	All others	21 courses

d) There is not a separate period of vocational training following graduation as a dentist in Italy.

19.2 List of different postgraduate courses

The following postgraduate courses are offered by the school:

- Specialization in Orthodontics(Prof. A. Ferro): Three years open to qualified graduates of Dental and Medical schools (6 per year)

- Specialization in Oral Surgery (Prof. G. Laino): Three years open to qualified graduates of Dental schools (3 per year).

- Master in Periodontal Therapy (Prof. F. Caruso): One year open to qualified graduates of Dental and Medical schools (5 per year);

- Master in Orthognatic Surgery of Skeletal III classes (Prof. A. Ferro): One year open to qualified graduates of Dental and Medical schools (20 per year);

- Master in Stomatologic Surgery and Surgical Techniques (Prof G. Laino): One year open to qualified graduates of Dental and Medical schools (20 per year).

- A Doctorate in Biotechnologies (Prof. De Rosa): Three years open to qualified University graduates (4 per year)

19.3 List of Different auxiliary courses

In addition to classical course the students must participate to Optional Didactic Activities (ODA) for 2 credits per year.

Name of the ODA	Name of the Course	Name of the ADO
1. Bioactive Materials in Tissue Engineering	Biochemistry	Prof. M. Carteni Dr Peluso tel. 081-5665867
2. Muscle Links	Anatomy	Prof. B. Valentino tel. 081-5665053
3. Dentistry for Disabled	Dental Materials	Dott. M. Parlato tel. 081-5665499
4. Surgical Therapy of Facial Malformations	Oral Medicine	Prof. F. Gombos tel. 081-5665486
5. Facial Development in the Embryo	Oral Medicine	Prof. F. Gombos tel. 081-5665486
6. Insurance Protection and Legal Safety	Oral Medicine	Prof. F. Gombos tel. 081-5665486
7. Guided Regeneration Surgical Techniques on Periodontal Tissues	Periodontology	Prof. F. Caruso tel. 081-5665523
8. Surgical Bone Regeneration Techniques in Implantology	Periodontology	Prof. F. Caruso tel. 081-5665523
9. Growth Factors in Periodontal Therapy	Periodontology	Prof. F. Caruso tel. 081-5665523
10. Surgical Emergencies in Oral Surgery	Oral Surgery	Prof. G. Laino tel. 081-5665522
11. DNA as therapeutic Agent	Pharmacology	Prof. A. Cascino tel. 081-5665879
12. Posture and Occlusion	Orthodontics	Prof. A. Ferro tel. 081-5665501

13. Kinesiology in Dentistry	Orthodontics	Prof. A. Ferro tel. 081-5665501
14. Statistics Applied to Physiological Signals	Basic and Applied Medical Physics	Prof. L.R. Cicchiello
15. New Methods on Tax Investigation in Dental Offices	Dental Materials	Dott. M. Parlato tel. 081-5665499
16. Radiation Protection	Oral/Dental Radiology and Radiography	Prof. F.S. Sasso tel. 081-5665466

19.4 Describe briefly student counseling services in the University

The only official counselling concerns the curriculum and is given by Professors Carteni and Caruso, coordinators of the first biennium and last triennium respectively.

For all other problems the Dean receives students every friday morning.

Visitor Comments

We held a very productive meeting with the students. The following points emerged :-

They were particularly appreciative of the education provided by the staff. They felt able to bring their worries and concerns to the School teaching staff.

They were very worried about the lack of practical clinical experience. They recognised the background to the problem but were anxious for change together with an earlier introduction to patients.

They expressed concern about the problems which would inevitably arise from the major increase in student numbers.

They had obtained great benefit from visits to dental schools in other countries and hoped that the scheme could be expanded.

They would like facilities to be made available so that a dental students' society could be developed more effectively.

SECTION 20: RESEARCH AND PUBLICATIONS

20.1.1 List of Articles published by the Istituto di Clinica Ontostomatologica (1996-2000)

1996

WADDINGTON R.J., LANGLEY M.S., GUIDA L., IUORIO G., LABELLA R., EMBERY G., CARUSO F. Relationship of sulphated glycosaminoglicans in human gingival crevicular fluid with active periodontal disease. *J. Periodont. Res.* **31**, 168-170, 1996

FERRO F., MONSURRO' A., PERILLO L. Il controllo della dimensione verticale anteriore e posteriore nella terapia delle malocclusioni secondo Norman Cetlin. *Ortognatodonzia Italiana* **4**, 591-592, 1996

LAINO G., MENDITTI D., RULLO R., SANTORO R., CAPPABIANCA S., DEL VECCHIO E. Osteodisplasia fibrosa varietà cranio-facciale: presentazione di un caso clinico. *Riv. It. di Chir. Or.* **1**, 68-71, 1996

PERILLO L., JOHNSTON L.E., FERRO A. Permanence of skeletal changes following function regulator (FR-2) treatment of retrusive Class II patients. *Am. J. of Orthod. and Dentofacial. Orthop.* **109 (2)**, 132-139, 1996

RICCIO C., GUIDETTI A. M., SAVA M., VALENTINO C. Otturazioni canalari: metodiche a confronto. *Odontostomatologia* **6**, 768-774, 1996

1997

PARLATO M., COPPA P. L'influenza della mordenzatura e della detersione dello smalto nella ritenzione dei sigillanti occlusali. Risultati clinici. *Arch. Stomat.* **Single volume 36-38**, 59-64, 1997

PARLATO M., COPPA P. I sigillanti nella riduzione del gap marginale dei restauri in amalgama. *Arch. Stomat.* **Single volume 36-38**, 21-25, 1997

PARLATO M., COPPA P. Considerazioni sui sigillanti auto e foto polimerizzabili e risultati clinici dei sigillanti fotopolimerizzabili *Arch. Stomat.* **Single volume 36-38**, 43-48, 1997

RICCIO C., VALENTINO C., BUONAIUTO C., DE VIVO D. L'infiltrazione marginale nelle V classi. L'evoluzione dei materiali estetici. *Il Dentista Moderno* **1**, 41-48, 1997

RICCIO C., VALENTINO C., BUONAIUTO C., DE VIVO D. L'infiltrazione marginale nelle V classi. Adesivi di IV generazione e infiltrazione marginale. *Il Dentista Moderno* **1**, 51-59, 1997

REA F., SERPICO R., PLUVIO R., BUSCIOLANO M., IOVENE A., FEMIANO F., SESSA G., BELNOME G. Ipoplasia dello smalto dentario in un gruppo di soggetti celiaci. Correlazioni clinico-epidemiologiche *Minerva Stomatol.* **10**, 517-524, 1997

SERPICO R., BUSCIOLANO M., FEMIANO F. Indagine statistico-epidemiologica su di una possibile correlazione tra livelli sierici di transaminasi e markers di patologie virali epatiche e lichen planus orale. *Minerva Stomatol.* **46**, 97-102, 1997

FEMIANO F., VILLANO P. A., MENDITTI D. Manifestazioni orali del lupus eritematoso discoide. *Arch. Stomat.* **Single volume 36-38**, 73-79, 1997

LAINO G., D'ALISE P.L., MENDITTI D., RULLO R. Iperplasia verrucosa del cavo orale *R.I.C.O.* **1 (8)**, 78-82, 1997

MARRA R., GUIDA L., IUORIO G. La rigenerazione ossea guidata. *Dental Cadmos* **5**, 38-43, 1997

MARRA R., PERSICO P., GUIDA L., GALANTUOMO P. Le principali membrane di barriera nella terapia rigenerativa *Dentista Moderno* **8**, 87-93, 1997

RICCIO C., VALENTINO C., SAVA N., BUONAIUTO C. Adesione nelle V classi. Vantaggi nell'uso di condizionatori; valutazione al SEM. *Arch. Stomat.* **Single volume 36-38**, 27-34, 1997

RICCIO C., VALENTINO C., SAVA N. Cresatina e Cresophene Ultra come medicazioni intermedie nelle terapie canalari. Analisi in vitro sull'efficacia e la tollerabilità. *Arch. Stomat.* **Single volume 36-38**, 65-12, 1997

RICCIO C., VALENTINO C., SARNATARO A., GUIDETTI A.M. *Successi ed insuccessi in endodonzia*. Revisione critica e parametri valutativi nel giudizio odontoiatrico. *Arch. Stomat.* **Single volume 36-38**, 49-58, 1997

RULLO R., MENDITTI D., SANTORO R. Tecnica chirurgica per via endo-orale delle cisti epidermoidi del pavimento orale in sede sottomiloioidea. *Arch. Stomat.*, **Single volume 36-38**, 11-19, 1997

1998

ARONNA G., DE ROSA A., ROSSO F., MARGARUCCI S., CARUSO F. Studio sulla biocompatibilità e gli effetti di alcuni materiali a lento rilascio di antibiotico nel trattamento della malattie paradontale. Nota II. Biocompatibilità e comportamento del poliidrossietilmetacrilato (pHEMA) come materiale a lento rilascio di tetraciclina e metronidazolo. Studio su due casi. *Minerva stomatologica* **47 (10)**, 559-564, 1998

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GOMBOS F., SERPICO R. "Immunopatologia orale". Textbook in the series "Atlanti di Odontoiatria" 340 Pages, 591 Figures, Piccin, Padova 1999

20.3 Chapters in books (1996-2000)

Odontostomatology

CAPURSO U., PERILLO NUCCI L., FERRO A. L'ecosistema orale senile e le sue problematiche. pp. 243-254 Chapter 22 In *Geriatría e Gerontologia Varricchio M. e Coppola L. Editors.* Idelson-Gnocchi, Napoli 1998

PERILLO NUCCI L., CAPURSO U., FERRO A. L'apparato masticatorio nella senilità. pp. 255-264 Chapter 23 in *Geriatría e Gerontologia Varricchio M. e Coppola L. Editors.* Idelson-Gnocchi, Napoli 1998

NUCCI S., PERILLO NUCCI L. Chapter 21 - Risorse di Odontoiatria. in *Internet e Medicina* In "Guida delle risorse mediche" 2nd Ed. L.G. Pareras Editor. Masson, Milano 1998

SATRIANO R. A. & GAETA G.M. Acrodermatitis Entheropathica, Benign Chronic Familial Pemphigus, Epidermolysis Bullosa. pp.48-56 In *Oral Disease Textbook and Atlas: Genetic diseases of oral mucosa (bullous diseases).* T.M. Lotti, L.C. Parish, R.S. Rogers (Eds.) Springer-Verlag Berlin Heidelberg 1999

Physiology

MONZON-MAYOR M., YANES C., ROMERO-ALEMAN M. M., DE BARRY J., STURROCK R.R AND GOMBOS G. Glial Cells Ontogeny in the Lizard *Gallotia galloti*. pp. 79-109, In *B. Castellano, B. Gonzales & M. Nieto-Sanpedro (eds) Understanding Glia.* Kluwer Academic Publishers, London 1998

Pharmacology

DE NOVELLIS V., DI MICO J.A., BERRINO L., STELLA L., MAIONE S., COLUCCI D'AMATO A., VITAGLIANO S., ROSSI F. Nucleo dorsomediale ipotalamico e tachicardia da stress pp. 97-108 In *Ambiente e malattie del Sistema Nervoso*, G. Meco editor. A & J. Roma 1996

ROSSI F., BERRINO L. Vasculopatie, pp. 561-568 In: *Principi di Farmacologia*. P.L. Munson Editor – Piccin, Padova 1999

Neurology

Di COSTANZO A., TEDESCHI G. Analisi computerizzata dei movimenti oculari saccadici. pp. 237-242, In *Neurologia Clinica Diagnosi e Terapia*. Bonavita V, and Di Iorio G. (eds). Edizioni Medico Scientifiche, Torino 1996

TEDESCHI G., TORIELLO A. Encefalopatie metabolico-tossico. pp. 651-685, In *Neurologia Clinica Diagnosi e Terapia*. Bonavita V. and Di Iorio G. (eds). Edizioni Medico Scientifiche, Torino 1996

CASUCCI G., TEDESCHI G. AND BONAVIDA V. Farmaci e sistema nervoso. pp 395-455, In *Neurologia Clinica Diagnosi e Terapia*. Bonavita V. and Di Iorio G. (eds) Edizioni Medico Scientifiche, Torino 1996

BONAVIDA V., Di COSTANZO A., AND TEDESCHI G.: Malattie cerebrovascolari. pp. 595-643, In *Neurologia Clinica Diagnosi e Terapia*. Bonavita V. and Di Iorio G. (eds) Edizioni Medico Scientifiche, Torino 1996

BONAVIDA V., Di COSTANZO A., AND TEDESCHI G. Malattie cerebrovascolari pp. 967-999 In *Geriatrics e Gerontologia*. Varricchio M. e Coppola L. Editors. Idelson-Gnocchi, Napoli 1998

BONAVIDA V., Di COSTANZO A., AND TEDESCHI G. Tumori Endocranici pp. 949-965 In *Geriatrics e Gerontologia*. Varricchio M. e Coppola L. Editors. Idelson-Gnocchi, Napoli 1998

Dermatology

R.A. SATRIANO R.A., GAETA G.M. Genetic Diseases of Oral Mucosa - Bullous Diseases pp 48-56 In *Oral Diseases Textbook and Atlas*. T.M. Lotti, L.C. Parish, R.S. Rogers (Eds.) Springer-Verlag Berlin Heidelberg 1999,.

Psychiatry

GRITTI P., DE VITO M., CASALE M. La depressione nel paziente neoplastico: prevalenza, diagnosi e trattamenti. pp. 101-116, In *Psicologia in Oncologia*, F. De Falco Editor, Cuzzolin, Napoli 1998

GRITTI P. "Psicotraumatologia: rilievi storico-culturali, epidemiologici, psicopatologici e nosografici pp. 223 – 227 In *Psichiatria '99*, CIC Ed. Internazionali, 1999

GRITTI P., DE VITO M., AMATO M.G., CASALE M., DELLA CORTE E., ARCAMONE P. Trauma collettivo e risposte individuali: uno studio sperimentale in sopravvissuti ad un incidente marittimo alla luce dei contributi di letteratura pp. 228 –231, In *Psichiatria '99*, CIC Ed. Internazionali, 1999

GRITTI P., DI CAPRIO E.L. "I disturbi affettivi ed i sistemi familiari: considerazioni dottrinarie e cliniche". pp. 297 – 300, In *Psichiatria '99*, CIC Ed. Internazionali, 1999

Radiology

SASSO F.S.: "Istopatologia da Radiazioni Ionizzanti" in "*Trattato di Anatomia Patologica Clinica*" M. Raso Editor. Piccin, Padova, **galley proofs**.

SASSO F.S., ANDREUCCI L., ORECCHIA R., MARSIGLIA H., SASSO G. IME: Experiences of using an image management environment in medical applications. *Multimedia Databases & Image Communication* 1999, edited by M. Tucci

General Medicine

GENTILE S., GUALDIERO P., MANZELLA D., SIMEONE D., VERDE S., BUONOMO A. Le aritmie nell'anziano. pp 775-817 In *Geriatría e Gerontologia Varricchio M. e Coppola L. Editors*. Idelson-Gnocchi, Napoli 1998

GENTILE S., COPPOLA A., GUALDIERO P., SCOTI G., SIMEONE D., VERDE S., VESCIO S., BUONOMO A. Le sincopi nell'anziano. pp 819-831 In *Geriatría e Gerontologia Varricchio M. e Coppola L. Editors*. Idelson-Gnocchi, Napoli 1998

GENTILE S., COPPOLA A., GUALDIERO P., PISANO D., SIMEONE D., VERDE S., VESCIO S. Morte Cardiaca Improvvisa. p 871-885 In: *Geriatría e Gerontologia Varricchio M. e Coppola L. Editors*. Idelson-Gnocchi, Napoli 1998

Otorinolaringoiatry, Phoniatics

COSTA G., BARILLARI U. La vertigine. p.841-846 In: *Terapia, Dario Giuliano. Editors* Idelson-Gnocchi, Napoli, 1999

20.4 Grants received > £1000

"Biomaterials in odontostomatology" a progetto finalizzato CNR (National Research Council) on the theme " Biomateriali speciali per tecnologie avanzate" 28 million Lit.

20.5 Number of invited presentations at international meetings

GOMBOS F. Fendas nasopalatais e as desarmonias maxilofaciais. Invited lecture at *the 14^o Congresso Mundial do Comitè Internacional de Pesquisa em Implantologia Oral* IRCOI **Facultade de Odontologia Universidade Federal de Juiz de Fora- Minas Gerais- Brasil** 19-22 september 1996

GOMBOS F. Protocolo terapeutico en la cirugia de las alteraciones de la formation de la boca. Invited lecture *at the Jornadas internacionales de Actualizaciòn en Odontologia-100 anos de la Universidad Nacional de La Plata Facultad de Odontologia Universidad Nacional de La Plata, Argentina* 3- 4 october 1977.

20.6 Sectorial representatives to be contacted about reprints of papers by staff members

A The biological sciences Name: Prof. Dr. Michela d'Istria
e-mail: michela.distria@unina2.it

B Anatomy, Physiology, Pharmcology, Microbiology, General Pathology: Prof. Dr. Maria Carteni

e-mail: maria.carteni@unina2.it

C General Medicine,.General Surgery: Prof. Dr.Umberto Parmeggiani
e-mail: parmeggi@unina2.it

D Orthodontics, Paediatric Dentistry

E Public Dental Health : Prof. Dr. Umberto Del Prete
e-mail: umberto.delprete@unina2

F Restorative Dentistry, including Periodontology, Conservative Dentistry, Endodontics,
Prosthodontics
Prof. Dr. Gregorio Laino

G Oral .Radiology Prof. Dr. Francesco Silvano Sasso
e-mail: francescos.sasso@unina2.it

H Oral Surgery
Prof. Dr. Gregorio Laino

Visitor Comments

The list of publications shows the benefit of close collaboration with colleagues in the Medical School.

The space available for research in the Dental School is very limited. We understand that a central research area will be established in Caserta; this will be of great benefit.

We were very pleased to see details of an innovative research doctorate scheme entitled 'Biomedical technologies applied to odontostomatological sciences' financially supported by the EU.

SECTION 21: QUALITY DEVELOPMENT

Increase and maximise student and staff exchanges on a pan-European scale.

Visitor Comments

We gained the impression that, until very recently, the students were involved only informally in the evaluation of courses. We recommend that such evaluations should be more systematically performed in order to improve those courses and the whole curriculum. Another benefit of this approach could be that it stresses the students' responsibility for improving their own educational environment and promotes their ability to express themselves in a well motivated way.

Curriculum enhancement is a continuous process. We are sure that the changes which have been made to the feed-back procedure will strengthen the process. We hope that the changes will also promote the further development of methods for measuring outcomes of the educational programme

SECTION 22: OVERALL COMMENTS ON THE SCHOOL

1. Strengths

A complete and thorough knowledge of the fundamental principles of Medicine is expected of students before embarking on a course in Dentistry.

2. Weaknesses

Current practical training in terms of time-scales is still limited and should be substantially increased. Legal problems, however need to be overcome. Students should be authorised to treat patients at reduced fees.

3. Innovation and Best Practices that may be considered for application by other dental schools in Europe

European schools should seek to integrate studies on tissue immunology to a far greater extent for Oral Medicine and Stomatology.

Visitor Comments

In this summary we would like to express our admiration of the staff for their ability to improvise in order to overcome the physical shortcomings. We regret that their problems are going to become even more acute because of the large number of students about to commence the clinical phase of the curriculum.

We are relieved that there appears to be some light at the end of the tunnel with the development of the new facility at Caserta. We hope that the light appears sooner rather than later.

We commend the development of the dedicated five year dental curriculum and the retention of strong links with medicine.

The curriculum is strong in theory but we must express our concern about the lack of practical clinical experience and the fact that the problem must inevitably deteriorate in the short term because of the increase in student numbers.

The students we met were well motivated and the staff/student relationship appeared to be strong. These qualities are of the greatest importance if the School is to successfully meet the major problems which would appear to be on the horizon.

**Visit to the School of Dentistry, Second University of Napoli.
13th -17th May, 2000.**

Visitors Overall Comments

The visitors' comments are presented in two formats. First, the comments are separated so that they can be related directly to each section of the School's Self Assessment Document (SAD). Second, the comments are brought together as a single narrative at the end of the SAD.

Section 1. Introduction.

We would like to extend our most grateful thanks to the Dean, Professor Fernando Gombos, and to the staff and students of the School of Dentistry for their warm welcome, their generous hospitality and most excellent co-operation. Throughout the visit Professor Giorgio Gombos was our shepherd; we thank him most sincerely for looking after us so well.

We were particularly appreciative of the quality of the documentation provided for the visit. The School is well situated in the middle of a big city. There is ready access for patients and, nearby, there are related university departments thus allowing convenient teaching and opportunities for collaborative research. Having said this the point should be made that some medical clinics are situated a distance from the School thus creating logistical problems for the students.

The aims of the School and of the undergraduate curriculum were clear and appropriate.

The staff have met the challenge of devising a five-year curriculum for dental students in place of the old style 3-year addition to the medical course.

At this introductory stage of our report we would like to put on record our admiration of the excellent staff/student relationship. The students specifically mentioned their gratitude for the effort of the staff in devising and promoting their educational programme.

Also, at this early stage, we must draw attention to the very major problems which have been created by the legal ruling which has effectively banned the *numerus clausus*. As a consequence, since 1997, the University has been obliged to admit well over 100 students per year instead of the normal 24 per year who were admitted on a selective basis. This increase has had to be accepted without any increase in resource. At the present time it is far from clear whether or not this ruling will continue.

The teaching and clinical facilities in the School were designed for the smaller intake. As we will point out later in this report it is our opinion that these facilities are inadequate for 24 students following a modern dental curriculum. The increased numbers of students entering the clinical course will put an intolerable burden on teachers and on the existing facilities. It is inevitable that the current limited clinical experience will be further diluted, that the quality of education will suffer and that there is a definite risk of patient safety being compromised because the new graduate has inadequate practical clinical experience.

The University and University Hospital administrations are fully aware of the problem. We

understand that solutions can be found only at national level. We urge that the matter be considered urgently if the quality of dental education is to reach and be maintained at a level commensurate with European standards.

The visitors feel that they have no choice but to draw attention to this matter at the outset of the report as it goes to the very heart of the quality of dental education.

Section 2. Facilities

2.1 Clinical facilities

The School is now showing signs of age. A few units have been replaced in recent times while others appear to be coming towards the end of their useful life. We accept that little money can be spent on the existing facilities as plans are reasonably advanced for a move to a new School based in Caserta. This move is said to take place in three years but popular opinion suggests that five years is a more realistic time scale.

Radiological facilities meet the current standards of safety.

Much of the floor space in the Institute is made over to oral and maxillofacial surgery in order to support a well developed in-patient facility which serves the region.

The 24 dental units are used by staff, postgraduate students, hygienists and undergraduate students. Already these facilities appear to be inadequate. The situation can only get worse as the increasing number of undergraduates progresses to the clinical phase of the course.

At the present time there is no opportunity to practice 4-handed dentistry. As the new school in Caserta is in the process of being designed we hope that steps are taken to promote this aspect of team dentistry.

2.2 Teaching facilities, including laboratories.

We were very impressed with the facilities in the phantom head teaching laboratory. There are 24 modern manikin units and facilities for live TV demonstrations. Of course these very good facilities will become totally inadequate for the larger years of students.

We also noted, with pleasure, the most recent development - the very well equipped IT room.

The lecture theatres in the Dental School are just adequate for the current numbers of students. It is difficult to see how these facilities will be able to cope with the demands posed by the extensive lecture programme and the huge number of students.

We must draw attention to the very small technology laboratory. Only four work places are available for the 3 dental technicians and for all the undergraduates. We understand that facilities allow only for acrylic work to be undertaken. All metal work has to be sent to commercial dental laboratories. We will report later on facilities for dental students to gain experience in dental technology.

2.5 Library

The Self Assessment Document (SAD) prepared by the School drew attention to inadequacies within the library. We would agree with this assessment. Particularly we draw attention to the lack of a librarian, the restricted access to books and the cancellation of subscriptions to journals since 1995.

Various measures have been taken to reduce this academic deficit. The students are able to make use of the dental library housed in the other dental school in the city. Also, members of the academic staff make available their own text books for the students. Again we hope that the move to Caserta will allow a normal library service to be re-established and properly financed.

Section Section 3. Administration and Organisation.

The main committee governing the affairs of the School (CLOPD) is the Dental School Council (CCLOPD). Its membership is made up of the whole teaching staff together with student representatives. CCLOPD meets every one or two months.

We are very pleased to hear that a process of regular student feedback on the quality of courses is being introduced. This initiative is an important aspect of quality control. We hope that this feedback is used to inform CCLOPD on the progress of the curriculum and that the results will enable appropriate changes to be made.

We read with interest the criticism of the staff over the previously centralised control of the dental curriculum in Italy. We share the School's concern as the process would appear to stifle innovation in curriculum planning. It was therefore good to learn that a degree of flexibility has been introduced as it will encourage individual schools to be innovative. The school in Napoli has taken advantage of this flexibility and has introduced two important initiatives - the course in English language and the course in IT. We are delighted to hear of these developments which will be considered further in this report.

Whilst welcoming this change we do express some concern over the policy that the core curriculum remains under rigid central control, that this core amounts to approximately 40% of the total content and that the details of this percentage are unclear to the staff of the School.

Essentially there are two income streams, one for the hospital function and one for the educational function. We gained the distinct impression that both streams were tightly controlled from outside the School of Dentistry and that they remained quite separate. This inflexibility would seem to create obstacles for the Dean and his colleagues at a time when they are having to grapple with major logistical problems. We earnestly hope that the central budget managers are able to relax the arrangements and give more responsibility to the local managers. Such a change would help to overcome the problems graphically described by the School and would increase administrative efficiency.

One further financial problem became very obvious to us during the visit - the fees paid by patients for their treatment. We feel we must highlight this matter as it has a significant influence on the flow of patients to undergraduates, a point we will be referring to at a later stage. We understand that patients pay the same fee whether or not the treatment is provided by a senior member of staff or by a student. The inevitable consequence is that patients are unwilling to be treated by students. Whatever else is done to establish a basic level of clinical experience for the undergraduate, the measures are unlikely to be successful unless the fee structure is altered in order to provide a financial incentive for patients to receive treatment from students. It is common practice in other countries within Europe for such arrangements to be put in place, or even for the treatment by students to be free of charge.

4. Staff

We understand that the staff/student ratio is within the range 1:4 - 1:8. We regard this figure as providing a suitable basis for clinical education. It will of course become totally inadequate when the larger years enter the clinical phase of the curriculum.

With regard to staff development we were pleased to learn that there has been increased

opportunity for graduates to undertake a programme of study leading to a PhD. We also understand that opportunities exist for members of staff to visit foreign universities. We applaud both these initiatives and hope that they can be developed further.

We were delighted to discover that a school for dental hygienists has been established. We hope that having both dental undergraduates and hygiene students under one roof will be seen as a golden opportunity to further encourage interdisciplinary co-operation and thus promote the concept of team dentistry.

Section 5. Biological Sciences

We make some general comments before progressing to the subject areas.

The courses have been designed for dental students and are taught by staff who have the interests of the dental students very much to heart. A comprehensive theoretical programme is provided and there is an almost universal wish to develop further the concept of interactive teaching.

There are no facilities for practical sessions in laboratories.

5.1 Biochemistry

The programme is designed specifically for dental students and the Professor of Biochemistry takes a particular responsibility for the delivery of the course. Clinical input to the course is sought on an informal basis. It has been a policy to develop an interactive flavour to the course. We were sad to hear that the major increase in student number is thwarting that ambition.

5.2 Molecular Biology and 5.3 Genetics

Again we were advised that the wish to maintain and develop further the interactive nature of the teaching is prevented by the large number of students. We believe that this adversely affects the quality of the educational experience. We were also advised that the motivation of many of the large number of students is variable. A consequence is that only 20% passed a recent examination and that this figure is in stark contrast to the success rates of the smaller years.

We were told that there is a wish to integrate the departmental teaching with that of other areas and so develop multidisciplinary courses. We applaud that approach.

Section 6. Pre-clinical sciences.

6.1 Anatomy

The course has been designed for dental students. Most of the teaching is given through lectures and by reference to text books. There are no or only few opportunities for dissection. No alternatives are offered.

The self-assessment document alluded to some teaching being delivered to small groups in an out-patient clinic. We understand that such an arrangement is not in place at the present time.

6.2 Physiology

We were impressed by the efforts being made to extend the concept of interactive teaching and to encourage self-learning. Computer aided learning is being adopted wherever possible. We noted a positive desire to integrate teaching with other disciplines. All these approaches are praiseworthy.

We do have a worry that the increased numbers of students will thwart these ambitions. We also were told that the variable motivation of the larger intake makes the introduction of self-learning an uphill struggle.

6.3 Histology

Histology is taught by one member of staff who has the interests of dental students very much to heart.

The number of microscopes (30) is sufficient for 24 students but is insufficient for the increased number. This has resulted in a 60% reduction in practical work. To overcome this handicap images on interactive CD ROMs are being prepared.

Educational links with Anatomy appear to be somewhat tenuous but this is not due to any lack of effort on the part of the histology staff..

Section 7. Para-clinical sciences.

7.1 Pharmacology

The aims and objectives of this course are appropriate and the content has been tailored to the interests of the dental student. There is a desire to seek further integration with the teaching of Oral Medicine. We encourage that desire.

We share the view of the teaching staff that the course is given rather too early in the curriculum when the student has little knowledge of disease processes. If teaching could be put back by one semester there would be definite educational advantages.

7.2 Microbiology

As with other subjects there are no facilities for practical work.

Again, as with other subjects, there is a desire to seek integration with other related subjects. Plans for such an approach are at a very early stage. We support any approach to accelerate the development. For example, it should be possible to relate closely to periodontology.

7.3 General Pathology

There was a new organiser for this course and he had tried to emphasise the relevance of general pathology for dental students. We supported the inclusion of the course in a dental curriculum as it was vitally important for the student to understand the principles of disease processes.

We note the very strong influence of pathology within the curriculum. To 50 hours of general pathology can be added 144 hours of pathological anatomy, 52 hours of oral pathology and 165 hours of oral medicine. We believe there must be a risk of duplication and suggest that the course organisers re-examine the programmes with a view to streamlining the teaching.

Section 8. Human Diseases

8.1 General Medicine

We were very pleased to learn that the responsibility for teaching dental students is given to specific members of staff. The method of teaching has been expanded to include simulated case presentations which are used to instruct the students in practical aspects. Students need to travel some distance to attend hospitals in the Naples area.

We were told that the increasing number of students was putting constraints on clinical teaching. We must assume that this problem can only get worse.

We noted in the self-assessment document that the Department of Geriatrics and Metabolic Disease was partly responsible for organising the course. We hope that this collaboration might play an important role in strengthening the teaching of gerodontology in order to meet the demands of the future.

8.2 General Surgery

Again, we were very pleased to learn that the responsibility for teaching general surgery to dental students is invested in specific members of staff. Cross-infection control is taught in this programme. The theory is given to all students whilst a few are able to gain practical experience.

We were glad to hear that facilities were available for students to attend the hospital wards on a compulsory basis. Students also have the opportunity to carry out minor practical procedures such as suturing; this activity is optional.

8.3 Anaesthesiology

We were delighted to hear that this course had been re-timed so that it is to be given at the beginning of 4th Year. This is much more appropriate than the previous timing in 2nd year.

As can be seen from the SAD, the staff in anaesthesiology are responsible for teaching many vitally important aspects of theoretical and practical knowledge. Their remit includes teaching the control of pain and anxiety of adults and children and involves the teaching of local anaesthesia.

We understand that the Italian dentist is allowed, by law, to administer intravenous and inhalational sedation but is not allowed to administer a general anaesthetic. The teaching prepares the student for these future responsibilities.

We understand, though, that the dentist does not have to attend further instruction in intravenous sedation before practising this technique independently.

We were very pleased to learn that the formal assessment of students' competence will now include a test of ability to perform cardiopulmonary resuscitation on a manikin. We would like to suggest that experience in this technique is extended to the final year of the curriculum so that the dental student maintains competency.

Section 9. Orthodontics and Child Care

9.1 Orthodontics and Gnathology

As the title of the course suggests there is considerably emphasis placed on the diagnosis and treatment of TMJ problems within the clinical area; this accounts for about 20% of the course. This particular activity is in addition to that which is undertaken in Oral Surgery and Prosthodontics. This shared interest did not seem to have encouraged integration. In fact we understand that the approach to TMJ problems is different to that in the other departments. This is in contrast to the integration which has been established with Periodontology.

As with other clinical areas there is great pressure on clinical facilities which have to be shared with a sizeable number of postgraduates. We were told that the undergraduate clinical experience is obtained mostly through observation over a period of one month. There must, therefore, be limited opportunity to see the long term consequences of treatment. We were advised that the practical experience accounts for 50% of the teaching time and is limited mainly to diagnosis and to early interceptive therapy. There appeared to be little integration with Paediatric Dentistry.

9.2 Paediatric Dentistry

The course organiser had been appointed during the current academic year. In our opinion this clinical discipline has to work under very considerable constraints. There is no dedicated clinic for the treatment of children, there is a shortage of teaching staff and there appear to be relatively few patients.

Teaching in this subject is restricted to 30 hours during the last semester of the curriculum. We were told that the best students will obtain about 15 hours of clinical experience whilst the others will do rather less. Apparently the student makes the choice.

Within the limited time devoted to Paediatric Dentistry we were pleased to learn that considerable emphasis is placed on behavioural management. However, preventive dentistry was not included in this course.

We understand that plans are being made to deal with the shortcomings.

Section 10. Public Oral Health and Preventive Medicine.

The comment is made in the SAD that the importance of prevention should be emphasised to the students by all staff members. Indeed, we gained the impression that the concept of prevention being an important theme throughout the whole curriculum was rather weak. This may reflect outside influences as we were told by dentists, who we met for a most interesting discussion, that the general emphasis is placed on cure rather than prevention and that the public dental health system is viewed rather negatively and is limited in its scope.

Section 11. Restorative Dentistry.

11.1 Conservative Dentistry.

This course also includes teaching in oral health sciences and oral epidemiology. A thorough practical grounding is provided on manikins. Although there is apparently a good supply of patients the clinical facilities do not permit the students to gain very much practical clinical experience. It was suggested to us that a student might complete 10

amalgam restorations and 10 composite restorations during the curriculum. From our discussions with students the reality appears to be that rather less is achieved.

The design of the curriculum is such that experience in Conservative Dentistry is completed at the end of the 4th year. There is the real risk that the limited clinical experience is further diluted by the passage of time between 4th year and graduation.

As mentioned earlier we believe there would be benefits in stressing the preventive dentistry theme rather more during this course.

11.2 Endodontics

The teaching of practical endodontic techniques is restricted to the manikin. Apparently the reasons for this include lack of clinical facilities, lack of instruments and the fact that students are not allowed to take radiographs. We will return to this particular point in Section 13.

Teaching of this subject occurs in 5th year and therefore is somewhat divorced from the instruction in conservative dentistry although it must be said that the same members of staff teach both subjects.

11.3 Prosthodontics

Prosthodontics occupies a large portion of the curriculum. During 3rd year the teaching is devoted to removable partial dentures and TMJ problems. In 4th year the emphasis is on complete dentures while the 5th year is devoted to fixed prostheses. In each of these subject areas we were told that the balance of teaching is about 70% theoretical and 30% practical. Much of the latter is restricted to experience on manikins. Students are exposed to patients with TMJ dysfunction and to those with cleft palates.

There is no laboratory course in which the students can learn how to make the various prostheses. They may therefore not acquire the depth of knowledge needed to allow them to communicate and discuss treatment with the dental technician effectively.

Our discussions with students and graduates led us to the conclusion that although they can observe the clinical stages there was very little opportunity to actually undertake programmes of treatment for patients. Experience in preparing teeth for fixed prostheses is provided on the manikin. However, the 'course of treatment' is not taken beyond the preparation stage and so the student does not gain the experience of seeing what can be achieved. The whole matter of clinical experience will be discussed further in Section 18.

Section 12. Periodontology

The small number of units in Periodontology are well equipped. As they must service the needs of staff, postgraduates, student hygienists and undergraduates there is little opportunity for the latter group to obtain clinical experience. As a consequence it is not possible for the students to follow up or evaluate treatment performed on their own patients or on patients treated by other students or dentists in order to gauge the degree of success.

The following comment relates to all three limbs of restorative dentistry, namely conservative dentistry and endodontics, prosthodontics and periodontology. We did not gain the impression that integration of these subjects was well established. This no doubt is one reason why integrated (comprehensive) patient care is not taught.

Section 13. Oral Surgery, Dental Radiography and Radiology.

13.1 Oral Surgery

This department has no shortage of patients and so students do gain experience in extracting teeth and other minor oral surgery procedures. We were pleased to learn that, from time to time, seminars are conducted by teachers from other schools. This cross-fertilisation is to be encouraged.

The course finishes at the end of 4th year. We can see value in the students obtaining some exposure to the subject in the final year so that the limited clinical experience is reinforced.

13.2 Dental Radiography and Radiology.

Students receive a comprehensive theoretical course with the main focus being on the physics of ionizing radiation and biological effects of radiation. We note that the subject is touched on in the course of Medical Physics taught in the 1st year. There may be value in exploring the possibility of integration in order to avoid unnecessary duplication.

In our opinion the current legal situation creates a considerable obstacle to the student gaining an acceptable level of practical experience. The practical experience is limited to knowledge in interpretation of normal radiographic anatomy and also the radiological appearance of pathological conditions in 10 full-mouth examinations. We were told that an undergraduate student is not allowed to take radiographs. It is therefore somewhat surprising to learn that the newly qualified dentist is able to do so without any further training.

In a number of countries in Europe students are permitted to take radiographs under supervision. In others, where the law is similar to that in Italy, the student gains the experience of positioning the patient, film and X-ray tube but then leaves the qualified member of staff to 'press the button'. We see this as a useful approach and one which is far preferable to graduating students who have had no experience at all.

We were heartened to see the plans for future changes and hope that they can be delivered at the earliest opportunity.

Section 14. Oral Medicine and Oral Pathology

These two subjects are closely related to each other and to oral surgery. We were pleased to note this degree of integration and also to learn that efforts have been made to avoid duplication of teaching material.

Section 15. Integrated patient care, dental emergencies, special needs patients.

There are no specific courses in these subjects. We have already drawn attention to what we see as the great value in developing the concept of total patient care.

Within the area of 'special needs' we suggest that the School might consider more formal programmes which deal with the care of elderly people and those with various handicaps.

Section 16. Practice management and communications.

16.1 Behavioural science, Psychiatry

We were impressed by the aims and objectives of this course. There may be value in splitting the teaching so that behavioural science is introduced before the students start to see patients in the clinic whilst psychiatry is taught when the students are more mature

clinically.

This course is optional. We heard that as few as 5-10 students attend. This surely is not acceptable for such an important subject. We do urge that it is made compulsory.

16.2 Communications

No comment.

16.3 Ethics and Jurisprudence

This course occupies 45-50 hours of the curriculum. In a curriculum which already has a very heavy theoretical load we do wonder whether the important matters can be taught in rather less time. Certainly we have difficulty in supporting the plea in the SAD for more hours.

16.4 Practice Management

No comment.

Courses not considered by DentEd but taught at the School.

A.1.1 Basic and Applied Medical Physics

We understand that this course is given because some students enter the University without a scientific background.

The course is very detailed and some of it appears to be quite loosely related to dental materials and to radiology. There may be opportunity for streamlining here.

A.1.2. Dental Materials

Reference to the self-assessment document indicates the extensive nature of the course. As well as conventional dental materials science the students receive instruction on such subjects as cross-infection control and adverse reactions to dental materials. We are of the opinion that the course is positioned far too early in the curriculum. We suggest it should be so positioned that the information is delivered at about the same time that the students use the materials.

A.1.3. Pathological Anatomy and Histology

As mentioned earlier in the report, we suggest that the organisers of the various related courses collaborate in order to examine the contents for unnecessary duplication of subject matter.

A.1.4. Neurology

This course is directly and importantly tailored to the needs of dental students. The topics are related mainly to oral and facial problems. The students are given the opportunity to see selected patients with relevant neurological problems.

Complementary Courses

The courses listed under this heading are optional.

A.1.5 Paediatrics

This course highlights the specific importance of illnesses in children. In a way its inclusion draws attention to the lack of corresponding teaching in geriatrics.

It is a pity that there are no direct links with the teachers of Paediatric Dentistry.

A.1.6. Dermatology

This optional course is delivered as a series of lectures. We understand that most students attend.

The course covers topics of major importance. We do believe that there would be value in collaboration with Oral Medicine and Oral Pathology. Although this does occur within the area of research it might also usefully occur when examining the various teaching programmes.

A.1.7. Introduction to Otorhinolaryngology, Phoniatics and Audiology

The strong dental link with this course is through the care of the large number of cleft palate patients.

New courses

A.1.8 Scientific English

The introduction of this course is a most welcome and important innovation.

It is therefore sad that we have to report that the increased number of students entering 1st year makes it impossible to maintain the concept of interactive learning within small groups. There can be no doubt that the quality of the course will have suffered as a consequence.

A.1.9. Computer Data Access

Again we would like to congratulate the School on this important initiative. It has been introduced because students leave high school with limited knowledge of IT skills.

Because of the lack of staff there inevitably has to be limited access to the laboratory and therefore there is a reduced opportunity for the students to practice and improve their skills. We recommend that thought be given to integrating the IT facilities with those of the library as a means of combining personnel needed for supervision and therefore of increasing the student access to these two important learning facilities.

Section 17. Examinations, assessments, competencies

We were advised that the concept of external examiners is not recognised in Italy.

In each section of the SAD the means of assessment of the students is described. Specific portions of the year are devoted to examinations. Most of these take the form of an oral examination in front of the professor of that subject together with two co-examiners. For some subjects practical competence is judged by a manikin test. There do not appear to be any examinations of dental subjects where patients are seen except for the last examination (Oral Medicine) where the student examines a patient, establishes a diagnosis and plans treatment.

Section 18. Other influences

Many of our comments in this section arise from comprehensive discussions we held with members of the profession outside the Dental School, recent graduates and the students themselves.

a) Quality of the undergraduate programme.

It is quite clear that the theoretical part of the curriculum is taught in a very thorough manner.

It is also quite clear that the fundamental problem is the lack of practical clinical experience on completion of the undergraduate course. This message came to us loud and clear from each group to whom we talked.

We have already mentioned some of the factors which lead to this perceived deficiency, the problem of patients' fees for treatment and the lack of space in the School. We were also told that there is apparently no established tradition for patients to be treated by students. It has to be said that such an arrangement is common practice in most countries within Europe.

b) Demand for treatment

It was not, of course, our brief to conduct a survey of dental health. The following points were made to us at the various meetings and we mention them as they have some bearing on dental education.

There has been a reduction in dental caries and an increased need for the treatment of periodontal disease.

Public awareness of dental health is rather low.

Little demand by the public for preventive regimes. Most preventive dentistry is provided on a private rather than a public basis.

The dental public health system is viewed negatively. It is seen as offering a very limited service much of which is devoted to emergency work.

There is no effective relationship between the School and the dental public health system.

There is a demand for aesthetic dentistry and implantology.

There is a belief that there are too many dentists and too many dental students.

c) Postgraduate education.

The new graduate cannot practise until he or she has passed the state board examination. This examination is regulated by a decree which was issued by the Italian Ministry of Public Education in 1985. In this examination the candidate must submit him or herself to oral and practical tests on medical odontostomatology and related medical subjects or on odontostomatology surgery. The practical test lasts for 45 minutes and involves establishing a diagnosis, planning treatment and considering the prognosis. The examination is held after the graduate has completed a period of clinical experience called 'Tirocinio'.

We were told that the 6 months is the average time spent on the Tirocinio. We

subsequently discovered that, during the last two years it has been possible for the best students to discharge the Tirocinio commitment during the undergraduate course as long as all 3rd year assessments have been completed successfully. Such an arrangement may be appropriate for, perhaps, three students per year. It was not clear to us how much practical clinical work could be accomplished during the training period.

We were told that approximately 20% of the graduates are able to obtain the further clinical experience in the Dental School; this group usually comprises the best students and those who can afford a further period of study without remuneration. The remaining 80% will seek tuition from a general dental practitioner.

There is a recognition that when the larger number of students progresses to the clinical years there could well be an adverse effect on the quality of training during the Tirocinio, on the amount of clinical experience available for the undergraduate, or both.

There is no scheme for vocational training nor is there a requirement for continuing professional education. The dentists hope that this situation will change but they explained that there are financial and legal obstacles to be overcome.

Section 19. Student affairs

We held a very productive meeting with the students. The following points emerged :-

They were particularly appreciative of the education provided by the staff. They felt able to bring their worries and concerns to the School teaching staff.

They were very worried about the lack of practical clinical experience. They recognised the background to the problem but were anxious for change together with an earlier introduction to patients.

They expressed concern about the problems which would inevitably arise from the major increase in student numbers.

They had obtained great benefit from visits to dental schools in other countries and hoped that the scheme could be expanded.

They would like facilities to be made available so that a dental students' society could be developed more effectively.

Section 20. Research and publications

The list of publications shows the benefit of close collaboration with colleagues in the Medical School.

The space available for research in the Dental School is very limited. We understand that a central research area will be established in Caserta; this will be of great benefit.

We were very pleased to see details of an innovative research doctorate scheme entitled 'Biomedical technologies applied to odontostomatological sciences' financially supported by the EU.

Section 21. Quality development

We gained the impression that, until very recently, the students were involved only

informally in the evaluation of courses. We recommend that such evaluations should be more systematically performed in order to improve those courses and the whole curriculum. Another benefit of this approach could be that it stresses the students' responsibility for improving their own educational environment and promotes their ability to express themselves in a well motivated way.

Curriculum enhancement is a continuous process. We are sure that the changes which have been made to the feed-back procedure will strengthen the process. We hope that the changes will also promote the further development of methods for measuring outcomes of the educational programme

Section 22. Overall comments on the School

In this summary we would like to express our admiration of the staff for their ability to improvise in order to overcome the physical shortcomings. We regret that their problems are going to become even more acute because of the large number of students about to commence the clinical phase of the curriculum.

We are relieved that there appears to be some light at the end of the tunnel with the development of the new facility at Caserta. We hope that the light appears sooner rather than later.

We commend the development of the dedicated five year dental curriculum and the retention of strong links with medicine.

The curriculum is strong in theory but we must express our concern about the lack of practical clinical experience and the fact that the problem must inevitably deteriorate in the short term because of the increase in student numbers.

The students we met were well motivated and the staff/student relationship appeared to be strong. These qualities are of the greatest importance if the School is to successfully meet the major problems which would appear to be on the horizon.