



# **Internal Evaluation Report**

**TECHNOLOGICAL EDUCATIONAL INSTITUTION OF ATHENS  
SCHOOL OF HEALTH AND CARING PROFESSIONS  
DEPARTMENT OF DENTAL TECHNOLOGY**

**Academic year: 2007-2008, 2008-2009 (Spring Semester 2007-2008 and Winter Semester 2008-2009)**

**AG. SPYRIDONOS, EGALEO, ATHENS**

**ATHENS 15-12-2009**

---

## Table of contents

<b>Preface.....</b>	<b>3</b>
<b>1. Procedure of internal evaluation.....</b>	<b>5</b>
<b>2. Presentation of the department .....</b>	<b>8</b>
<b>3. Undergraduate Studies Program .....</b>	<b>21</b>
<b>4. Postgraduate Studies Program .....</b>	<b>32</b>
<b>5. PhD program.....</b>	<b>35</b>
<b>6. Teaching.....</b>	<b>36</b>
<b>7. Research.....</b>	<b>69</b>
<b>8. Relationship with social/cultural/production bodies .....</b>	<b>75</b>
<b>9. Academic development strategic .....</b>	<b>78</b>
<b>10. Administration and substructure.....</b>	<b>82</b>
<b>11. Conclusions .....</b>	<b>91</b>
<b>12. Improvement planning.....</b>	<b>98</b>
<b>13. Tables.....</b>	<b>104</b>
<b>14. APPENDICES (separate leaflet)</b>	

## Preface

The present Internal Evaluation concerns academic spring semester 2007-2008 and winter semester 2008-2009 and is the first effort made by the Department of Dental Technology for evaluation.

The Aim of this Internal Evaluation is for the Department to form and present a judgmental and objective view of the quality of the work being done in it, at all levels, using as many objective criteria as possible.

The goals that were initially set are the following;

1. Evidenced presentation of the results of the Department,
2. Existing problems and shortcomings,
3. Pinpointing areas that need improvement,
4. Planning of improvement strategies

With the procedure of evaluation and the achievement of the above goals, a clearer and more than ever applicable plan came to rise that concerns not only inter-department actions but also actions within the whole Institution.

In fact, this evaluation is an internal evaluation that marks the identity of the Department, as it records and presents all the characteristics of its function, positive and negative as well as its ambitions. During this evaluation, the most important conclusions that derive from the composition of the data, which were gathered with the participation of all members of the Department, tenured, substitutes and students, are recorded, concerning the existing and desired level of quality and ways of achieving it.

The procedure of Self-Evaluation has been completed with the present Internal Evaluation Report (IER), submitted to the Department for approval by the General Assembly and, following that, it will be sent Hellenic Quality Assurance Agency (HQAA) through Qualification Assurance Unit (QAU), so that the external evaluation can follow. The Internal Evaluation Team (IET), appointed by the Department for the duration period of Internal and External Evaluations, is responsible for writing down the Internal Evaluation Report.

IER was based on the data the Department collected and which are normally included in the Yearly Internal Reports. As this is the first attempt for evaluation made by the Department, IER essentially coincides with the Yearly Internal Reports. Nevertheless, we hope that IER not only simply presents these data but also critically analyzes and evaluates them in order to deduce useful conclusions and suggestions which will lead to the improvement of the quality of studies provided by the Department.

IER was based on the model for structure and content of criteria analyzed in the HQAA instruction booklet with the title “Quality Assurance for Higher Education: Analysis of criteria for Quality Assurance of Academic Units” Edition 2.0, July 2007, HQAA, Athens, and corresponds fully to the basic units, with some necessary modifications, so that the special characteristics of the Department are clear. The units that follow are:

1. Procedure of internal evaluation,
2. Presentation of the department,
3. Undergraduate Studies Program,

4. Postgraduate Studies Program,
5. PhD Studies Program,
6. Teaching
7. Research
8. Relationships with social, cultural and production institutions
9. Academic development strategies
10. Administration and substructure
11. Conclusions
12. Improvement Planning
13. Tables
14. APPENDICES (separate leaflet)

It is easily understood that the drafting (composing) of the Internal Evaluation Report according to the proposed Standard Form and the completion of the Tables that accompany it, require composing data recorded by all members of the Department, in the specific inventory statements (the Inventory of Semester Courses and Personal Member Inventory of Educational Personnel, Student Questionnaire, etc.) as they are provided, along with instructions for completion and are published on the website of HQAA (<http://www.adip.gr>)

It is only natural, as it is also indicated in the instructions of HQAA, that, especially during this first implementation of quality assurance, it is not always possible to cover all points of the report. The Department has made every effort to cover as many as possible of the issues in the report. Where there are differentiations, we try to make clear the reason that is so, keeping always in mind the distinctive features of the Department.

The Department of Foreign Languages, TEI of Athens, kindly contributed in the translation of the Greek Edition of the “Internal Evaluation Report”.

## **1. The process of internal evaluation**

This section includes a brief description, analysis and critical evaluation of the internal evaluation process, as well as, suggestions for improvement.

### **1.1. Description and analysis of the internal evaluation process in the Department.**

#### *1.1.1 Synthesis of the Internal Evaluation Team (IET).*

The General Assembly of the Department (5/18-12-2007) appointed a Team of Internal Evaluation (IET) which, for the sake of flexibility, consists of only three members of the Teaching personnel and one student representative. They are the following:

Yannikakis Stavros, Professor,  
Dimitropoulou Eugenia, Professor,  
Prombonas Antonios, Assistant Professor,  
Student, (substitute student member)

#### *1.1.2 Who with and how did IET work in order to form the report?*

IET's aim was to coordinate and allocate work to other members of the Teaching Staff, Specialized Technical Personnel, Administrative Personnel, temporary scientific and laboratory Personnel (adjuncts) and students. Thus, all members of the Department Personnel were involved, as well as, students. Individual persons or committees were assigned sub units for the preparation of the Report for Criteria Analysis of Quality Assurance of Academic Units.

Specifically, the project was allocated as follows:

1. The process of internal evaluation (Yannikakis Stavros; Professor)
2. Presentation of the Department (Yannikakis Stavros; Professor)
3. Undergraduate studies program (Boulouchou Ourania; Assistant Professor, Salamaras Panagiotis; Lab Instructor)
4. Postgraduate studies (Dimitropoulou Eugenia; Professor)
5. PhD studies program (Dimitropoulou Eugenia; Professor)
6. Teaching (Yannikakis Stavros; Professor, Balourdas Theodoros; Lab Instructor, Spyropoulos Konstantinos; Lab Instructor)
7. Research (Prombonas Antonios; Assistant Professor)
8. Relationship with social, cultural and productive institutions (Zavola Anna; Lab Instructor)
9. Academic development Strategic (Yannikakis Stavros; Professor)
10. Administrative services and infrastructure (Department Secretariat)
11. Conclusions (Yannikakis Stavros; Professor)
12. Improvement plans (Yannikakis Stavros; Professor)
13. Tables (members of teaching, administrative and specialized technical staff)
14. Appendices (Yannikakis Stavros; Professor)

The Specialized Technical Staff of the Department (STS) undertakes the distribution of student questionnaires to students attending every theoretical or laboratory curriculum course, between the 6th and 8th week of the semester, with envelopes indicating the course, semester, date, etc. STS members are informed in advance by IET about the procedure so as to give the necessary instructions to present students, who are to properly and objectively complete the questionnaire.

Note that while the report concerns the Spring Semester 2007-2008 under the old curriculum and winter 2008-2009 with the new curriculum, the questionnaires and the analysis extended also to the Fall semester 2007-2008 with information that was helpful in achieving a more objective evaluation of the department.

The registration of data (questionnaires and inventory) was done by Constantine Spyropoulos, Lab Instructor and the analysis and creation of charts were made by Stavros Yannikakis, Professor who had the overall care of the present Internal Evaluation Report. Following the writing of the Report, it will be submitted to the department in order to be distributed to all members for reviews and comments and then (in its final form) it will be validated by the General Assembly of the Department.

### *1.1.3 What resources and procedures were used to obtain information?*

#### *A. Sources*

- The records of the Department of Dental Technology related to statistics, student grades etc.
- Decisions of the General Assemblies and Councils of the Department.
- The inventory sheets for all courses per semester and personal inventory of instructors (members of Teaching Staff and Science and Laboratory associates).
- The questionnaires completed by students expressing an opinion on the course being taught.
- The records of the Department Teaching Personnel especially with grades of students who failed.

#### *B. Procedures*

In order for the information deriving from the above sources to be representative, objective and reliable, emphasis was given to providing information to all members at various meetings (members of the Academic staff (AS), Specialized Technical Staff, Scientific and Laboratory hourly associates and representatives of students from the IET) In addition, members of AS inform students how to properly complete the questionnaires, something which is also done by STS who have undertaken the task of distributing the questionnaires in classrooms and laboratories.

### *1.1.4 How and to what extent was the report discussed within the Department?*

Initially, a General Assembly of the Department was held on the issue of Evaluation on 5/18-12-2007. Lengthy discussions took place on the importance of evaluation, the need to outline through this process the problems that the department faces, and the actions to be taken and continue to be made through a structured development plan to improve the Department, following constantly new data in the labor market and educational system.

This way, if members of the Academic Staff agree with the whole procedure and the Department accepts the evaluation, all members participate in its formation and upon its

completion it is taken for approval firstly by the Sectors (teams of AS members teaching related subjects) and then by the Department Council. In this way, all members get an overall idea of the report, and they discuss problems, questions and difficulties met during the procedure. After composing the main body structure of the report, it is distributed to all AS members and the procedure described above follows.

## **1.2. Analysis of strengths and difficulties experienced during the process of self-evaluation.**

Academic Staff members realize the need for the evaluation process as it is a natural consequence of the effort made worldwide for academic community improvement and agree to proceed. The strengths and benefits gained by the whole process are many:

### *Positive elements:*

- In order to improve specific areas of the educational system, even if it is at its cellular level which is the basic academic unit, that is the Department, it is imperative that the basic functions of the educational process are found, are identified and recorded, something that is actually the basic function of the evaluation process.
- Participation of all permanent and temporary teaching staff members thus enhancing teamwork.
- By exploring the existing opportunities available in the Department and finding weaknesses or deficiencies in each area, each member realizes his part of responsibility for both positive and negative points, and thus, strengthening his determination for improvement.
- Students, as part of a wide range participation procedure, are enabled to develop initiatives.

### *Difficulties:*

- The lack of previous experience with evaluation resulted in a relatively slow pace working process.
- The small number of permanent staff employed by the Department had to undertake a large volume of work and responsibilities, a factor, which was also responsible for the relatively slow working pace.
- HQAA'S assistance through its website was considered rather good as far as providing all the necessary instructions and clarifications for the evaluation but regarding extracting information about statistical results such as student questionnaires, inventory sheets of courses or individual inventories, our working team encountered many difficulties. There should have been a computer program facilitating the input and output of conclusions and statistical data.

## **1.3. Suggestions for improving the process.**

The main improvement would have been a full automation and data entry directly to a computer program. This way the recording of data but also the extraction of conclusions would have been made easier and faster. This would have helped also in the easier, more representative and objective self-evaluation.

Another thing that would have helped a lot is a “good” Internal Evaluation Report made by another department previously, which could have been made available to us and other departments, as a sample.



## 2. Presenting the Department

This unit is a brief presentation of the Department and its main parameters of function.

### 2.1. Location of the Department.

The Department of Dental Technology is located at the Technological Educational Institution (TEI) of Athens, in Ag. Spyridonos str., Aegaleo and sheltered under the School of Health and Caring Professions.

### 2.2. History of the development of the Department.

The Department of Dental Technology has been in function since 1983 by the establishment law for TEI 1404/83, which set the structure and function of the Technological Educational Institutions and is the continuation of the Dental Technicians Department which had been in function since 1973 under KATE-KATEE, in the area of higher education.

It belongs to the School of Health and Caring Professions of the TEI of Athens and is the only department of Higher Education in Greece which provides complete education in the field of DENTAL TECHNOLOGY.

Students are admitted to the Department either after having passed successfully the country wide Entrance Exams or according to the current laws and regulations about transfer from one school or institution to another.

Today, the number of students who are admitted by the department per semester, is 85 and the total number of students who attend our program of studies is about 500.

The studies in the Department of Dental Technology, according to the new, revised curriculum which, has been in existence since the winter semester of 2008-09, lasts eight (8) semesters in which students take theory and laboratory courses. During the last semester, students undertake their practical training in their field of profession, in the private or public sector and write a dissertation.

The academic year which lasts from September 1 until July 6, consists of two semesters. The winter semester begins in late September and the spring in late February. The exact beginning and end dates are determined each time by decisions taken by the Council of TEI and are announced at the beginning of each year. After the completion of the courses, at the end of each semester, there is a double two week testing period.

*2.2.1 Department staffing with teaching, administrative and laboratory personnel, during the last 5 years (quantitative data).*

Data are also found in tables of unit 13.

*Teaching Staff*

	Permanent Positions	Occupied	Vacant	In progress
Professors	1	2	0	0
Associate Professors	3	0	3	1
Assistant Professors	7	5	2	0
Lab Instructors	9	5	4	0
Total	20	12	10	1

St. Yannikakis	Dentist, Dr Dent	Professor
E. Dimitropoulou	Dentist, Dr Dent	Professor
A. Galiatsatos	Dentist, Dr Dent	Assistant Professor
St. Kyparissidis	Dentist	Assistant Professor
U. Boulouhou	Dentist, Orhodontist, Dr Dent	Assistant Professor
P. Tsolka-Katritsi	Dentist, Dr Dent	Assistant Professor
A. Prombonas	Dentist, Dr Dent	Assistant Professor
A. Zavolla	Dentist, Msc.	Lab Instructor
A. Ioannidou	Dentist, Msc.	Lab Instructor
Th. Balourdas	Dentist, Msc.	Lab Instructor
P. Salamaras	Dentist, Msc.	Lab Instructor
K. Spyropoulos	Dentist, Msc., Dr Dent	Lab Instructor

*Administrative Staff*

<i>A. Chryssikou</i>
<i>N. Varsou</i>
<i>M. Sakkiotou</i>

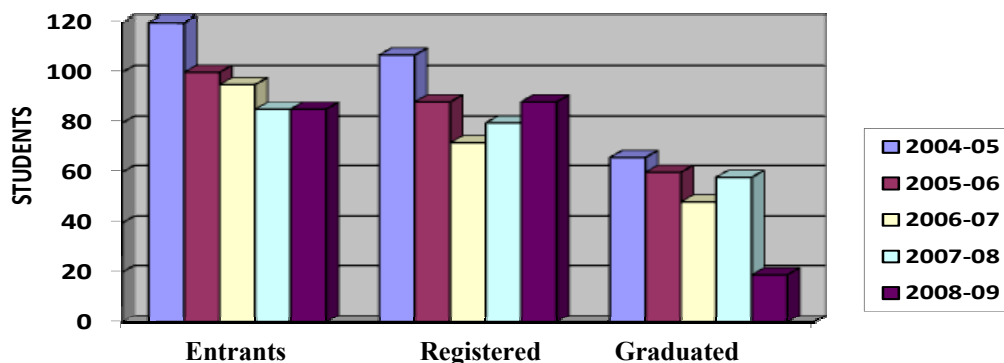
*Special Technical Staff*

I. Bimi	Dental Technician
V. Rembi-Bobori	Dental Technician
M. Foudoulaki-Karakozi	Dental Technician

*2.2.2 Number and distribution of students per level of studies (undergraduate, postgraduate, PhD) during the last 5 years.*

During the recent years, there has been a continuously decreasing number of admitted students following the proposals of the department (the department proposes 60 students per semester) so as to achieve higher quality of education given the existing educational means, the building structure and the teaching staff.

Despite the above effort, during the last two years, the number of admitted students reached 85. The Department of Dental Technology doesn't have any transferred students because it is the only one in Greece, nevertheless, the number of admitted students increases due to the fact of registration of students under special categories i.e. Muslim minority, students with special needs etc. The distribution of students during the last five years is given in the table below.



\* Graduates of the year 2008-09 belong to the Winter semester  
 \*\* average number of graduates per year: 55-60

There are two postgraduate students for the 2008-2009 academic year since it was the first year of a postgraduate program. There are no PhD candidates for the time being since this hasn't been planned.

## 2.3. Aim and goals of the Department

*2.3.1 Which are the aim and goals of the department according to the law for its establishment?*

The *curriculum* of the Department of Dental Technology covers the field of applying scientific and technological knowledge on the field of Dental Prosthodontics, Removable and Fixed, as well as, the field of orthodontic appliances.

The Department's *mission* is to promote the development and dissemination of scientific knowledge and applied knowledge in the technology of biomaterials and in the methods of design and construction of dental prostheses and orthodontic devices. Through teaching and application at a fairly realistic level (simulation with real cases), students are fully prepared and equipped with the necessary skills, for their scientific and professional careers and development.

Within the framework of its obligations the Department does the following:  
 a) Observes and follows world wide developments in science and education.

- b) Develops international partnerships with higher education institutions in the country and abroad.
- c) Collaborates with related to its field of knowledge private and public sector.
- d) Uses modern technologies in education.
- e) Conducts technological research.
- f) Develops students' abilities and skills thus enabling them to compete at national and international level.
- g) Becomes prepared to be receptive to change, according to the changing educational, economic and social conditions, at regional, national and international level.
- h) Becomes prepared to safeguard and improve the quality of study in the Department.
- i) Collaborates with universities at national level and participates in the organization of Postgraduate Studies.

#### *Graduates of the Department of Dental Technology*

Upon completion of their studies, graduates of the Department have acquired the necessary scientific and technological knowledge, skills and abilities to operate as responsible dental technicians.

They assume the responsibility for the organization and operation of dental laboratories able to guarantee quality and certify the adequacy of the manufactured prostheses. They choose the appropriate machinery and instruments for dental laboratory equipment and arrange for maintenance and implement hygienic and safety regulations. They are informed of modern materials, thus selecting the appropriate ones based on the biological behavior required, as well as, the laboratory method to follow each time.

They staff the dental lab with specialized personnel whom they supervise and to whom they assign specific tasks, depending on their specialty.

They design and manufacture all types of dental prostheses, Mobile and Fixed, according to the written instructions of the dentist, always aiming at maintaining or restoring the balance of the stomatognathic system.

They design and construct various types of orthodontic intraoral and extraoral devices, again according to the instructions of their orthodontic partners.

They have knowledge of the basic principles of prosthodontics, implants and maxillofacial prosthodontics in order to be able to attend specialized courses.

Within the framework of collective work, they participate in work teams together with specialized dentists for the design and construction of the above mentioned prostheses.

They carry out studies and participate in research teams.

They are employed at different levels of education, according to current legislation.

#### *Professional rights of graduates of the Department of Dental Technology of the TEI of Athens (Presidential Decree No. 83 Gov. 3717-2-1989) Article 2*

1. Graduates of the Department of Dental Technology, School of Health and Caring Professions of the Technological Educational Institution, based on their specialized scientific and technical knowledge, work in the private and public sector, as defined by the current legislature. Their work includes the whole range of dental and orthodontics manufacturing as well as prosthodontic constructions aiming at oral cavity dysfunctional restorations.

2. Specifically, these graduates have the right to work either as employees or as self-employed in the following subjects and activities:

a) Construction of any kind of prosthodontic works and orthodontic appliances such as complete and partial dentures, inlays, crowns and bridges, each with specific materials, precision attachments in removable prostheses, orthodontic devices and prostheses for oral dysfunction restorations. Such works are performed only in the laboratory on the bases of impressions and instructions by the dentist, who can monitor the works to verify compliance with his/her guidelines.

b) Any other occupational activity that appears as technology progresses and is covered their field of specialization.

3. Graduates of the above department may be employed at all levels of education in accordance with the current legislature. They can also be employed as members of research teams on subjects related to their specialized field of work.

4. Graduates of the above department can or may set up, organize and operate, in a responsible manner, a dental laboratory based on existing related laws.

5. Graduates of this department practice their profession within the framework of the above professional rights after obtaining a license issued by the relative services of the Ministry of Health, Welfare and Social Security.

### *2.3.2 How does the academic community of the department conceive the aim and goals of the Department?*

The instructors of the department, in accordance with the existing laws, are dentists or dental technicians and are tertiary education graduates. The above professions are cooperative and interdependent professions and most instructors, along with their educational activities in the department, practice their profession outside TEI, in the private sector.

This results in having profound knowledge of the needs of the profession and the market and in being continuously updated on the latest developments. Thus, they are able to adapt the curriculum and course contents through the process of revising so that the objectives and goals of the Department are always updated depending on the needs and developments in science, technology and market.

### *2.3.3 Is there a difference of officially set goals for the Department (Government Gazette for its establishment), from those that the Department thinks it should pursue today?*

The science of Dental technology has a long history and, as a result, its mission was determined a long time ago. It has a distinct role from Dentistry, yet parallel development. The Department's needs and goals may change from time to time in order to follow developments but the main aim, which is the construction of all kinds of prosthodontic and orthodontic works, remains the same, as it was officially defined at the time of the Department's establishment.

### *2.3.4 Have the pursued objectives been met? If not, which factors are responsible?*

The goals the Department pursues are met according to the curriculum and the Department's mission:

*Graduate of the Dental Technology Department*

Upon completion of their studies, the graduates of the Department are equipped with the necessary scientific and technological knowledge, skills and competencies in order to take action in their domain as responsible Dental Technicians.

- They undertake the responsibility of the organization and operation of a dental laboratory assuring quality and ensuring appropriateness of the dental prostheses fabricated in it.
- They choose the right appliances and instruments for the equipment of dental laboratories, take care of their maintenance and implement the recommended hygiene and safety rules.
- They stay updated on modern materials; choose the right ones with the necessary biological behavior, as well as the laboratory method they will apply as each case may require.
- They manage the dental laboratory with specialized staff, which they supervise and to which they assign specific works according to their specialty.
- They design and fabricate all kinds of dental prostheses of Removable and Fixed Prosthodontics, in accordance with the dentist's written instructions, aiming at the maintenance or restoration of the balance of the stomatognathic system.
- They design and fabricate orthodontic appliances of different types, intraoral and extraoral, always in accordance with the instructions.
- They possess the basic principles of implant and maxillofacial prosthetics so they can follow specialized courses.
- In the context of teamwork they participate in groups with specialized dentists for the design and fabrication of the above mentioned prostheses.
- They conduct studies and take part in research.
- They can also work in all levels of education according to the existing in force legislation.

*Factor's acting as a deterrent in this effort.*

A) Adequacy of permanent teaching staff number. Unfortunately, there is only a small number of permanent teaching staff in the Department and its needs are covered by laboratory and scientific temporary staff who, many times, in the absence of others with the demanded qualifications, are recruited with lower ones. There is an effort to have at least one permanent instructor, along with the temporary in any laboratory class but that is not always feasible. This inadequacy is firstly due to the policy of the Ministry of Education concerning the opening of new positions and secondly due to bureaucracy and delays in recruiting teaching staff who have been judged adequate by an electoral body in the department.

B) Temporary teaching staff number adequacy. The number of temporary teaching staff laboratory and scientific, is also limited compared to the needs of the Department, so the teacher-student ratio is unfavorable for the quality of education provided.

C) Funds of the Department. The available funds are inadequate for the real needs. The budget for consumables is constantly 70-80.000 euros, and in the current semester (spring 2008-2009) only 24.000 euros were given (a double amount in average, from the one given for the previous semesters). It seems that the coverage of the minimum needs is to the limit and certainly not to the degree demanded by "Higher" education.

D) "Practical work" is an essential step to the completion of studies for our students especially as the profession of Dental Technology belongs to applied sciences and Technology. Funding of practical training is problematic since half of the money paid to the student is covered by the employment party and the rest by the host Dental laboratory

with which the Department signs a contract. Quite often, the owner of a Dental laboratory does not accept students for practical work, because he/she believes that students, as trainees should not be paid by the host Laboratory. Other times, they accept the student but are not consistent with their obligations towards him/her. Under the obligation resulting by the law, that the student is working and should therefore be paid, the owner of the Dental Lab maintains that as the constructions made by the students are biomedical materials, they cannot be used by patients. If funding was entirely granted by the Manpower Employment Organization (MEO) or another provider, it would facilitate the student in finding a laboratory for his/her practical work, on the one hand, and the Department could recommend specific laboratories that meet the requirements for the training of students, on the other.

E) Large numbers of entrants. Although there is decline in the number of incoming students, as already mentioned the figure is still higher by 25% from the one the Department believes it is able to sufficiently educate.

F) Lack of sufficient space in the buildings infrastructure to educate students as well as to shelter teaching staff offices.

G) Lack of high education level students. Low basic educational level of students is observed owing to gaps an insufficient education during their secondary school.

*2.3.5 Do you think there is reason to revise the officially stated by the law (in the government Gazette) goals and objectives at the Department?*

With the current needs of the market and the national and international conditions there is no need to change the officially stated objectives of the Department.

## **2.4. Administration of the Department**

The administration of the Department is:

- **GENERAL ASSEMBLY**

The General Assembly comprises of all teaching staff members of the Department, student representatives (40% of the total number of teaching staff) and Specialized Technical Staff representatives (50% of the total number of teaching staff).

- **COUNCIL**

The Council of the Department comprises of: the Head of the Department, the Instructors in Charge of Sectors A and B, a representative of the students and a representative of the Specialized Technical Staff in case issues concerning the Specialized Technical Staff are in the agenda.

- **HEAD OF THE DEPARTMENT**

Ms. Eugenia Dimitropoulou, Professor

- **GENERAL ASSEMBLY OF THE SECTOR**

The Department is divided into two Sectors:

A' Sector of Fixed Prosthodontics.

Responsible: K. Spyropoulos, Lab Instructor

Deputy responsible: P. Salamaras, Lab Instructor

Members: E. Dimitropoulou, Professor

A. Galiatsatos, Assistant Professor  
 P. Tsolka-Katritsi, Assistant Professor  
 A. Zavolla, Lab Instructor  
 Student representative

B' Sector of Removable Prosthodontics

Responsible: St. Yannikakis, Professor

Deputy responsible: A. Prombonas, Assistant Professor

Members: St. Kyparissidis, Assistant Professor  
 U. Boulouhou, Assistant Professor  
 A. Ioannidou, Lab Instructor  
 Th. Balourdas, Lab Instructor  
 Student representative

• IN CHARGE OF SECTOR

As above.

SECRETARIAT. The Secretariat comprises an administrative Council of the Department and is composed of:

A. Chrysikou  
 N. Varsou  
 M. Sakkiotou

*Committees of the Department and responsibilities:*

1. COMMITTEE ON PRACTICALWORK

A. Prombonas, President  
 St. Kyparissidis, member  
 P. Salamaras, member  
 Decision number 702/13-05-09

2. COMMITTEE ON DISSERTATIONS

E. Dimitropoulou  
 St. Yannikakis  
 St. Kyparissidis – U. Boulouhou (alternate)  
 The current introducer  
 Decision number 1981/05-09-05

3. COMMITTEE ON PLACEMENT EXAMS FOR DEGREE OWNERS

E. Dimitropoulou, president  
 St. Kyparissidis, member  
 Th. Balourdas, member  
 P. Salamaras, member  
 U. Boulouhou, member  
 Council Decision number 6/29-04-09

4. COMMITTEE ON EQUIVALENCES

St. Kyparissidis, president  
 A. Prombonas, member



P. Salamaras, member  
Decision number 1/1244/14-4-03

5. COMMITTEE ON REGIONAL PLANNING OF TEI-A

St. Yannikakis, president  
A. Prombonas, member  
St. Kyparissidis, member  
(One student)  
Council Decision number. 3/6-02-03

6. COMMITTEE ON RECEIVING EQUIPMENT AND CONSUMABLES FOR EDUCATION

A. Prombonas, president  
U. Boulouhou, member  
P. Salamaras, member  
K. Spyropoulos, (alternate)  
Decision number TEI-A 14611/27-12-06

7. ACADEMIC RESPONSIBLE FOR SOCRATES/ERASMUS

U. Boulouhou  
TEI President Decision, number 1006/31-01-06.

8. RESPONSIBLE FOR COMET-TEMPUS PROGRAMS

A. Prombonas  
A. Zavola (alternate)  
Council Decision number.3/20-03-00

9. RESPONSIBLE FOR LEONARDO PROGRAM

Academic responsible: U. Boulouhou  
Deputy responsible: A. Zavola  
TEI President Decision, number 8529/13-09-06.

10. RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF PERMANENT EQUIPMENT

Th. Balourdas  
I. Bimi, assistant  
Decision number 1/1260/15-04-03

11. RESPONSIBLE FOR THE MULTIMEDIA ROOM

A. Prombonas  
Head of the Department's decision 1/1222/16-5-02

12. RESPONSIBLE FOR THE PERMANENT EQUIPMENT INVENTORY CARDS

A. Zavola  
Decision number (1/1931/23-9-98)

13. RESPONSIBLE FOR PERMANENT EQUIPMENT AND STORAGE ROOM

A. Zavola  
P. Salamaras (alternate)  
Decision number (1/2743/2-11-00)

## 14. RESPONSIBLE FOR CONSUMABLES MANAGEMENT

A. Prombona

M. Foudoulaki, assistant

Decision number 1/1259/15-4-03

## 15. REPRESENTATIVE FOR COHEHRE-EUKANADA PROJECT

St. Yannikakis

A. Zavola (alternate)

Council Decision number.1/14-1-02

## 16. ECTS REPRESENTATIVE

E. Dimitropoulou

Council Decision number 1/5-6-96

## 17. LIBRARY RESPONSIBLE

A. Zavola

Decision number 1/1632/15-10-97

## 18. RESPONSIBLE FOR THE DEPARTMENT LIBRARY

Th. Balourdas

A. Zavola

Decision number 1/1261/15-04-03

## 19. RESPONSIBLE FOR CASTING MACHINES ROOM

I. Bimi

Decision number 1/1245/14-4-03

## 20. WEBSITE RESPONSIBLE

St. Yannikakis

## 21. RESPONSIBLE FOR BOOKS-NOTES

V. Rembi

Council Decision number 4/29-3-00

## 22. LINK-REPRESENTATIVE WITH THE CARREERS OFFICE OF ATHENS-TEI

St. Yannikakis

Council Decision number 10/2-9-02

## 23. REPRESENTATIVE FOR RESEARCH PROGRAMS

St. Yannikakis

A. Prombonas

General Assembly decision number 2/29-04-04

## 24. REPRESENTATIVE OF THE DEPARTMENT IN THE EXAMINING COMMITTEE FOR LICENCE TO EXERCISE THE PROFESSION OF DENTAL TECHNOLOGY L.1666/86.

St. Yannikakis

Th. Balourdas (alternate)

Council Decision number.11/25-09-06

25. REPRESENTATIVE OF THE DEPARTMENT IN THE WORK TEAM FOR THE MODIFICATION OF LAW 1666/86 ABOUT THE PROFESSION OF DENTAL TECHNICIANS

St. Yannikakis

E. Dimitropoulou (alternate)

26. REPRESENTATIVE OF THE DEPARTMENT FOR THE CONSTITUTION OF COMMITTEES FOR THE CONDUCT OF COMPETENCE TESTS ACCORDING TO THE PROVISIONS OF THE PRESIDENTIAL DECREE 231/98.

Th. Balourdas

K. Spyropoulos

Council Decision number 8/10-07-06

27. REPRESENTATIVES OF THE DEPARTMENT FOR THE CONDUCT OF COMPETENCE ASSESSMENT TEST OF PRACTICAL TRAINING FOR THE ISSUING OF PROFESSION EXERCISE LICENCES ACCORDING TO DIRECTIVE 89/48 EC.

A. Zavola

K. Spyropoulos (alternate)

Council Decision number 3/17-2-99 και απόφ. Υπουργ. Υγείας Α5/ΟΙΚ.3583/29-6-99.

28. RECOMMENDATION COMMITTEE ON THE STUDIES PROGRAM

E. Dimitropoulou

St. Yannikakis

A. Petridis (Department of Medical Care)

29. COMMITTEE FOR THE DIPLOMA SUPPLEMENT

1. U. Boulouhou

2. A. Prombonas

3. Th. Balourdas

Decision number 3371/02-11-05

*2.4.1 Which internal regulations (i.e. internal regulation for Post-Graduate Studies) apply to the Department?*

The Department functions in accordance to the T.E.I. internal regulations (YA E5 1585/84 ΦΕΚ 191/27-03-84 τ.Β') and the new regulation ΠΔ 160/2008 ΦΕΚ 220 τ.Β' 03-11-08. Internal regulation is also applied for the function of Post Graduate Studies (see Annex)

*2.4.2 Is the Department divided in Sectors? Which are they? Does this division correspond to the Department's conception of aims and goals?*

The Department is divided into two Sectors:

Sector A': Fixed Prosthodontics and Sector B': Removable Prosthodontics.

DISTRIBUTION OF SUBJECTS BETWEEN SECTORS

SECTOR A'

1. Dental Morphology

2. Fixed Prosthodontics I




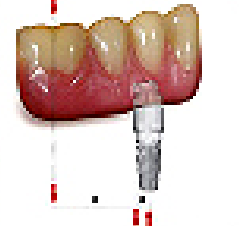
3. Fixed Prosthodontics II
4. Dental Ceramics I
5. Dental Ceramics II
6. Physiology of the Stomatognathic System-Occlusion
7. Oral and Lab Hygiene
8. Restoration of Occlusion Dysfunctions
9. Prosthodontics and Aesthetics
10. Dental Biomaterials I
11. Dental Biomaterials II

#### SECTOR B'

1. Basic Principles of Dental Technology
2. Removable Prosthodontics I (Complete Dentures)
2. Removable Prosthodontics II (Removable Partial Dentures)
3. Removable Prosthodontics III (Overdentures, Soft Liners, Reinforcements)
4. Combined Prosthodontics-Precision Attachments
5. Maxillofacial Prosthodontics
6. English for Dental Technology
8. Implant Prosthodontics
9. Orthodontics I
10. Orthodontics II

### **2.5 Website of the Department ([http://www.teiath.gr/seyp/dental\\_technology/](http://www.teiath.gr/seyp/dental_technology/))**

The website of the Department operates as a modern tool for presenting the Department and giving information to anyone interested. It operates based on the structure defined by the Institution. In addition to being an electronic study guide, it also provides information about the members of the Department, secretariat, etc. It includes an announcement board where different subjects are announced and updated on a regular basis, such as weekly course schedules, examination schedules, and any other kind of information that the students need to be promptly aware of Professor Stavros Yannikakis is responsible for the website;

 <p>ΤΕΧΝΟΛΟΓΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΙΤΩΛΟΑΚΑΡΙΑΣ</p>	<h2>Τμήμα Οδοντικής Τεχνολογίας</h2>	
<ul style="list-style-type: none"> <li>+ ΔΙΟΙΚΗΣΗ</li> <li>+ ΕΚΠΑΙΔΕΥΤΙΚΟ ΠΡΟΣΩΠΙΚΟ</li> <li>+ ΠΡΟΓΡΑΜΜΑ ΣΠΟΥΔΩΝ</li> <li>+ ΔΙΟΙΚΗΤΙΚΟ ΠΡΟΣΩΠΙΚΟ</li> <li>+ ΕΙΔΙΚΟ ΤΕΧΝΙΚΟ ΠΡΟΣΩΠΙΚΟ</li> <li>+ ΝΕΤΑΠΛΥΣΑΚΑ</li> <li>+ ΕΠΙΣΤΡΑΤΗ ΠΡΟΫΠΟΛΟΓΙΣΜΩΝ</li> <li>+ ΓΛΗΦΟΦΟΡΕΣ ΝΕΩΝ ΠΡΟΓΡΑΜΜΑΤΩΝ</li> <li>+ ΕΥΡΩΠΑΪΚΩΝ </li> </ul>		
<input type="text"/> <input type="button" value="ΑΔΩΣΤΗΤΗ"/>	<p>Το Τμήμα Οδοντικής Τεχνολογίας</p>	
	<p><b>ΙΣΤΟΡΙΚΟ</b>          Το Τμήμα Οδοντικής Τεχνολογίας λειτουργεί από το 1983 με τον ιδρυτικό νόμο των ΤΕΙ 1404/83, ο οποίος καθόρισε τη δομή και τη λειτουργία των Τεχνολογικών Εκπαιδευτικών Ιδρυμάτων και αποτέλεσε τη συνέχισή του Τμήματος Τεχνολογών Οδοντοτεχνικής που λειτουργούσε από το 1973 στο ΚΑΤΕ-ΚΑΤΕΕ στο χώρο της τριτοβάθμιας εκπαίδευσης. Ανήκει στη Σχολή Επαγγελματιών Υγείας και Πρόνοιας του ΤΕΙ Αθηνών και είναι το μοναδικό τμήμα Ανωτάτης Εκπαίδευσης στην Ελλάδα, που παράγει ολοκληρωμένη εκπαίδευση στο γνωστικό πεδίο της ΟΔΟΝΤΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ.          Οι σπουδαστές αφορούνται στο τμήμα με τη διεξαγωγή των πανελληνίων εξετάσεων ή σύμφωνα με τη σχετούσα διαπόδρα για τη μεταγγραφή και κωτερόδρα. Σήμερα, ο αριθμός των ασκούντων είναι 85 και ο αριθμός των σπουδαστών που φοιτούν σε όλα τα εξόμνητα είναι περίπου 550.</p>	
<p>Ανακοινώσεις</p> <ul style="list-style-type: none"> <li>▶ Εξαμηνιαίο Πρόγραμμα Χειμερινού Εξαμήνου 2009-10 (01/09/2009)</li> <li>▶ Σύμβασις Καθηγητής (22/05/2009)</li> <li>▶ Ημερομηνία (11/05/2009)</li> <li>▶ Πρόγραμμα Εξαμήνου (11/05/2009)</li> </ul>	<p><b>ΣΠΟΥΔΕΣ</b>          Οι σπουδές στο <a href="#">Τμήμα Οδοντικής Τεχνολογίας</a>, σύμφωνα με το νέο, αναβαθμισμένο Πρόγραμμα Σπουδών που τέθηκε από το 2008, διαρκούν οκτώ (8) εξόμνητα στο οποίο οι σπουδαστές διδάσκονται θεωρητικό και εργαστηριακό μαθήματα. Κατά τη διάρκεια του τελευταίου εξαμήνου σπουδών, οι σπουδαστές πραγματοποιούν την <a href="#">πρακτική τους άσκηση</a> στο απόγαλμα σε εργασιακό χώρο του ιδιωτικού ή του δημόσιου τμήτα και ολοκληρώνουν την <a href="#">πρακτική τους άσκηση</a>. Το εκπαιδευτικό έτος που διαρκεί από 1η Σεπτεμβρίου μέχρι 31 Ιουλίου, περιλαμβάνει δύο εξόμνητα σπουδών. Το χειμερινό εξόμνητο σπουδών αρχίζει στο τέλος Σεπτεμβρίου και το κερνύ στο τέλος Φεβρουαρίου. Οι ακριβείς ημερομηνίες άσκησης και λήξης καθορίζονται κάθε φορά με απόφαση του Συμβουλίου ΤΕΙ και ανακοινώνονται στην αρχή του έτους (βλέπε ανακοινώσεις). Πιο το τέλος των μαθημάτων κάθε εξαμήνου, ακολουθούν οι εξομνητικές περιόδους που έχουν διάρκεια δύο εβδομάδων η κάθε μία.</p>	
<p><a href="#">ΠΡΑΓΜΑΤΙΚΑ ΔΙΚΑΙΩΜΑΤΑ ΠΤΥΧΙΩΧΩΝ ΟΔΟΝΤΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ</a></p>		
<p><b>ΠΛΗΡΟΦΟΡΙΕΣ</b>          Η γραμματεία του Τμήματος Οδοντικής Τεχνολογίας δέχεται κάθε Δευτέρα, Τετάρτη και Παρασκευή, 11πμ - 2μμ.          Επικοινωνία:          Προϊστάμενος, Δρ Ευαγγέλιος Δημητρουλάου Καθηγητής: 210-5385619          Τηλ. Γραμματείας: 210-5385618          Ηλεκτρονικό ταχυδρομείο: <a href="mailto:dentaltech@teia.gr">dentaltech@teia.gr</a></p>		
<p>Υπεύθυνος σύνταξης και ενημέρωσης ιστοσελίδας: Δρ Στέφανος Γιαννικιώτης Ανσπλ. Καθηγητής, (<a href="mailto:giannista@teia.gr">giannista@teia.gr</a>)</p>		

### 3. Undergraduate Curriculum

The Curriculum is presented in the Study guide found in the annex, as well as, on the website of the Department ([http://www.teiath.gr/seyp/dental\\_technology/program.doc](http://www.teiath.gr/seyp/dental_technology/program.doc)).

#### 3.1 Degree of correspondence of the Undergraduate Curriculum to the Department goals and society demands.

##### *3.1.1 Procedures for monitoring this correspondence. Effectiveness of the application.*

In the modern era dominated by the rapid development of dental Technology and Dental Biomaterials, there must be constant concern for the education provided in the field of Dental Technology in Institutions of Higher Technological Education. The concern should be about the adaptation of the field of subjects of education in the modern labor market demands and the new targeted specialized knowledge required of graduates of Higher Technological Education Institutions.

An important factor in designing and planning the curriculum of the Department are the subjects and sectors of future professional employment of our graduates. Apart from that, the introduction of the new courses in the curriculum, such as Principles of Marketing Entrepreneurship, principles of Organization and Administration of Health Services, and Sociology of Health, contribute significantly to the preparation of the graduate to the new challenges of his profession.

In this context, the faculty of the Department with its continuously updated knowledge and research in the field of Dental Technology, as well as, its ongoing contact with profession agencies and the respective Ministries (Health, Education, and Employment) becomes active in creating an interactive system between the Department, which provides Education and the labor market.

Despite considerable efforts thus far in this direction, there is still need for a systematic process for recording and processing of data so that the objectives and goals the department has set, will meet the demands and challenges of modern society to the maximum extent. In order for the new curriculum, which has already been applied during the present academic year, to meet today's professional demands and scientific challenges that a graduate of Dental Technology will face, it should be further strengthened by the existence of an autonomous postgraduate curriculum (currently the post graduate studies of our department is in collaboration with the Dentistry school of the University of Athens).

This will provide an opportunity for the undergraduate curriculum to focus more on consolidating and assimilating the necessary basic knowledge, which is the foundation that a graduate student should have, so that he/she can be “absorbed” directly and productively in his professional field of expertise.

Moreover the existence of an autonomous program of postgraduate studies, will enable graduates who have an inclination and are capable of extending their knowledge, to achieve faster progression and establishment in their scientific and professional field.

##### *3.1.2 Procedures of evaluation and curriculum revising. Effectiveness of application.*

During the recent years there has been an ongoing activity on the part of the Department, regarding continuous evaluation of the curriculum, keeping always in mind, its updating. The new curriculum that is in use now, was revised during the academic year 2008-2009, based on study programs of other Dental Technology Departments, of institutions of

Higher Education in countries of the EU and the USA as well as, the market needs for employment in Greece.

The new revised curriculum was made to meet specific criteria such as:

- Providing complete education in the field of knowledge of Dental Technology.
- Sufficiency in specialized subjects of field.
- Updating the subject matter of specialized classes taught.
- Balance between primary and supplementary subjects.
- Avoiding overlap in content across courses.
- Avoiding excessive emphasis to some subjects over others.
- Introduction of new courses and innovative teaching methods, which contribute significantly in the preparation of the graduate of the Department to respond accordingly to modern professional challenges. .
- Emphasis on the development of research methodology.

### *3.1.3 Publicizing the Curriculum*

The Curriculum of the Dental Technology Department at the TEI of Athens initially is approved by the General Assembly of the Department and then, sent to the Council of the Faculty of Health and Caring Professions for second approval and through that to the Council of T.E.I. which gives the final approval after a final check, that an appointed committee conducts. It is then made public on the website of the Department and the information Guide study and finally, it is distributed to the students during their registration at the Department.

### *3.1.4 Procedures for monitoring the professional development of graduates.*

At department level, there is no monitoring of the professional development of our graduates. As is known, the professional development of graduates provides a lot of information about the effectiveness of a program of studies and the current trends in the market, not only quantitative but mainly qualitative, therefore, it is desirable to systematically record pertinent data, on a permanent basis, to ensure the maximum extent of correspondence between the program of studies and the demands of the employment market in our country.

It is obvious that such a data basis is difficult to be developed at Department level (needs in personnel, computerization etc.) but at TEI level it is possible.

## **3.2 Structure, consistency and functionality of Undergraduate Curriculum**

The Undergraduate Curriculum includes 8 semesters of which 1 is practical training. On the detailed program one can see the mandatory courses of the Department for each semester. The theory classes are shown with “T” the laboratory classes with “L”, the total amount of hours with “Total” the work load of each class with “WL” the international credits that correspond to each lesson with “ECTS”

Each curriculum semester includes 5 to 6 mandatory classes with 26 teaching hours per week which correspond to 30 ECTS. The 7 semester curriculum includes 36 obligatory courses. These courses are subdivided into courses of General Background Subjects

shown as “GBS”, Specialization Subjects shown as “SS”, Special Background Subjects shown as “SBS”, and Administration, Economy, Legislation and Humanistic Studies shown as “AELH”.

Based on the above structure the curriculum offers total of 40 independent courses of which the student is required to take the 38. In particular, during the first 5 semesters there are no electives. In the 6<sup>th</sup> and 7<sup>th</sup> semesters there is a “duo” of courses (one duo for each semester) and the student can choose one of the two. Tables 13-3.1 and 2 and study guide (Appentices)

### *3.2.1 Percentage of core courses/of specialization/direction courses in the total course curriculum*

The percentage of core courses/specialization in the total curriculum is 32,5% / 67,5%. The curriculum does not include courses of direction.

### *3.2.2 Percentage of mandatory course /mandatory electives/electives in the total curriculum.*

The percentage of mandatory courses is 94,6% and the percentage of mandatory electives is 5,4%.

### *3.2.3 Percentage ratio between background courses, courses of scientific area, courses of general knowledge and courses for skill development in the total curriculum.*

The 21,7% of the total curriculum courses are background courses, 27% are of scientific area, 10,8% of general knowledge and 10,5% courses of skill development.

### *3.2.4 Allocation of time between theoretical instruction exercises, workshops and other activities.*

60% of the total time is occupied by theoretical teaching and 40% by laboratory exercises and other activities.

### *3.2.5 Organization and coordination of subject matter (or material) between courses. Overlap, subject matter gaps. Rationality of the extent of subject matter in the course. Reassessment, revising and updating the subject matter in courses.*

The teaching material is organized and coordinated between courses with the collaboration of the teaching staff at Sector and Department level and the Temporary Scientific and Laboratory Personnel, in accordance with the approved curriculum and the outline of each course. There are no overlaps in subject matter between courses, except where it is considered necessary in order to facilitate the student to have a substantial understanding of the connection and sequence of subjects.

The extent of the course material is rationally distributed. Reassessment, re-adaptation and updating of the course material takes place at regular intervals, through the process of revising the curriculum, depending on the current needs. There are no subject matter gaps and the courses, in both theoretical and laboratory level includes all activities necessary for the contemporary dental technician.



### *3.2.6 System prerequisite courses. Functionality, percentage of courses included in the system.*

A system of prerequisite courses is being applied, which is functionally structured in terms of teaching and understanding the material so as, to gradually familiarize and progress students from general knowledge courses to specialized ones.

With the new curriculum, there are no semester courses that the student must pass successfully in order to proceed to the next semester. These courses are referred to as core (or basic) courses in order to avoid confusion with the prerequisites of the old curriculum (see annex). Thus, as the semesters progress, students have no gaps or questions, a fact that helps further their education with increasingly specialized courses.

The percentage of basic courses included in the system is approximately 50% of the total courses taught.

### *3.2.7 Subjects offered by other curricula*

All subjects taught are included in the Curriculum of the Department of Dental Technology at the T.E.I of Athens. None of the subjects taught in the Department is offered to any other Department's curriculum. On the contrary, in accordance with the structure of the T.E.I. of Athens, other Departments with General Background Curricula offer courses to the Department of Dental Technology.

Specifically:

The courses of "Anatomy", "Physiology" and "First Aid" are offered by the Department of Basic Medical Studies.

The courses of "Physics" and "Chemistry" are offered by the Department of Physics-Chemistry and Technology of the Materials.

The course "Informatics" is offered by the Department of Informatics.

The courses of "Biochemistry", "Biology" and "Microbiology of the mouth" are offered by the Department of Medical Laboratories.

The course "Biometry - Biostatistics" by the Department of Public Health.

The course "Principles of Business Administration and organization of a laboratory" and "Principles of Marketing" offered by the Department of Marketing and Advertising.

The course "Entrepreneurship" by the Department of Management.

The course "Principles of Organization and Administration of Health Services" by the Department of Administration Units of Health and Welfare.

The course "Sociology of Health" offered by the Department of Social Work.

The course "Foreign Terminology" by the Department of Foreign Languages.

### *3.2.8 Foreign languages taught at the Department*

In collaboration with the Department of foreign languages, students are taught English terminology in their 7<sup>th</sup> semester. They take a proficiency placement test in an early semester and are placed in levels corresponding to their knowledge in English. In continuation they attend optional tutoring lessons until the 7<sup>th</sup> semester, where they are taught the mandatory course "Foreign Language Terminology". The course includes laboratory practice on the terminology of all subject fields of knowledge taught in the Department, aiming to familiarize the students with each independent course's terminology.

### *3.2.9 Suggestions for improving the curriculum.*

According to the department, as expressed in the General Assembly concerning the revising of the old curriculum, the new curriculum covers the current needs of the department sufficiently. But what has not been used yet and would help even more is the integration of technology in education. We refer in creating an electronic platform that will serve the needs of education with multiple objectives and results. Specifically, on this platform a student could find:

- Instructions for each lab, as given at the beginning of the semester. The difference is that instead of giving student documents, with all the difficulties this could imply, through this platform, he or she could find the information needed directly and easily.
- Books and notes necessary for the course could be in electronic form, making processing and study easier. Apart from the main course book, information could be given concerning multiple literatures for research on databases.
- Educational videos for specific projects, either those created by the Department, or those supplied by companies that operate in the field.

The e-learning platform, combined with an updated website of a department can help a student both educationally and making him a “shareholder” in the new age technology.

## **3.3 Examination System**

### *3.3.1 Procedures and methods of student evaluation.*

The main examination method for evaluating the students' performance in theory courses or theoretical part of mixed courses is the written final exam, which is carried out on two formal examination periods at the end of each academic semester. Because the studies are structured in half-yearly cycles of study by the internal regulations of T.E.I, there are two examination periods for each half cycle. After the end of the winter semester (January), there are two examination periods from 20.01 until 05.02 the first and from 06.02 until 20.02 the second (dates may change slightly due to unexpected circumstances). Respectively, after the end of the Spring Semester (June) there is the first examination period from about 20.06 until 05.07 and the second from 01.09 to 15.09.

In these written exams the student is asked to answer a series of questions to determine if he/she has adequately assimilated the necessary knowledge. Apart from the written examination, in various courses students are asked to study projects individually or in team groups. The projects are presented in class, towards the end of the semester. Thus, the students become familiarized with collecting and processing information, as well as, with the writing and presentation of work. They are evaluated for this work and this evaluation affects the final grade following the written examination.

Generally, there is a policy in the Department so that there is a gradation in difficulty of questions in the written examination. A percentage of questions is relatively easy, so most students who have adequately been prepared, will answer them. Another part of questions is more difficult and some few questions (1-2) require critical analysis and response. The students, who answer the latter ones well, get an excellent grade.

Emphasis is given on supervision to avoid copying which misleads the instructor about the real performance of students.

Regarding the evaluation of students in the laboratory part of the course, it is done in two ways. Students are evaluated throughout the duration of the course, for total lab performance on different assigned exercises (grade is marked on students' cards each

time) and secondly with a brief lab written final examination, towards the end of the semester. The final grade is the average of the two examinations.

Apart from the half-yearly final examination on theory and lab classes, the students write a dissertation in the last semester of their studies, which is evaluated by a three-member teaching staff committee, and has a large percentage in the averaging of the final diploma grade of the student. After the titles (subjects for dissertation) have been proposed by the teaching staff and approved by the Department Council, they are distributed to students who are eligible to a dissertation, by random drawing which they conduct themselves. When the student completes his work and gets approval by his supervising teacher, who has been observing and advising him throughout the work process, he submits four copies of his dissertation to the secretariat. Then, a date is set for the dissertation presentation, which is announced sometime earlier, so that the student has time to prepare and other students, who are interested in the subject of the dissertation, can make arrangements to attend.

### *3.3.2 Transparency in the process of evaluating students.*

The transparency in the process of evaluation is ensured with the collaboration of the teaching staff, permanent and temporary and certain criteria already set for evaluating, common and acceptable to all. The grades are posted on Bulletin Boards. Apart from that the students may see, if they wish their written examination paper and discuss their grade, if they think they have been under-graded and more importantly understand the mistakes that have led to this grade.

### *3.3.3 Procedures and criteria for evaluating students.*

The subject evaluating students has been discussed by the Academic Staff repeatedly at different Staff meetings. Regarding the written test, it is common belief that the questions should be clear and without “tricks” and double interpretations. During the examination, the course teacher is always present to give any necessary clarifications to questions that may arise. The correction and grading is done with commonly acceptable procedures ie making individual questions, underlining mistakes or deficiencies etc.

The lab courses are graded jointly, by all lab teaching staff responsible for the course, by averaging the individual scores as mentioned above (3.2.9).

### *3.3.4 Transparency and efficiency of procurement, preparation and examination of the dissertation.*

To ensure the above, all Teaching Staff proposes a list of subjects for a dissertation which is approved by the Department Council and then it is given to the eligible students, who take one answer one subject each for their dissertation through a drawing process they conduct themselves. The evaluation of each student's dissertation and its presentation is done by the Supervising Teacher and 2 other members. The supervisor conveys to other members details of his collaboration with the student during the preparation of the dissertation. The final grade of the student dissertation and presentation of it is the average of the grades of the three members.

### *3.3.5 Quality standards for the dissertation.*

The student's dissertation, to this day, is essentially a review of the literature (bibliography) on a specific issue, because unfortunately it hasn't been possible to have experimental-research work, which would have been ideal. Certainly, the organization of a research laboratory, as mentioned in the section of the Internal Evaluation on “research chapter”, could make it possible to conduct research study theses in the future.

Regarding the dissertation as a bibliography search, there are specific standards for writing one in accordance with international standards, which are listed in a specific form put together by teaching staff of the Department and was approved by the Department's Council, and is distributed to students who are starting a dissertation. These standards relate to structure, content and manner or writing the reference section of the dissertation. During the writing of the dissertation students collaborate with their supervisor at regular intervals and thus progression of their work is monitored. The instructions to students may be found in the appendices.

### **3.4 International Dimensions of Undergraduate Studies.**

#### *3.4.1 Participation of teachers from abroad.*

There is no participation of teachers from abroad in the Department on a regular and permanent basis. Occasionally, seminars are organized on specific and specialized subjects with speakers invited from national commercial companies. The budget of T.E.I does not allow inviting speakers from abroad at Department Level.

#### *3.4.2 Programs of International cooperation (i.e. ERASMUS, LEON, TEMPUS and ALPHA) of undergraduate level.*

The Department of Dental Technology of T.E.I. of Athens participates in the program LEONARDO DA VINCI, (ERASMUS LLP) in the framework of international educational collaboration at undergraduate level, for doing part of their practice training abroad.

#### *3.4.3 Agreement of bilateral cooperation with institutions and bodies abroad.*

There are no bilateral cooperation agreements with institutions and bodies abroad. Nevertheless, the need for contacts and exchanges between members of the Teaching Staff of the Department and the educational and research Staff of relevant Technological Institutions and Universities abroad, has occasionally been underlined, aiming at:

- Knowledge sharing and transfer of know-how to new educational processes.
- Exchange of views regarding the structure and content of the new program of studies.

#### *3.4.4 European Credits Transfer System (ECTS)*

The program of studies is organized with the ECTS credits with all the advantages that are gained by such organization (transfer of credits, diploma supplement etc).

### **3.5 Practical training of students**

#### *3.5.1 Establishment of practical training.*

The practical training of the students is mandatory for all students of the Department in the 8<sup>th</sup> semester of their studies in order to complete their studies and get their degree. The practical training begins in two periods, under the internal rules of T.E.I, in March and October of each year and lasts six months.

### *3.5.2 Mobilizing the interest of students.*

Students are informed by the Committee of Practical training about the importance of training practice, the details concerning its duration, the method and place of its execution, the rights and obligations of students in that period, as well as, the obligations of the partner bodies. The committee explains to the student that, in undergraduate level, it is impossible for them to be trained and acquire experience and skill only by attending theoretical and laboratory classes during the period of their studies. This gap, since their field of studies is applied science and technology, is filled by practical training which is done in production units. In each partner unit body, which is actually Dental labs, students will see and construct the full range of dental work. They will also gain experience in organizing a laboratory and learn about professional matters that concern them. They will make comparisons with the knowledge they have received from their studies and thus they will plan better their future. Having been informed about all the matters related to their practical training, students pursue their practical work.

### *3.5.3 The organization of practical training for students of the Department. Internal Rules and Regulations.*

The internal regulation that concerns practical training is common for all T.E.I. Departments based on the founding law for T.E.I. 1404/83 and it is stated in detailed version of Ministry of Education (Practical training in T.E.I., OBΔB 1988) Presidential Decrees and ministerial decisions (E5 /1797/20-03-86 ΦΕΚ 183/Τ.Β/ 14-04-86 as amended by E5/4825/16-6-86 Government Gazette 453/τ.β/ 16-07-86) that define also the details of contract with bodies. Thus, details are specified for the duration of practical training, time to begin, the process of absorption of students by the agents, rights and obligations of students and agents and finally the supervision of the practical training by the Department via the three member committee of instructors. This tripartite committee is appointed by the Department Council. There is a specific contract in written form, which must be accepted by the head of the implementing agency of practical training, the student and the department. After the contract has been signed by all three parties, each party keeps a copy of the contract. The committee monitors the training at regular intervals and also finds solutions to problems that may arise during the practical training period.

### *3.5.4 Major problems the Department faces in organizing the practical training of students.*

The problems the Department faces concerning practical training are the following:

- Absorption of students. The main problem is the absorption of students by practical training agents funding for the student. With the current legislature, the student's practical training is paid by the private sector with 80% of the basic salary of an unskilled employee. 50% of this is funded by the host laboratory and 50% by the Manpower Employment Organization. Nevertheless, many times there is denial by the host employment agency to pay his practical training with the excuse that the student is a

trainee and does not provide services. In this case, the student must try to find another host agency or accept arrangements that do not comply with the law.

- Finding a host agency or lab for the training. Finding a host laboratory is totally the student's responsibility. The Department Committee of practical training keeps a record of host agencies that wish to accept students for practical training. This record, however, is limited and does not cover all students.
- Bureaucracy. The signing of contracts by the relevant parties often creates problems and delays.
- Accreditation of agencies for practical work. The main condition to be met, as set by the law is that the laboratory that accepts a student must be active throughout the range of Dental Technology works. Therefore, laboratories of insurance funds that construct only certain dental works are excluded, although they could accept a large number of students. Apart from the standard about the total range of works that a lab should have, there are no other specifications as to the quality constructed. It is known, not based on a serious study or classification of course (serious disadvantage), that among the existing laboratories, some meet the highest and up to date operating standards, and quality, some others meet mediocre standards, and many lack basic working conditions and quality. Unfortunately the students in their effort to find a laboratory that will accept them, having no choice, do not raise the issue of quality in their training, at all.
- Supervision of students and bodies. Substantial supervision standards of students or bodies are not provided for and do not exist. There is only the supervision (typical) performed by the committee responsible for practical work. Ideally, the student should be supervised at regular intervals, from, his/her physical presence at the laboratory, to the quality of work he/she constructs. Also the lab owner should be supervised to ensure that he/she allows or encourages the student to go through all the posts so as to carry out, gradually, the full range of dental works. It is normal practice for the student to perform simple tasks or supplementary work and not the whole range.

### *3.5.5 Skills of applied knowledge the Practical training aims at. Results and familiarization of trainees with the environment of the body implementing practical work.*

Practical training aims at the whole range of both theoretical and laboratory skills, students are taught throughout their studies in the Department. Basically, its his/her last chance, “final rehearsal”, to discover any gaps, to resolve any questions but most importantly to become familiar with the methods and materials before going out to the job market, either to look for a job as an employee, or to create his/her own dental laboratory unit. The results are very satisfactory although this judgment is based purely on experience since until today there isn't a standardized objective way of judging these results. The familiarization of the trainees with the environment of the body implementing practical work, based on the current data, is judged as successful. Usually there are no problems between the trainees and the practical training body. The few cases where problems have risen between the above parties have been resolved successfully after consultation between the committee and the person in charge of the host laboratory.

### *3.5.6 Connection of the subject of Practical training with the dissertation.*

Practical training covers the whole range of knowledge of the student and dental profession in general. On the contrary, the Diplomatic dissertation concerns a specific section of the field of Dental Technology in which the students deepens his/her knowledge by searching new data, presents problems, etc. So basically, the practice is not

related to the dissertation. The only point in which perhaps there is a connection is when students construct in the laboratory related to their dissertation works, which then photograph and use in their dissertation presentation. Thus, they are taking advantage of the host premises and equipment in order to present new picture and not copied ones from the bibliography. The fact is appreciated by the dissertation committee accordingly.

#### *3.5.7 Future employment opportunities for graduates through the process of practical work.*

It is commonly seen fact for the trainees to continue working at the host employment body after graduation, if the person in charge of the laboratory, is satisfied with their performance during the practical work, good cooperation and efficiency. There are no official data and statistics about this fact, something that the carrier's Department of T.E.I. could provide by monitoring the graduates' careers.

#### *3.5.8 Network linkage of the department with production bodies aiming at practical training of students.*

Network linkage with production agents aiming at undergraduate's practical work, with its strict sense, does not exist. Nevertheless, the department has developed a cooperation with bodies of the profession, namely with Pan-Hellenic Federation of Dental Laboratory owners and other large unions, concerning practical work. Specifically, there is an effort to improve matters such as education, student practical training funding, working conditions of host laboratories etc. Because of this cooperation there is always help for students who are unable to find a host laboratory for their practice training. Of course, if this cooperation could develop further, and prerequisites and standards were established as mentioned and suggested in the section for improving conditions of practical work, numerical data could be drawn more easily, especially about open positions for practical work.

#### *3.5.9 Initiatives taken by the Department to create practical training openings (in local, national and European level)*

At national level, particularly with Dental Technicians Associations, where most of our students are absorbed, there is effort to find openings for practical training but this is done only at a personal level and is based on the inter relation the Department Staff members have with the host agencies.

With the large insurance funds, especially with Social Security, where a substantial number of our students could be absorbed, there is no cooperation (although it existed in the past) due to bureaucracy in the relevant service departments, as well as because of weakness to cover in their dental laboratories, the whole range of dental works needed by the students.

At the European level, the assistance offered by the Department is only in the case the student himself/herself has found a practical training opening.

#### *3.5.10 Cooperation and contact between the instructors/ supervisors of the Department and the representatives of the implementing body for practical work.*

During the student's practical training, the three member teaching staff committee of the Department, which has been appointed by the Department's Council, has contact with the

practical training body mainly in the cases where there are problems of student- host body cooperation. The committee checks a book of practical training kept by the student on which he reports all his work during practical training. It would be nice for the committee to have contact with the host laboratory at regular intervals so there would be closer monitoring of the student's practical work, something that requires official institutional arrangement, more Teaching Staff members involved and perhaps additional funds, since, this supervision cannot be done during the school hours, when the Teaching Staff is preoccupied with educational and administrative duties.

*3.5.11 Specific conditions and requirements for the collaboration between the Department and the bodies that are implementing the practical work.*

There are specific conditions and requirements for the collaboration of the Department with the parties involved, stated in a specific contract signed by the Department, the trainee, and the body implementing the Practical work. These conditions relate to formal collaboration conditions, such as, working hours, safety issues, etc.

It is imperative that conditions and requirements are established concerning the host employment bodies aiming at better education of students. The contract made by the Department with the relevant bodies of the profession (federations, associations), is also aimed at improving the practical training and setting standards.

*3.5.12 Supervision of trainees, monitoring and supporting them*

Effective supervision of students' progress does not exist. Typically, each member of the three member committee assumes the responsibility of supervising 1/3 of the students that are conducting their practical training and is responsible for monitoring the performance of the practice by the student. In the "Book of Practical Work", in specific section, the student records the works done in the host laboratory and signs.

As mentioned earlier, it would be ideal for the department to have contact with the host body regularly and be informed about any problems or deficiencies and thus monitor closely the student's performance but that is something that requires legislative setting, larger number of Academic Staff and perhaps additional funds, since this monitoring cannot be done at the hours the instructors are occupied with educational and administrative work. Of course, the committee is at student's disposal for any problems that may arise concerning the practical training and is responsible for solving them.



## **4. Program of Postgraduate Studies**

### **4.1 Title and general information of the Curriculum of Postgraduate Studies.**

The Dental School of the National and Kapodistrian University of Athens in cooperation with the Department of Dental Technology of the TEI of Athens organizes from the academic year 2006-2007 a Program of Postgraduate Studies (PPS) with the title "Material for Dental Technology" according to the provisions of the articles 10 to 12 of the law 2083/92 and the par. 12γ and par. b of the article 5 of the law 2916/01 as well as the 110697/E5/10-10-2003 ministerial decision. The administrative support of the above Program which is pointed out by the article II par 1b of the law 2083/92 is taken over by the Dental School of the National and Kapodistrian University of Athens.

Candidates to be admitted, if they meet the prerequisites, in priority order are:

- a) Graduates of the Department of Dental Technology of the Faculty of Health and Caring Professions of TEI or of corresponding Departments of foreign Universities.
- b) Graduates of the Dental School of Greek Universities or corresponding Department of foreign Universities.
- c) Graduates of TEI or Universities of other Greek or foreign tertiary education Departments with relevant subjects.

### **4.2 Departments and Institutions which participate in the Postgraduate Program of Studies.**

This Program is Inter-Institutional in which the Dental School of the National and Kapodistrian University and the Department of Dental Technology of the TEI of Athens participate.

### **4.3 Aim of the Postgraduate Program of Studies and degree of correspondence to the targets of the Department and the demands of society.**

The Program concerns the materials that are used by the Dental Technicians for the construction of any kind of prosthetic works.

During their training, postgraduate students acquire in-depth in the scientific areas which concern the composition, the properties (physical and mechanical), the behavior and handling of the materials, not only the traditional ones but also the new available.

This knowledge helps the Dental Technician to choose the proper materials concerning resistance, biological behavior and cost.

Given the development of research and technology which has led to a multitude of materials, this knowledge is absolutely necessary for the Dental Technician who wishes to keep a high standard of his professional services.

Moreover, this postgraduate Program provides students with the necessary academic qualifications so that those who wish can staff the Department of Dental Technology in the future.

### **4.4 What do you think about the structure, cohesiveness and functionality of the Postgraduate Program of studies?**

The postgraduate Program of studies lasts four semesters during which the postgraduate students are taught general background subjects which consists the 38% and special subjects, which consist the 62% of the total subjects. All the subjects of the postgraduate Program are obligatory. Most of the subjects are theoretical. Skills development concerns the subjects of Dental Technology of the third semester and Sample Construction of the fourth semester. The course material is defined by the teachers and approved by the General Assembly of the Special Inter-Institutional Committee (SIC), which has the responsibility of material adaptation and material updating.

During the second year of studies, a supervisor is appointed who supervises the students with their dissertation, assesses and gives his judgment to the Special Inter-Institutional Committee, which also approves the topic of the dissertation. Dissertation presentation and defense is performed by the student in front of a committee and an audience, in the presence of the supervisor and the postgraduate students.

At present, two graduates from the Department of Dental Technology attend the Postgraduate Program. Since the Program is in the first year of its implementation, there haven't been any procedures of assessment for the time being. This can be achieved upon completion of studies of the first students.

#### **4.5 What do you think about the examination system?**

The evaluation of the postgraduate student's results from the projects and assignments prepared during the semester – under the supervision of their professors – and from the written exams which take place at the end of each semester. The results of the assignments evaluation and of the written exams are announced to the students.

The examination system is considered adequate and right because the students, with the preparation of the assignments are also evaluated during the semester and not only from the final written exam at the end of the classes.

#### **4.6 How do you judge the selection procedure of postgraduate students?**

For the selection of students, the postgraduate candidate students are examined in written in the following subjects, which are included in the graduate timetable of the Department of Dental Technology:

- a) Materials Technology
- b) Research Methodology and
- c) English Terminology

Also, for the selection of students who are going to be enrolled in the PPS the followings are taken into consideration:

- The cumulative grade point average of the degree
- The dissertation performance where it is necessary, in the undergraduate level.
- If the candidate has done any research.
- The scientific publication and announcements in conferences
- Knowledge and use of P/C
- The adequate knowledge of the English language and terminology. Knowledge of another foreign language will also be estimated.
- The adequate knowledge of the Greek language for the foreign degree owners which is confirmed either with a certificate or a post graduate title of studies of a Greek

University of a unified lyceum leaving certificate or a certificate of the Greek language from the Greek Language Centre

- The interview
- Scholarships, if there are any.

The criteria for the selection of postgraduate students are satisfactory. Apart from the exams, the progress of each candidate during the lessons as well as the cumulative grade point average of his degree is taken into consideration, so as to have/form a complete idea and decide on the right evaluation.

#### **4.7 What is your opinion about the financing of the Postgraduate Program of studies?**

Candidature participation costs 100 euros. Tuition fees are 4500 euros per year for each student. With the decision of the Special Inter-Institutional Committee (SIC) the total amount of fees can be modified or sponsors can be sought for the achievement of the Program's viability.

Upon decision of the SIC the financial management of the PPS can be assigned to the Special Account of TEI of Athens.

With the amount that is gathered, the needs for consumables are covered for the Essay Writing by the students or their practice in selected private labs, where they are trained in specialized materials and methods. It also contributes to the needs for the operation of machinery and research devices of the Biomaterials lab of the Dental School of the National and Kapodistrian University.

#### **4.8 What is your opinion about the international effect of the Program of Postgraduate Studies?**

It is desirable that the particular postgraduate Program also appeals to graduates of corresponding foreign Institutions, something that at present does not apply.

## **5. Program of PhD studies**

The Department does not offer PhD courses yet, as this applies to all TEI Departments. On the other hand, this is not possible due to existing legislation, and on the other hand there are objective difficulties in the organization of such a procedure. Of course after the organization of a postgraduate Program with the cooperation of the Dental School of the National and Kapodisrian University, we believe that in the future, once the legal, bureaucratic and procedural problems that exist are solved out, the Department will be able to undertake PhD Program. The aim of the Department is to employ teaching staff out of its own graduates who, in this case, know the needs of the Department better, especially in the laboratory field.

## 6. Teaching

### 6.1. Effectiveness of the teaching staff.

#### 6.1.1. Evaluation procedure of the teaching staff by the students.

The teaching staff is evaluated on a semester basis by the students through questionnaires according to the model questionnaires provided by the HQAA. Below is the description of the evaluation procedure and the way of its implementation.

##### *Evaluation procedure of the teaching staff by the students.*

The relevant questionnaire is uniform for all subjects and concerns the theoretical and laboratory part. It is anonymous. The questionnaires are given during the lesson, between the 8<sup>th</sup> and the 10<sup>th</sup> week of teaching for completion by the students.

##### *Implementation Procedure*

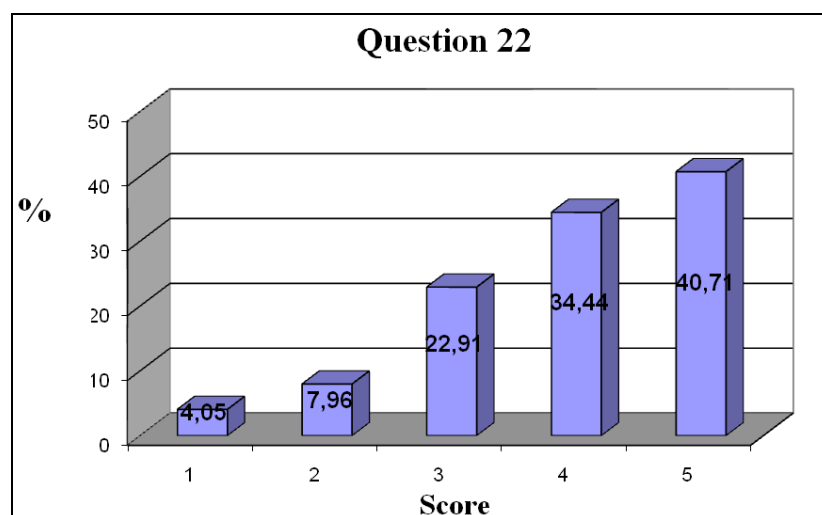
The members of the Special Technical Staff of the Department hand out envelopes with the questionnaires in which the title of the subject (theory or lab), the semester, the responsible professor and the date are written, then they explain in brief the aim of the procedure, answer any possible question and get out of the classroom with the professor. They come in again after 15 minutes and ask from 1-2 students to collect the questionnaires. After the students collect all the questionnaires they put them in the envelope which is then sealed. The same students take the envelope to the Secretariat.

When all questionnaires have been collected, the Department records the answers on spread sheets. Upon completion of data recording, the spread sheets are given to a Specialist collaborator with the Department for their process. The process is limited to calculating the frequency of answers to each question for the Department in total.

Data recording of the present evaluation was done by Mr. Spiropoulos Konstantinos, Lab Instructor, while the analysis and development of diagrams was done by Mr Yannikakis Stavros, Professor.

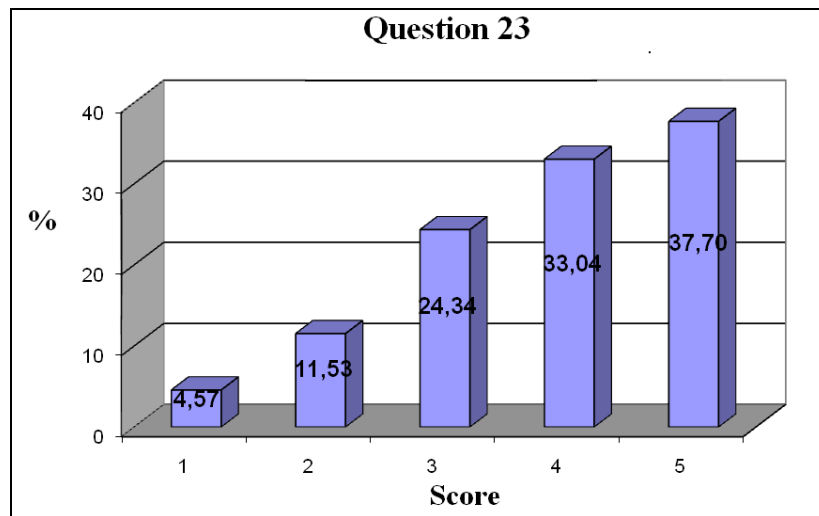
The results of the data processing, regarding the quality and effectiveness of the teaching staff is as follows:

##### Organization and presentation of the study material



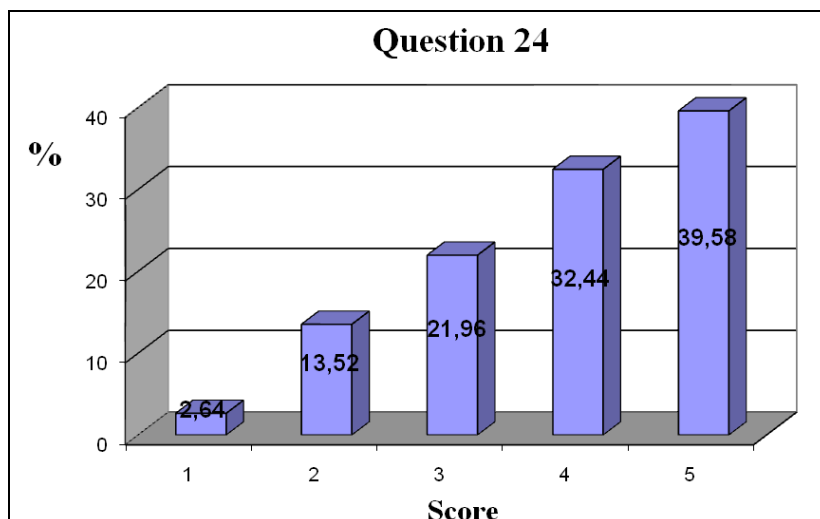
The profile of the Department concerning the presentation and organization of the study material is excellent. In most subjects the teaching staff of the Department, although it is small in number, has provided for the publication of text books manuals or notes. In addition, the teaching staff provides the students with multiple bibliographies and databases so that the students who are really interested in their studies can acquire an indepth knowledge. Lectures are well organized in modules (see studies guide) and the presentation is made with the most modern technological means, thus arousing the students' interest.

*Making the subject matter interesting*



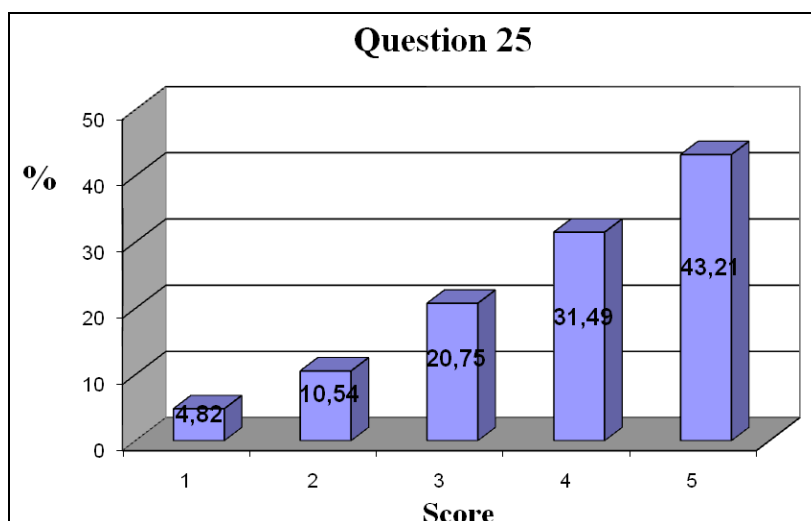
It is important for the education as a whole, to make the subject matter interesting for the student. Unfortunately the students' workload is big (labs, classes, homework, assignments, etc) resulting in great fatigue. Some students manage to get over the difficulties but some others fall behind. It is advisable that the latter ones be helped by the teaching staff so that they can keep up with the rest as a team. Generally, a lot of effort is needed by the teaching staff so that the students' interest should be continually aroused. The profile of the Department is considered excellent since more than 70% of the students answered "satisfactory" and "very good".

*Analysis and presentation of the concepts, in a simple and understandable way. Use of examples.*



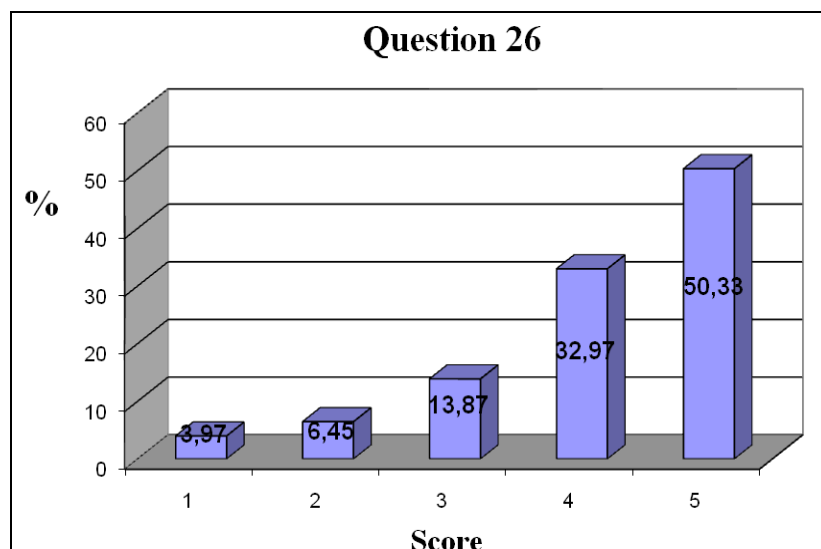
The specialty of Dental technology belongs to Applied Studies and thus, the subject is presented with examples and the concepts are analyzed in the most possible descriptive way. In many subjects educational multimedia (DVDs) are used and help the student in understanding better and digesting the concepts. Since the teaching staff of the Department, from the rank of the Assistant Professor and upwards are dentists who clearly know and estimate the deficiencies of the Dental technicians at professional level, they focus their attention and guide the students to get into the essence of the problem. The profile of the Department is considered excellent again.

*Encouragement of the students to make question and develop their judgment*



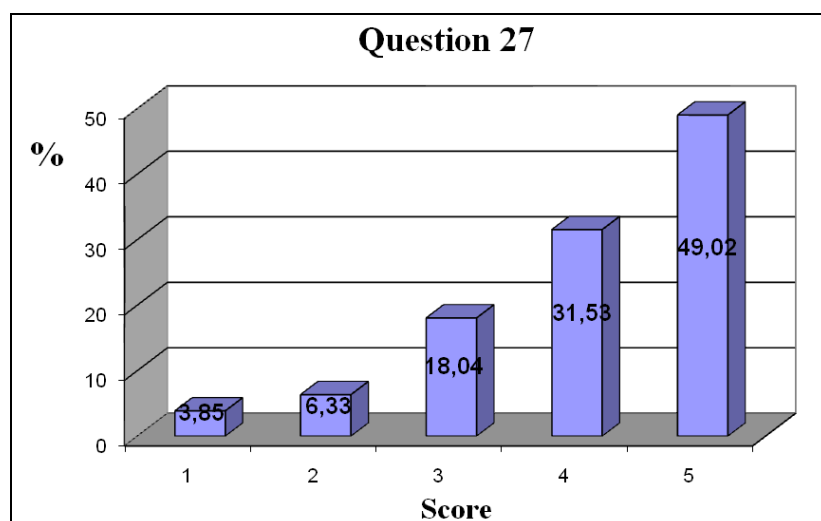
When the lesson becomes interesting from the part of the professor, and he himself addresses question to the audience, the student is obliged to be an active member during the lesson and address questions himself/herself. Besides, students are continuously asked whether they have understood or not the concepts taught. It is sure that in the way that the dental technology science is structured it is impossible for the student to proceed further if he/she hasn't understood the previous lessons completely. Generally, the Department's point of view, this is also shown in the graph, is that the teaching staff respects the student and tries to provide him/her with an essential education.

Consistency of teaching staff with duties (not being absent, timely assignment correction, office hours for students).



The teaching staff is characterized by professionalism, regarding duties. This results in the very high rate (>83%) of the grading of the students at a level above “satisfactory”. Although the workload of the teaching staff beyond its educational duties, for example administrative work participation in committees etc is great and sometimes unbearable, they manage to be consistent with their duties. And if in rare cases they cannot meet the students’ demands/needs, this is due to extremely small number of teaching staff members of the Department with whatever obligations it implies. Teaching staff members, in addition to teaching hours, offer office hours during which they accept students and discuss with them different issues they are preoccupied with, as the academic advisor’s duties demand.

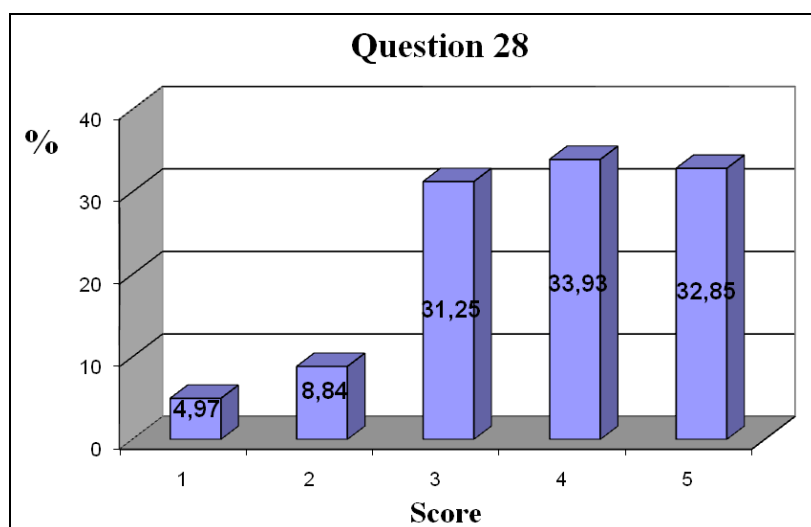
Teaching staff/students relationship





Generally there aren't any arguments. Every time those problems arise they are always solved out by common consent, without coming to extremes. At this point, it is worth noting the extremely low percentage (<10%) of students who view the relationships with the teaching staff as bad. However, not taking into account the percentages, rarely does a disagreement-complaint comes to the Council, a fact indicating that the problems are solved out in good will, from both sides.

*Contribution of the auxiliary teaching staff to a better understanding of the material.*



Concerning the auxiliary staff's contribution to a better understanding of the material, the greatest percentage is in categories 4 and 5, yet, there is a quite big percentage ( $\approx 1/3$ ) in category 3, while a percentage of about 15% considers that the temporary teaching staff who work as a lab or scientific assistant does not play a significant role in understanding the material. Two explanations can be given. First of all the understanding of the material concerns the theoretical part which is taught mainly by the tenures. Secondly, the lab assistant is related to the lab part of the education which incidentally is the most difficult and tiring for the student, thus making him/her form a wrong opinion about the mission of the auxiliary staff.

*6.1.2. Using the results of teaching staff evaluation by the students.*

The results are given to the Head of the Department who then gives each member the data that concern him/her. Additionally, a report of the overall results is written, also included in the present report, accompanied by a statistical analysis (frequencies) of the data, which is given to the teaching staff and constitutes a very useful tool for comparing personal result data with the mean average of the Department. In this way the teaching staff is given the opportunity to see if there are any problems and improve them. The teaching staff should aim at improving their subjects according to contemporary data. The more attractive the class, the more effective it is and greater the number of students who attend it.

### 6.1.3. Average weekly teaching load.

Most subjects, at least the theoretical part, are taught by tenures. Yet, a number of temporary (scientific and lab assistants) teaching staff, is employed with an employment contract, who have the necessary academic qualifications, as permanent teaching staff does not suffice. The provided weekly teaching load for the tenures, which also constitutes the mean average, is given in the following table:

<b>Rank</b>	<b>Teaching Hours</b>
Professors	10
Associate professors	12
Assistant professors	14
Lab Instructors	16

Concerning the assistants, the maximum numbers of working hours for the scientific assistants is 15 teaching hours per week, while the maximum number for the lab assistants comes to 16 hours per week. It must be noted, that at certain periods, members of the teaching staff offer voluntarily more hours than the provided weekly hours, in order to cover educational needs of the department.

### 6.1.4. Members of the academic staff of the Department who teach in the Postgraduate Program of studies.

The following table gives the participation of the teaching staff in the Joint Postgraduate Program of the Department of Dental Technology and the Dental School of the National and Kapodistrian University of Athens.

Part of the subjects is taught by the teaching staff of the Department of Dental Technology (“Dental Technology Materials”) and the rest by the teaching staff of the Dental School.

#### RANK:

Professors : Stavros Yannikakis, Eugenia Dimitropoulou

Assistant professors : Ourania Boulouxou, Antonios Promponas

Lab Instructors : Konstantinos Spyropoulos

### 6.1.5 Contribution of postgraduate students to the Departments teaching staff

As the postgraduate program has started recently there have been no graduates and as a result there is no postgraduate student contribution to the Department’s teaching staff.

## 6.2 Quality and effectiveness of the teaching process

### 6.2.1 Methods

Most subjects follow a mix teaching model which promotes the use of learner-centered methods as well as the exploitation of group practice. The model comprises:

- Contemporary face-to-face teaching with the use of infrastructures of the Department and the application of teaching methods such as lectures, lab exercises and learning based on assignment preparation.
- Support of the teaching process, through exploitation of modern technology and internet.

### 6.2.2 Updating process of subject content and teaching methods

Updating the subject content is done by the teaching staff at regular intervals. This takes place either during Graduate Program reform by the responsible Committee or independently, when the teaching staff through their research activities and their cooperation with other institutions, consider it necessary. In any case, the committee of the studies Program is informed of the updated syllabi. Any change in the studies guide as well as in the website of the Department which constitutes a modern guide tool of the Department. Moreover, at subject level, each number of the teaching staff occasionally updates notes distributed to the students or reissues his/her textbooks or manuals. At present the Department provides students with relatively new books or notes (publications of the last 5-7 years).

### 6.2.3 Cumulative grade point average.

Year of graduation	Mark distribution (%)				Cumulative grade point average	
	5,0 - 5,9	6,0 - 6,9	7,0 - 8,4	8,5 - 10,00		
2001-2002	4	37	22	1	(64)	6
2002-2003	4	38	26	1	(69)	6
2003-2004	4	46	44	-	(94)	7
2004-2005	2	26	38	-	(66)	7
2005-2006	3	28	29	-	(60)	7
Overall	17	175	159	2	(353)	7

### 6.2.4 Average duration for the degree acquisition

Year of entry	Duration of studies								Total number of students
	K	K+1	K+2	K+3	K+4	K+5	≥K+6	They have not yet graduated	
2000-01	31	45	8	4	1	-	-	14	89
2001-02	3	45	19	7	-	-	-	27	74
2002-03	-	23	23	-	-	-	-	52	46
2003-	-	7	-	-	-	-	-	79	7

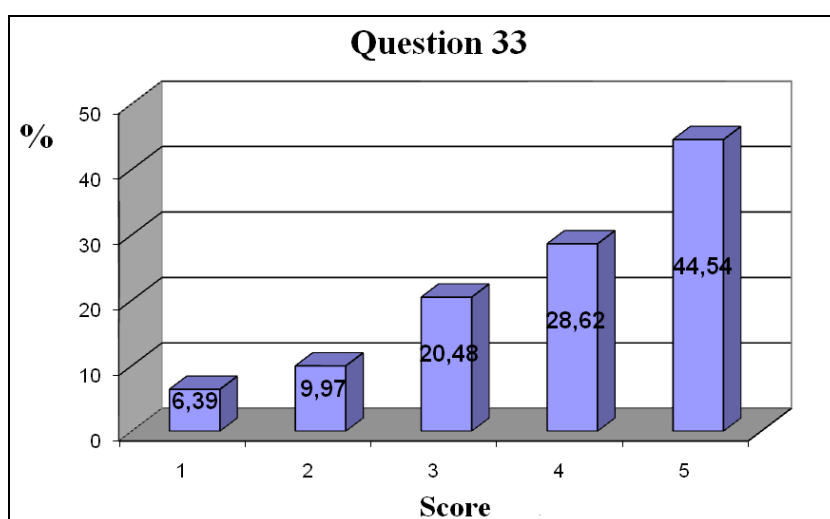
04									
2004-05	-	-	-	-	-	-	-	110	-
2005-06	-	-	-	-	-	-	-	91	-
2006-07	-	-	-	-	-	-	-	75	-

Where K= normal duration of studies per year in the Department

#### 6.2.4 Student's attendance of the teaching process

As mentioned in many points of this report, one of the targets of the educational process is that the "lesson" will become attractive to the student; it will arouse his interest so that he will attend continuously the knowledge provided to him independently from the form or the source it comes. In this area, the prevailing belief is that there is an increasing reduction of the students' interest in general.

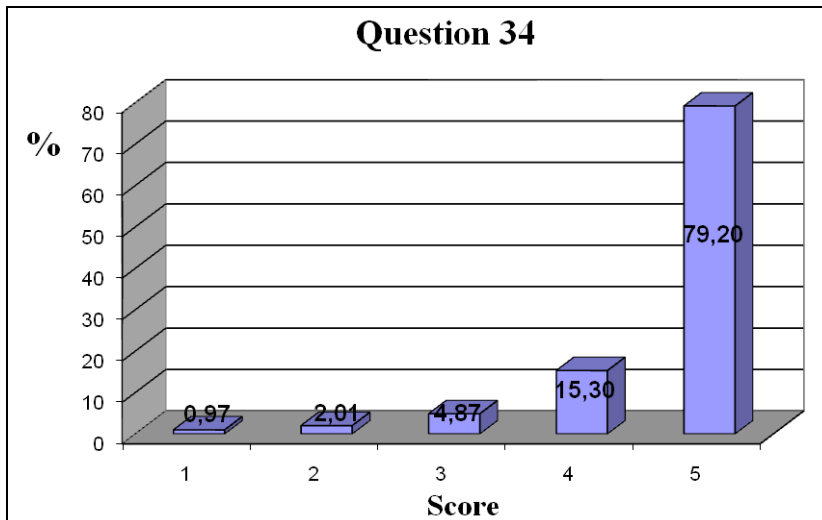
##### Lecture attendance frequency



If we judge from the individual subject reports of the numbers of the teaching staff of the Department, where it is shown an average attendance of 30-40% of the students, who declare the subject that, is in numbers on average 15-25 students, then the diagram that depicts this student's question is considered to be unreal. Adding up the percentages under the categories 4 and 5, there is a percentage of 73%, which in no case is true. Perhaps the students answered what they themselves would like to happen. This is a great problem and the same time a challenge for the Department as well as the tertiary education. In other words, how the students be motivated to attend classes and participate.

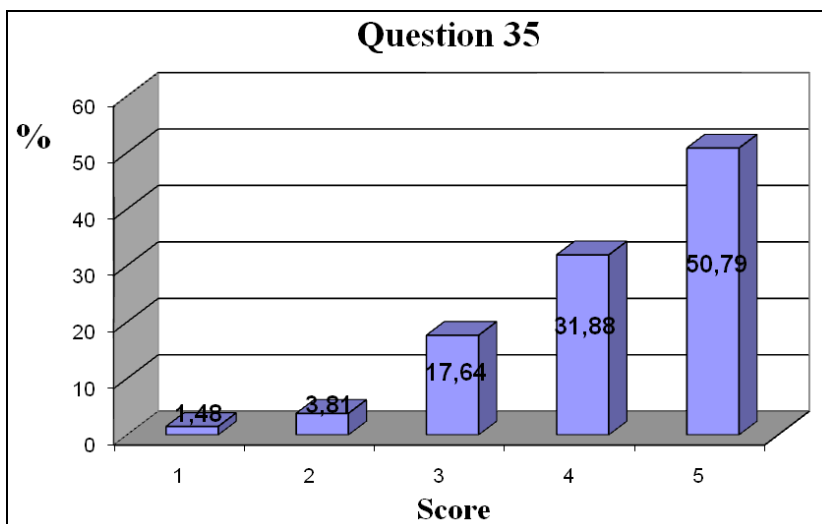
However, the problem of incomplete attendance will be improved when the Studies Internal Regulation of TEI will be modified, concerning the total attendance hours/semester and current Program data which relate attendance hours to workload.

### Lab attendance frequency



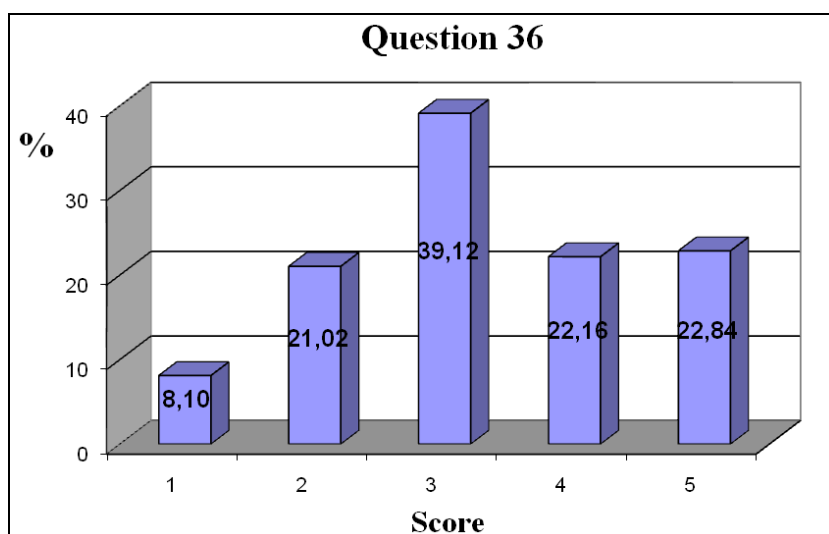
The profile shown concerns almost the total participation in the lab subjects. And the reason is obvious since the lab work is obligatory. Students, who will not attend lab classes successfully according to the Departments Regulation, will repeat lab classes in the next semester. Besides, the increase workload that students have makes them attend lab classes unflinching so that they can carry out lab exercises and projects/ assignments in order to pass the subject. The difference from the previous question and graph is obvious and very interesting for analysis.

### Frequency of participation in written assignments



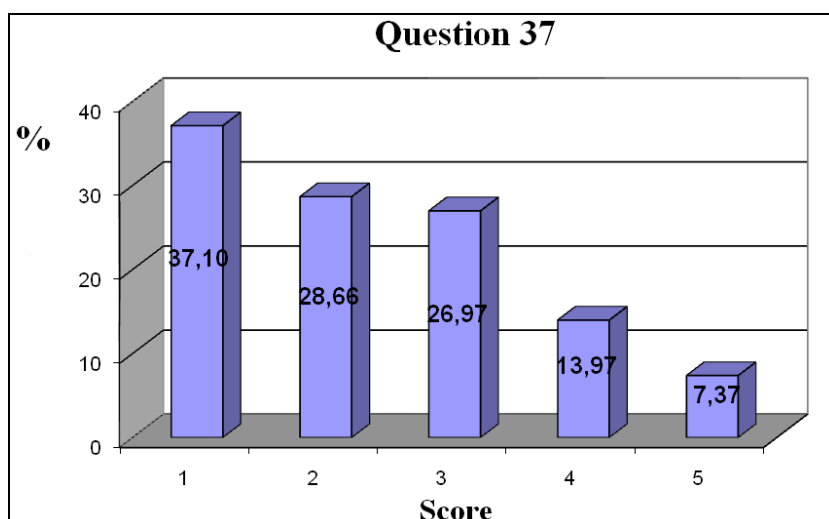
Likewise, prerequisite subjects and written assignments, which are compulsory, result in greater student participation in class attendance.

Systematic material study



The graph shows the great contradiction with the previous two questions, according to which students would be judged as studious, while as far as systematic attendance and material study are concerned, the image is not at all good, as the greatest percentage is at an intermediate level and the rest is distributed almost in cone shape, in relation to the mean average. If moreover don't take into consideration the fact that the questionnaires have been answered only by those who attend and who are considered more studious than the rest, then the image is rather worse.

Weekly hour hours of study per subject: 1= <2 hours, 2=2-4 hours, 3=4-6 hours, 4=6-8 hours, 5= >8 hours



Unfortunately the image is disappointing and accounts for problems aroused in all the previous questions of the questionnaire. It is obvious that the majority of students devote very few hours to the study of the subjects during the semesters. The reasons for the

situation which is rather general at all educational levels and in all specialties, with some exceptions, are of multifactorial origin. Reasons which may be suggested concerning the Department may be due to the following:

- Delays in providing students with books and manuals
- Educational procedure intermission for various reasons (occupations etc) resulting in rendering students relaxed.
- Classes are not as attractive and interesting as they should be; because tutors do not try their best to make students attend classes.

In the future the Department has to try and improve its image, by becoming more approachable to the students.

### 6.3. Teaching Organization

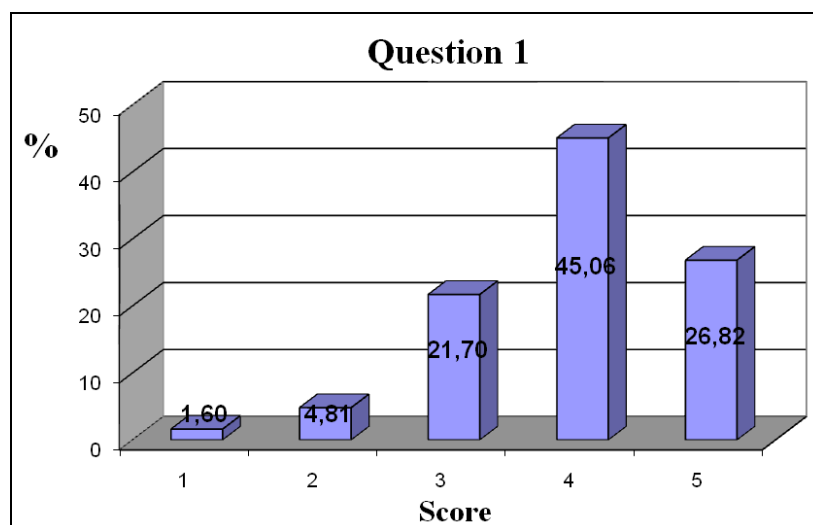
#### 6.3.1 Informing students of the subject material at the beginning of the semester

Course syllabi of all students are included in the studies guide of the Department, which is given to the students at the beginning of the semester. Additionally, there is a possibility of getting relevant information from the website of the Department. Besides, in the classroom, the first lesson is usually focused on the acquaintance with the students and giving information on the subject, such as the subject teaching method, books and manuals, assessment etc. Concerning lab classes, the staff, in their first meeting with their students presents the content of their subject, provide them with the lab regulation (see Appendices) and answer questions aiming at contributing to students orientation.

#### 6.3.2. Description of learning objectives of the subjects and expected results.

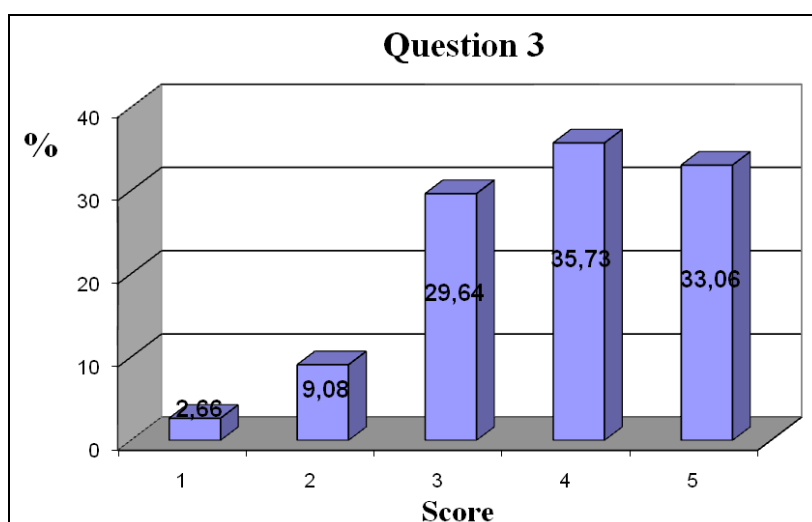
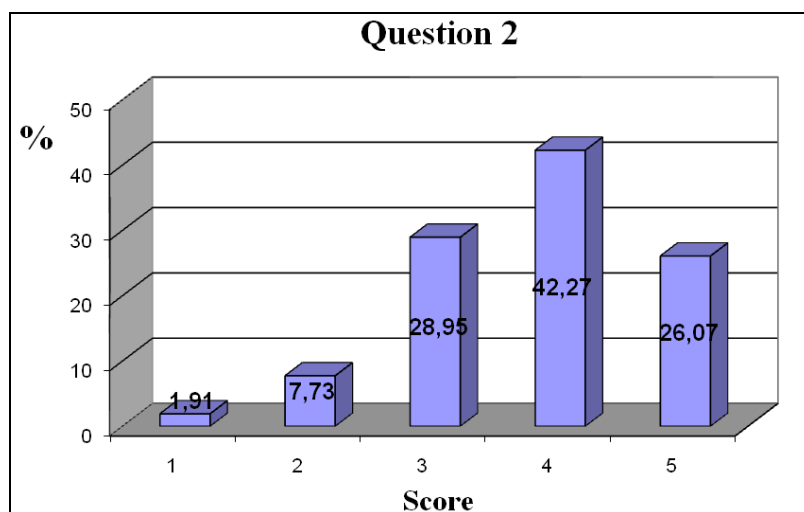
The learning objectives and the expected results consist an inseparable part of the subjects' description and are made known to the students, within the sphere of the above mentioned activities in the first classes.

##### Clarity of subject goals



The image of the Department is satisfactory. If general background subjects could be separated from specialization subjects, something that demands a great amount of workload and appropriate electronic data processing (EDP) the image could be much different.

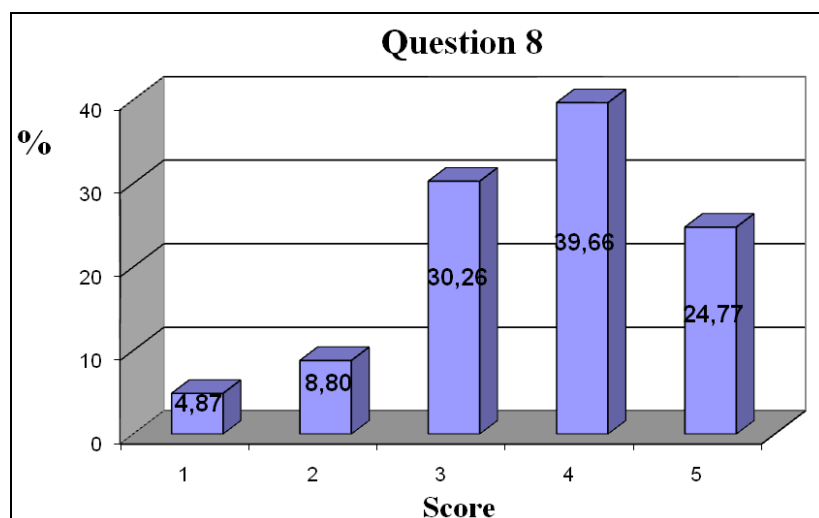
Material Organization and coverage of subject goals



The image remains similar to the previous since the questions 2 and 3 concern the same topic. Although the problems, that education faces, are known, concerning the loss of learning hours for the known reasons, the image is quite encouraging.

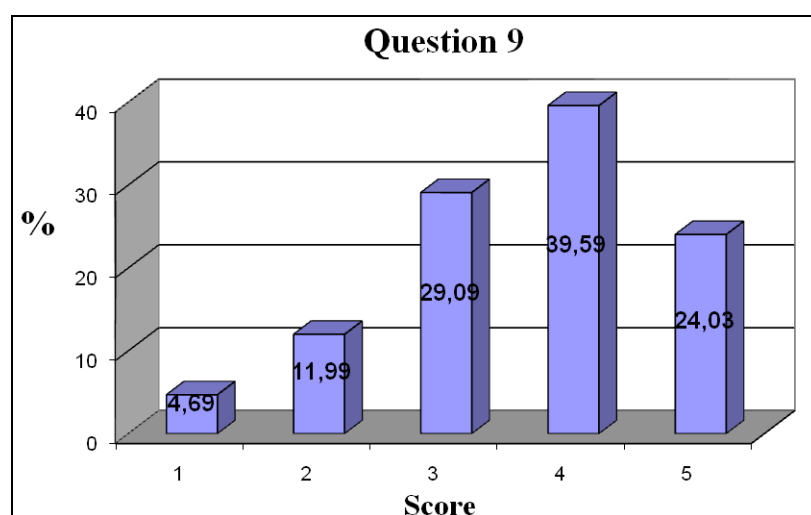


Necessity of prerequisite subjects.



Actually students seem to have answered quite maturely this question that is they have realized the value of prerequisite subjects, although these subjects could make them delay in the acquisition of their degree. Quite often, students complain and try through their representatives to press for changes in the status of prerequisites according to the existing condition. Of course the Department does not give in to those pressures which would finally result in poor educational quality, proved by the answers given by the majority of students.

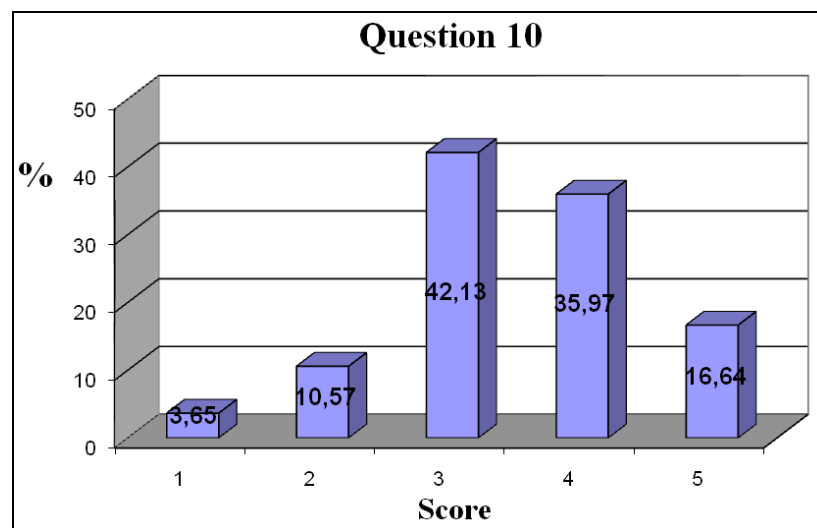
Knowledge obtained/in connection with other subjects.



The biggest perhaps, problem of the present educational system is subject interconnection. So, when students complete their studies, they are fully qualified and have acquired the necessary knowledge for every aspect of their profession. Yet, students are not qualified to that degree so as to face everyday problems. This is due to the fact that students cannot correlate knowledge on various subjects and organize their thought

for the constructive and qualitative result. They can surely manage this through time and experience. The main reason for this is that subject courses are not characterized by continuity and cohesion or emphasis is not given on the interconnection of subjects. Besides, very often the instruction “subjects must not overlap each other” is common. At this point, the tutor’s experience and competence are of crucial importance, as he can effectively and in a simple way relate subjects without repeating knowledge already taught. This is a point in which the Department needs to be improved since the Dental Technicians specialty is an applied science.

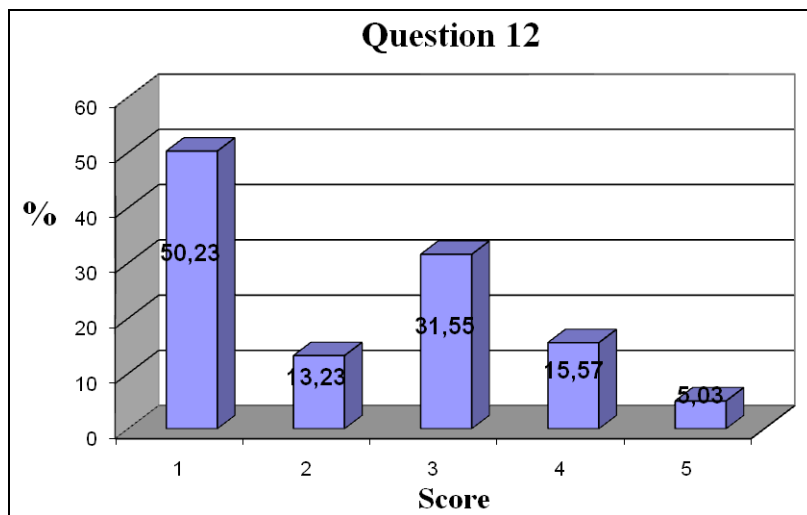
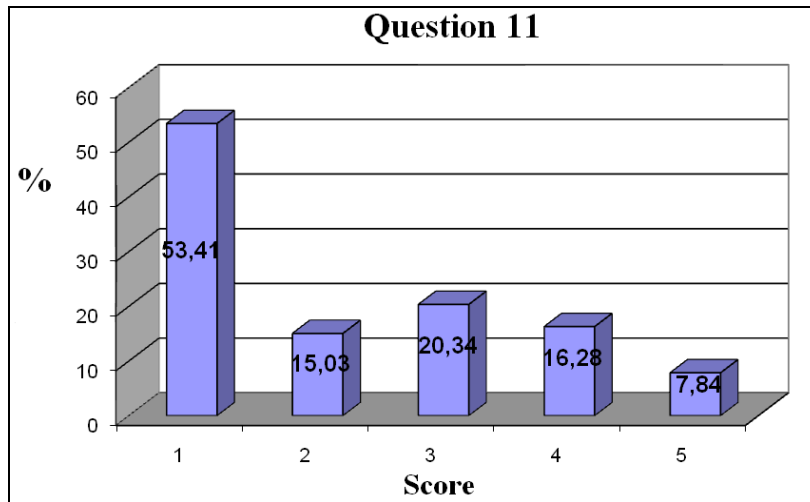
Subjects’ level of difficulty according to the year they are taught.



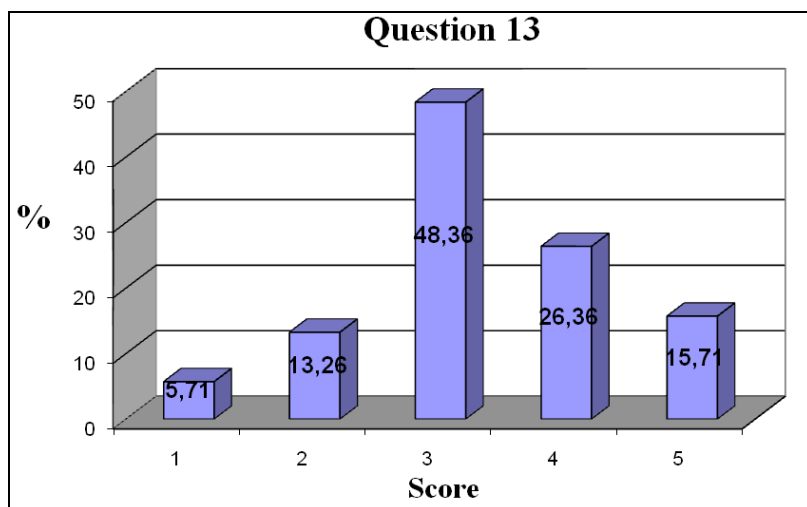
Subjects, theoretical or laboratory, taught at the Department may be characterized as difficult. They demand quite a lot of study, insistence, effort and attention. It is natural that a great percentage of answers are in the categories “much” and “very much”. Extra analysis of the question in relation to the semester of studies, could give interesting results.

Necessity for and quality evaluation of auxiliary courses.

Most students realize that in case they face difficulties, they themselves are responsible to a great degree. They find the educational quality of the Department satisfactory (this results from other answers as well) so that there is not real need for auxiliary courses. The problem is not the existence and quality of auxiliary courses but the students and staff’s interest and of course the material technical infrastructure of the system.

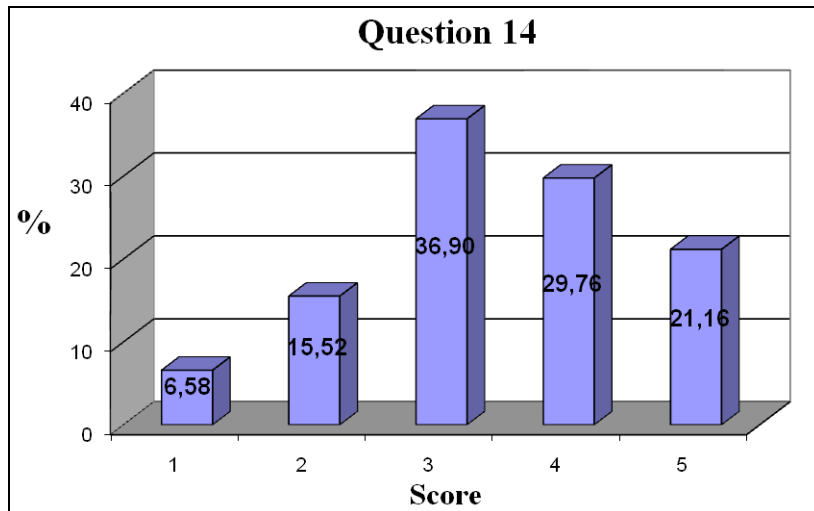


Number of ECTS in relation to workload.



Answers to this question must not be a hundred percent assessed, as the ECTS system is rather new and does not practically mean a lot of things to students. For this reason the distribution is in cone shape round medium average.

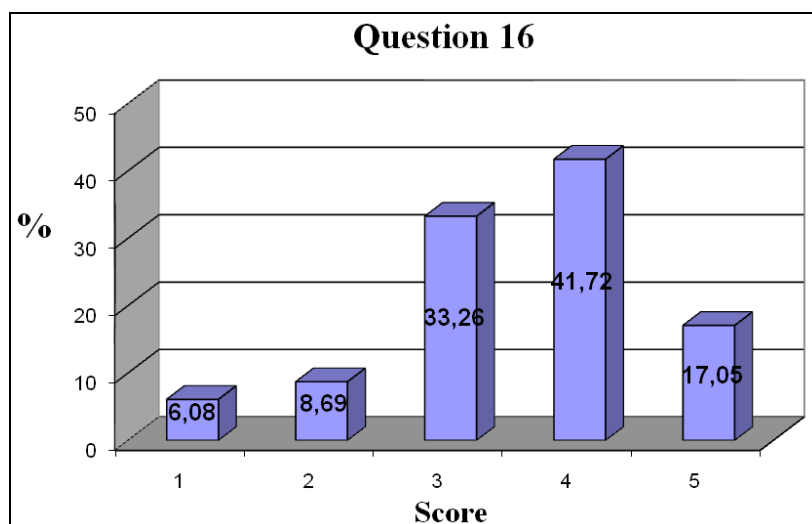
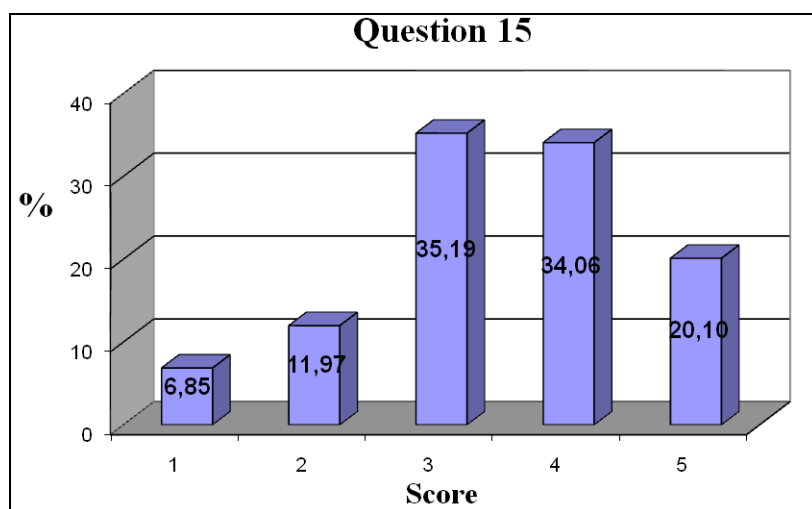
Transparency of grading criteria.



The image of the Department is not satisfactory. Although there is student access to their written papers after the end of the exams (this is reported by the teaching staff to the students' questionnaires) and possibility of discussion with the responsible staff, students do not consider that this process is completely transparent. This shows a partial transparency problem together with the real feel the students have about being graded with lower grades than what they expect. It would really help a lot and will be proposed for materialization, if after the exams finish, the answers are publicized on the Department's website, so that students can know if they have answered correctly.

Project Work/Assignments.

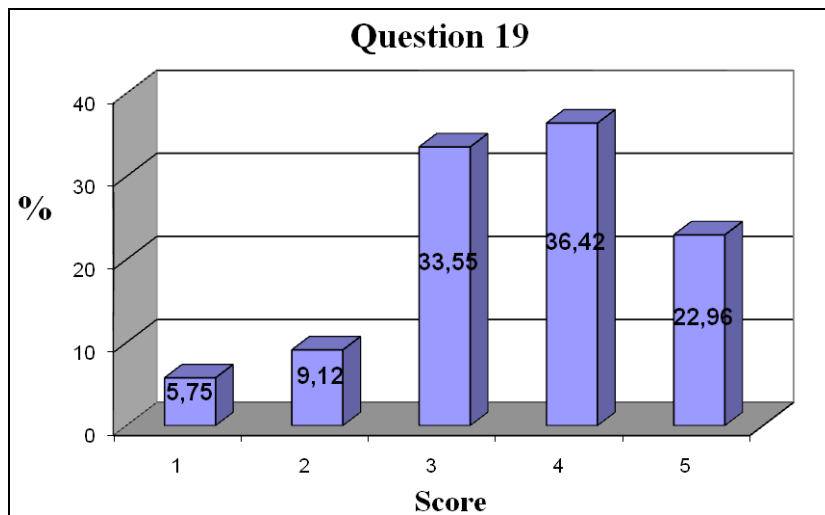
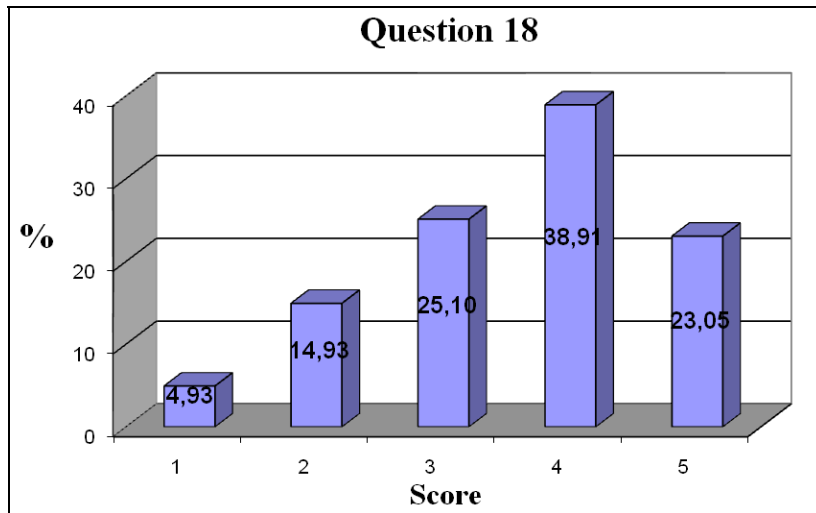
By suspending the course "practice-exercise" students are deprived of a basic means for practicing in depth learning, research paper writing and whatever all this entails (team work, data collection, etc). For this reason, depending on the tutor students, on optional or compulsory basis, are given topics which they have to prepare in teams. These assignments are presented at the end of the semester and are handed in, in printed form. They are graded and the grade is taken into consideration for the final subject mark. Helping and training students is important for the preparation of their dissertation.



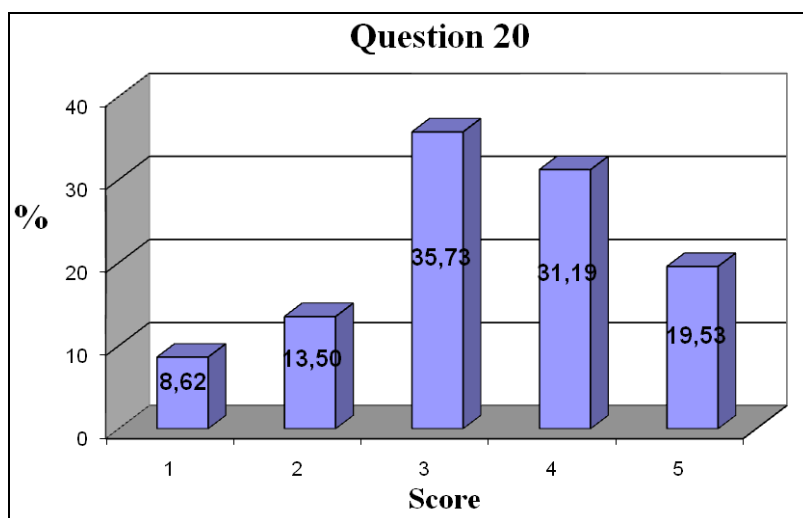
Concerning the questions, that if the assignment was given timely (question 15) and preparation time was sufficient (question 16), a moderate to good image is given. The reason is that students must first understand the subject matter and be familiarized with the basic elements in order to carry out the assignments. This is not possible from the first teaching weeks.

*Guidance in the preparation of assignments and quality of comments by the supervisor.*

To carry out their assignments, students are guided and supervised by the teaching staff. More specifically written instructions are provided for dissertation writing. Besides the role of the academic advisor (extensive reference has already been done) is exactly the same. Thus, the image given is good with a percentage higher than 63%. Students' assessment of the supervisor's quality comments is similar.

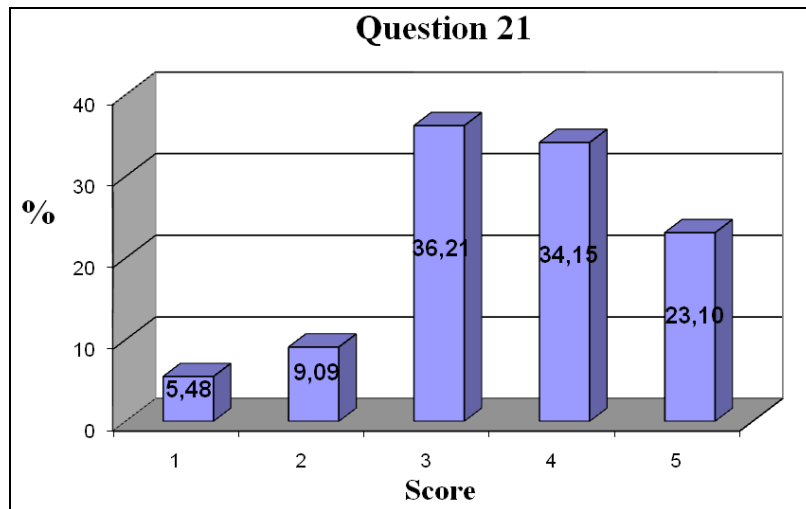


*Possibility for assignment improvement.*



The possibilities for the assignment improvement are very limited as far as semester subjects are concerned due to tight time and students' workload. Yet, it is believed, that these deficiencies and the mistakes that students have in their assignments are part of their education and have to be brought into surface and commented by the staff. On the contrary, for the preparation of their dissertation there is time for improvement and the only limit is the time each student sets.

*The influence of assignment in understanding the subject*



The truth is that we would expect a better image in the specific question, although in categories 4 and 5 the percentage is totally above 50%. Obviously, the topics given must be narrower, the staff's help must be greater and bigger emphasis must be given to the dissertation preparation and evaluation.

*6.3.3. Process of measuring learning skills acquisition.*

The measurement of learning skills acquisition takes place through:

- specific activities organized by the teaching staff in the context of the subjects
- statistical data taken from the questionnaires about teaching procedure assessment as formed above.

*6.3.4. Observation of timetable.*

The final and certified timetable is on the website of the Department and is kept during the semester given the fact that the limited infrastructure makes any modification inflexible. The only exception are cases of illness or staff absence, through the Secretarial, in print or on the website, students are informed and supplementary classes are announced.

*6.3.5. The rationalization of the organization and structure of the syllabus*

During the organization and structure of the syllabus the following criteria has to be fulfilled:

- Teaching of theoretical classes preferably in the morning zone.
- Combination of laboratorial and theoretical classes on a daily basis so that depending on their importance and degree of difficulty will prove less laborious for the students, where possible.
- Teaching of laboratorial classes both in the morning and afternoon zones so that the needs of the working students can be served.
- Avoidance of long teaching voids in the Program of each semester so that a continuous attendance may be accomplished as much as possible and a satisfying proportion of free time for study and implementation of other activities can be assured.
- Avoidance, where possible, of overlapping theoretical and laboratorial classes either of the same or adjacent semesters, so that phenomena such as excluding students from attendance will not make their presence.

*6.3.6. Fundamental introductory classes tutored by members of the educational staff of the two higher grades.*

Quite a few of the introductory courses in the first semester are instructed by members of other Departments (e.g. Department of General Medical Subjects etc.) The only subject taught in the second semester by members of the educational staff is: Removable Prosthodontics I; S. Yannikakis Professor.

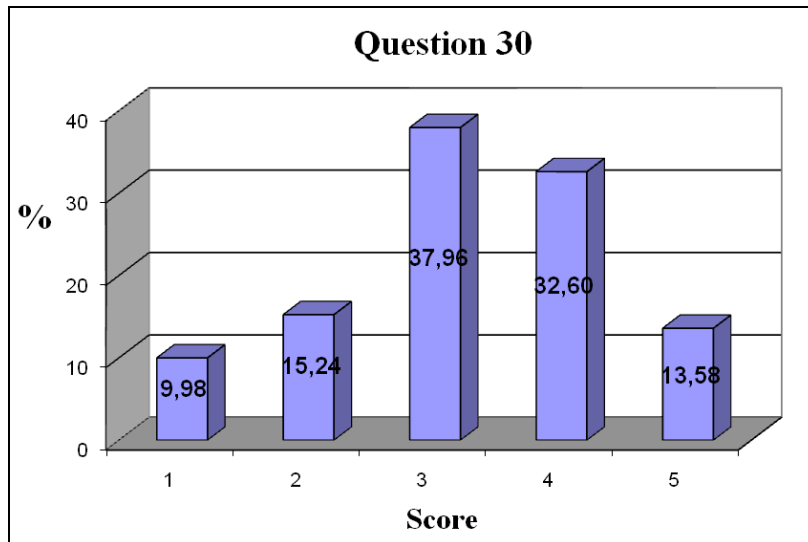
*6.3.7 Members of the academic staff of the Department who teach subjects which do not fall within their narrower or wider cognitive field.*

All members of the academic staff of the Department teach subjects that fall within either their narrower or wider cognitive field. Since the research-scientific field in which they are specialized is related to the instructed course it is considered that it pertains to the narrow cognitive field. Nevertheless, since the solid staff of the Department until now consists of dentists who had already covered the entire spectrum of Dentistry (in which dental technology is included) during their undergraduate studies they are entitled to teach other subjects from the wider field of dental prosthetics. Also dentistry students practice in the construction of prostheses in the laboratory and according to law 1666/86 they are permitted to construct dental structures on behalf of their clients.

*6.3.7 Organization and efficacy of laboratories*

The study and analysis of the results of the questionnaires concerning the quality and efficacy of the teaching procedure in the laboratories are shaped as follows:





*Adequacy of notes concerning laboratorial exercises.*

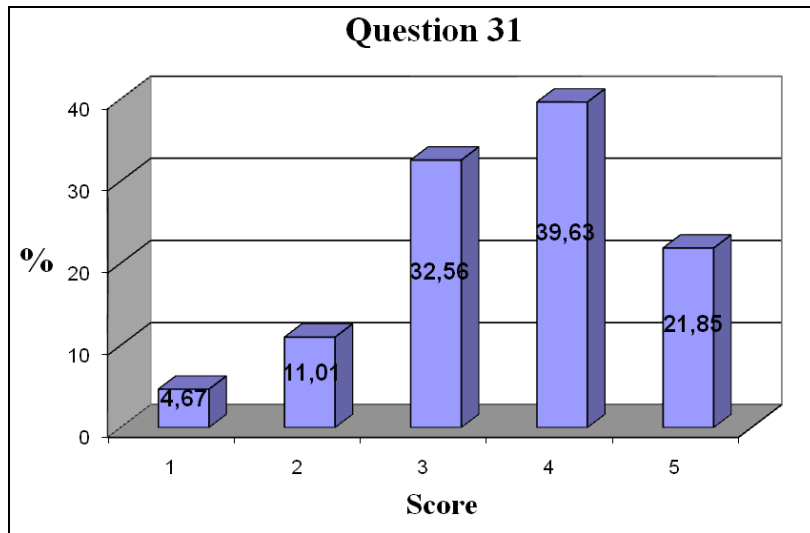
It is obvious that the largest majority believe that the notes which are handed out for the laboratorial exercises are not sufficient. Certainly this is a situation that the Department has to improve in the future. Nevertheless, it reflects the insecurity and weakness which at first students often experience during the implementation of difficult laboratorial exercises, as it has already been mentioned. However, it also indicates the weakness of the educational system- this may reach even the third grade instruction –and the student’s compositive thought and display of initiative are not being promoted. As a result, students prefer subsidiary manuals which explain the procedure step by step and become “ready-made food”; thus there is no need for critical thought, necessary for appropriate and substantial education. Nevertheless, with the introduction of multimedia (DVDs) during the laboratorial procedure some improvement of this parameter is expected (Although this is something new and still not fully integrated in the procedure). The view of students about this question is directly related to question 31 (see below). Both the image and explanations present similarities.

*Explanation of the basic principles of practice-exercise.*

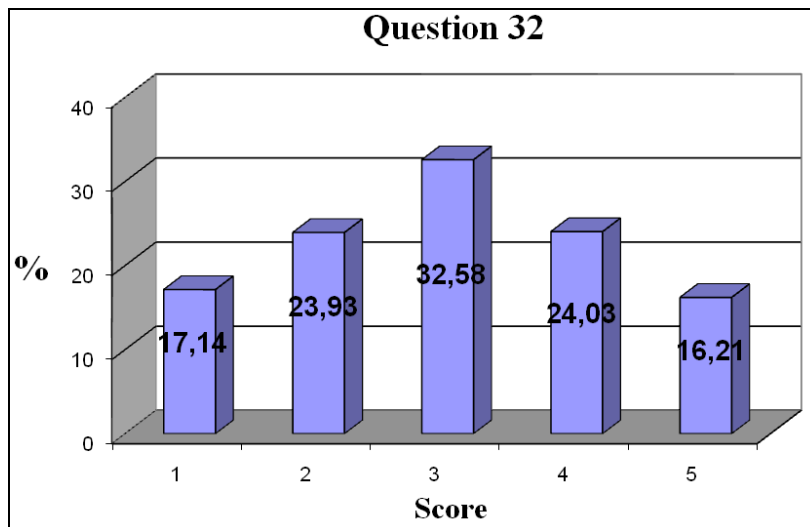
A significant number of students show that they cannot understand completely the basic principles of an exercise. It is normal that difficult laboratory exercises which are carried out in the Department’s laboratories may raise questions among students. The causes may be due

- a. to the large number of students in the laboratories and the inadequate ratio of a teacher to students (1/ 25-30) and
- b. the insecurity and uneasiness that a student may experience about something which is both new and difficult at the same time.

The fact that the majority of the students do not attend theory classes has an important impact on that they then attend laboratory classes without having the essential background.

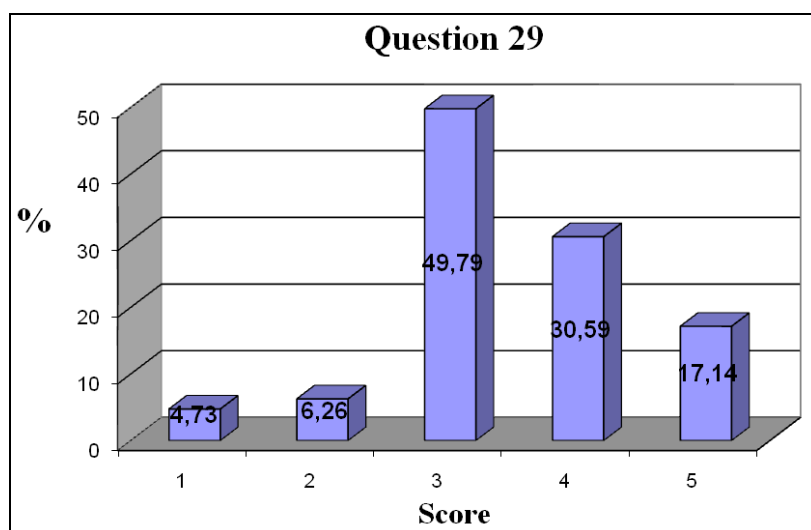


*The sufficiency of laboratory equipment*



The image about the sufficiency of equipment remains the same with the images of questions 34 and 35 because of the reasons explained previously. We believe that although the equipment of the Department could be better it is considered sufficient enough for the needs of the laboratory. What could be improved is the maintenance of the equipment which is assigned to an external collaborator, a procedure which may create beaurocratic obstacles and further expenses for TEI. Probably the procedure might be simplified if there were a stable staff (e.g. special technical staff, trained technically in the maintenance and the repairing of frequent damages; thus the procedure might be simplified).

Level of difficulty for the current year.



The image from the question on the degree of difficulty may explain the three previous questions which concern the laboratory; at the same time it confirms the arguments in the attempt to interpret the results. The majority states moderate difficulty while a percentage close to 47% believes that the difficulty is above average.

## 6.4 Educational subsidiary means.

### 6.4.1 Forms and number of subsidiary means (e.g. handbooks, notes, material from websites, etc.) which are distributed to students.

The instructional procedure is supported by various forms of teaching material which are handed out to students:

- Handbooks selected as principle books and are available by the institute.
- Teachers' notes provided in printed form either for courses which have no respective handbooks or as supplementary aids (e.g. laboratory guide-books etc.)
- Electronic bibliography is provided and also international data where students may find information about their studies and generally any specialized topic which interests them but not covered by printed aids.
- There is suggested bibliography on all subjects mainly in the library of the institute.

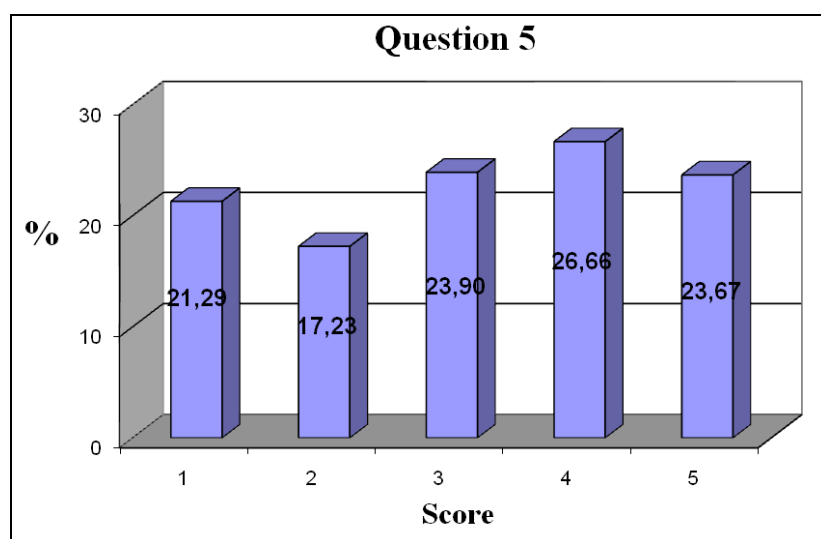
The subsidiary aids handed out to students in various types cover the entire curriculum.

### 6.4.2 Procedure for updating subsidiary aids.

Before the ending of each academic year a procedure of updating the lists of distributed handbooks and printed notes is activated so that the schedule for provisions for the next year will follow. In the framework of this procedure, the instructors are able to change the instructional aids and update the notes they provide.

### 6.4.3 How and when aids are exactly provided.

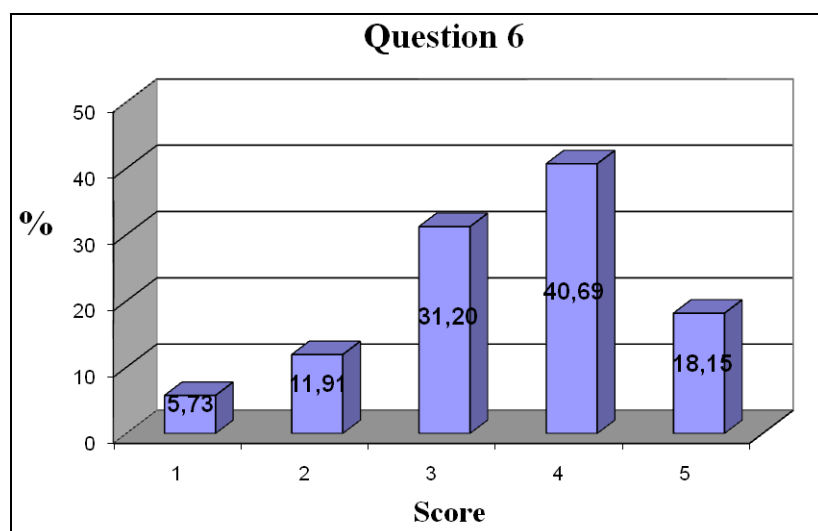
An effort is made so that the formal instructional aids (books, printed notes, suggested bibliography) are distributed in time to students. Unfortunately because of bureaucratic reasons and malfunction among services or the incapacity of the publishers of the books, there are significant delays in the delivery of the aids. Certainly, the procedure has been sped up in relation to the past, but still some improvement is required. This image is also impressed in the students' replies to question 5 of the questionnaire. It is obvious that the proportion from the "moderate" and below is higher than 50% and constitutes the worst image of all questions in the questionnaire. It is noted of course that the department does not function autonomously and that handbooks are handed out through central actions of the institute. As far as the notes are concerned they are delivered always in due time since the department sees that the store has sufficient quantities of books each time.



#### *6.4.4 Proportion of curriculum covered by aids.*

The curriculum is covered entirely by aids. When the main handbook does not cover the curriculum, supplementary aids are handed out by the tutor. Besides, as the student may consult the suggested bibliography and thus draw up information, the learning needs on the cognitive subject are completely met. As it is well known, in all educational institutes there is a continuous renewal of bibliography so that any new needs can be met.

#### *Evaluation of the main book or notes.*



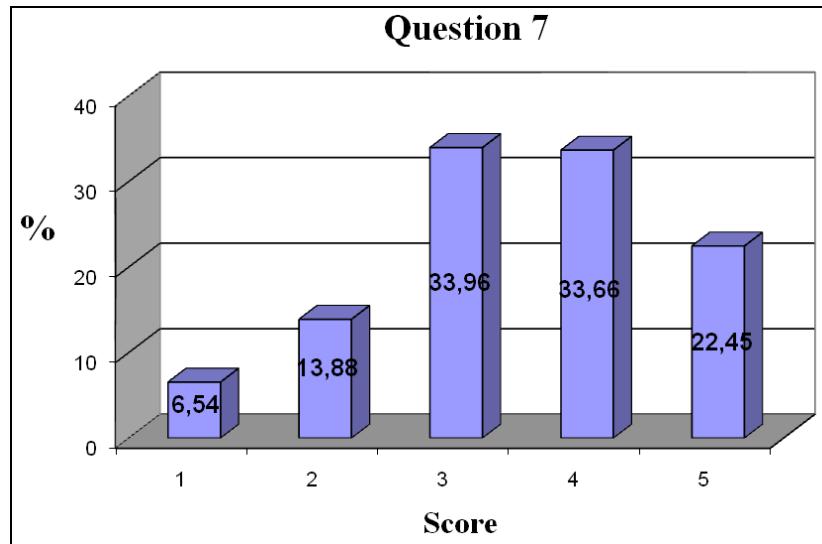
The students' answers show that the basic handbook and notes are at a quite satisfactory level. Actually, most of the handbooks and notes which are distributed in the department are relatively new. (2001 and there-after)

#### *6.4.5 Librarian support besides the distributed manuals.*

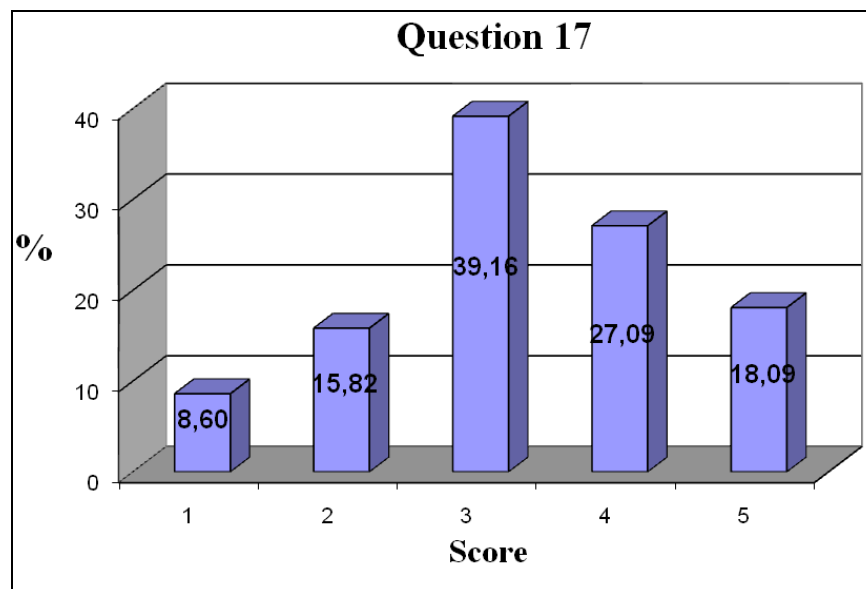
As mentioned above, apart from the handbooks distributed to the students, bibliography is also suggested from quite accessible sources such as the library of the Athens TEI. Thus the central library in cooperation with the instructors, provide support for the order and renewal of the books. Also students are guided towards the finding of information from the libraries of other Departments or Faculties which have the same topics (e.g. Dental School of Athens). Moreover, students receive significant support through the internet and also through the participation of the Institute in Healink website; also instructors themselves may exploit the free public internet resources.

#### *Availability of bibliography in the library of the institute.*

Depending on the available budget, the department attends regularly, to the renewal of library books concerning the specialty of dental technology. Furthermore, the books of other authors which are considered basic and classic, are available simultaneously for a sufficient number of students in more than one copies provided that these books are found on the lists of the proposed bibliography.



*Availability of relative research material in the library*

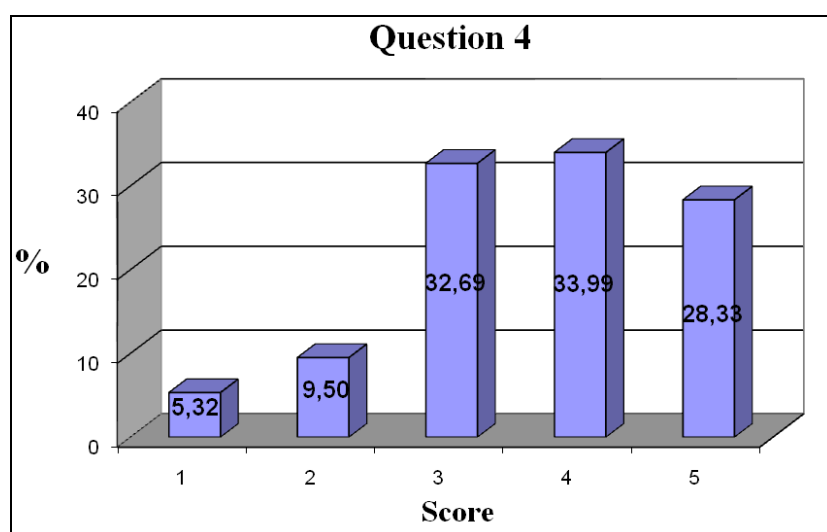


While the image for the availability of library books is good enough (question 7), it seems that there are shortcomings in the question about the relative research material for the implementation of an assignment. This phenomenon is explained quite simply, by the fact that the specialty of dental technology presents an enormous research field that is impossible to be covered sufficiently by a department such as the present one, especially when the library is organized in collaboration with the institution. Fortunately our students, being urged by the instructors of the Department, can frequently consult the library of the Faculty of Dentistry, which provides them with much material.

## 6.5 Quality of educational aids.

### Effectiveness of educational material for a better comprehension of the subject.

The educational process is supported by several forms of teaching material which is distributed to students; books that are selected as basic ones for each course and are available by the institution, teachers' notes provided in printed form on subjects where there are no corresponding handbooks; these may also be provided as supplementary manuals to the basic book. (e.g. laboratorial guide-books etc.), electronic bibliography and international data bases where students may find information about both their studies and specialized subjects they deal with but still not covered by the printed aids. There is proposed bibliography for all courses mainly in the library of the institution. The entire curriculum is covered by aids of various forms.



The image of the Department appears good enough. Only a small percentage <15 % considers the educational staff insufficient. It might be quite interesting if this percentage could also explain the reasons for which they consider it as such. Perhaps there have been ideas for possible improvements. That is because the basic book that is handed out is “judged” as good, bad, mediocre etc. However, multiple bibliographies are supplied and the student that is really interested can seek other resources. It appears though that during the second-grade instruction, students are being accustomed to the classic pattern of “teacher-book”; this model however, lacks time and cannot provide knowledge. The department should emphasize on the students’ briefing concerning the continuous effort to gather knowledge within the very first days of their training, something that in no case can be limited by either the classroom or the book.

## 6.6 Available means and infrastructures.

The issue of land planning of the Athens TEI is familiar, as it entails serious lack of space, offices, classrooms, laboratories etc. The huge number of both departments and students contributes to this issue. Because of this, various rooms have a mixed use (classrooms and laboratories) which may cause disturbance and also have an impact on

the quality of education. There is an immediate need to rehouse the departments or even the entire TEI into areas having more comforts and greater potential at their disposal.

### *6.6.1 Classrooms*

#### (a) Number and capacity

Three classrooms (A21, A23, A25) with average capacity of 30 students.

#### (b) Sufficiency, convenience and quality.

The number of seats is insufficient. It is noted that the number of students who attend the class (at least during the first weeks) is above 30. This results in both disturbance and nuisance in the implementation of the course. One of the causes that the number of students attending classes is gradually decreasing is the narrowness of space and the uneasiness caused by overcrowded classrooms. It is noted that classrooms A21 and A23 are used as laboratories for the courses of “Dental Morphology” and “Orthodontics I and II)

- Inconvenience after the ending of each class as the classroom should be tidied up and handed for the next use.
- Hygiene conditions extremely unsafe as the classrooms were not constructed for laboratory use.

#### (c) Degree of utilization.

Full throughout the day and week.

(d) Sufficiency, convenience and quality of supportive equipment. The supportive equipment is considered sufficient. The classrooms have projection systems via C/Ps, a slide projector etc. Classrooms A21 and A23 provide plasma screens connected to a C/P. There is air conditioning and also ventilation. Classroom 25 lacks significant equipment.

### *6.6.2 Laboratories.*

#### (a) Number and capacity.

Seven classrooms, two of which contain 30 seats (lab I and II), one 26 seats (lab IV), three 20 seats (morphology, orthodontics, ceramics) and one 15 seats (multimedia lab). It is noted that classrooms A21 and A23 are used both as laboratories and classrooms. This results in great delay for the preparation of the classrooms switching from one use to another. Also hygiene problems are created since the classrooms cannot be aired sufficiently after the use of various materials. The number of seats is considered insufficient.

#### (b) Sufficiency and room convenience.

The spaces are planned according to the needs of a modern dental technology lab, providing individual working seats equipped with the necessary appliances and are considered satisfactory. Sometimes issues are raised, due to the large number of students.

#### (c) Degree of utilization.

They are used according to the teaching needs. Because of supernumerary students, they function during morning and also afternoon hours.

#### (d) Sufficiency, convenience and quality of laboratorial equipment.

The equipment is sufficient and convenient. Its sufficiency depends on the number of students. The image appearing in the department shows from question 32 that has been commented earlier. The largest proportion regards the equipment mediocre, a fact due to the large number of students. As a result of the large number there are delays in the implementation of exercises but also this has an impact on the quality and performance of students as it may affect their judgment.



(e) Sufficiency of stores (laboratorial equipment, reagents, etc).

There is no storage room except from a store for the permanent equipment of the department and another one for consumables but of extremely limited space. Sometimes they are used as stores for objects to be destroyed and are concerned insufficient. The stores in the labs, which contain materials, appliances, the students' assignments, etc. have limited space resulting in inconvenience during the operation of the laboratory.

All the above are summarized in the following table

	Offices	Classrooms	Laboratories	Other
Square meters (m <sup>2</sup> )	Secretariat : 18 Head of the Dept Office: 8 Teaching staff office. I: 20	A21: 64* A23: 64* A25: 64	Lab I: 81 Lab II: 102 Lab III: 40 Lab IV: 108 Multimedia lab: 32 Research Lab: 20	Casting Lab: 37 Consumables storage : 12 Equipment storage: 12 Storage room uses as an office (staircase) : 7
Total	46	192	383	68

\* classrooms A21 and A23 are also used as laboratories.

Thus, the total available space for the Department is approximately 689m<sup>2</sup>.

### 6.6.3 Staff of technical support.

(a) Number and specialties.

Three members of special technical personnel should maintain the equipment, survey laboratories, distribute notes to students and in general to carry out several aiding duties for the proper function of the department.

- 1) Fountoulaki Maria
- 2) Rembi Vasiliki
- 3) Bimi Ioanna

## 6.7 Degree of exploitation of computing technologies and communications.

### 6.7.1 Use of computing technologies and communications in theoretical teaching.

The classrooms are provided with C/Ps, data projectors and some with plasma screens. Thus the instructor has electronic equipment at his disposal to project his subjects and may exploit all provided possibilities. Through the action of C' KPS, EPEAK, "reformation of syllabuses" instructive DVDs were manufactured for several courses. However other electronic aids circulate on the market or marketed by companies of the relevant branch, which may supplement the teaching process. Also, in classrooms there are phone lines and it is possible to be connected to the internet; thus the study of a subject can be realized within actual time in the presence of both tutors and students.

### 6.7.2 Use of computing technologies and communications in theoretical teaching.

The same stands for the equipment and laboratorial teaching. Moreover in some laboratories cameras have been installed to project on screens the demonstration performed by each tutor. Thus it is possible to observe the demonstration of the

laboratorial phase or the method which is being developed magnified without crowding around the instructor.

Generally the Department has satisfying electronic equipment to support the educational process.

## **6.8 What do you think of the ratio of educators to students and their cooperation?**

### *6.8.1 Ratio of tutors/students in classes.*

The ratio of tutors/students in classes, since we refer to the students of a typical semester is 1/30-35 approximately.

### *6.8.2 Ratio of tutors/students in laboratorial classes.*

In laboratories attempts are made so that two instructors are present (permanent or temporary) and since the number of students is large they are divided into groups (not more than 22-25). Thus, most of the times the ratio comes to 2/25 approximately. Also attempts are made by the two instructors so that one of them is a member of the educational staff of the department and the other one temporary. Certainly, this is not always possible and it depends on the factors below:

- Number of members of the educational staff which as already mentioned is considered small in relation to the needs of the department. The state, via the competent ministry has to see towards this direction so that standing posts are increased and proclaim and cover posts with permanent members according to the solid requests of the department.
- Number of temporary associates, scientific and laboratorial, which each time depends on the available budget of TEI (although there has always been a tendency of limitation.)
- Number of entering students which although it is decreased, in relation to the past, is still considered large.

### *6.8.3 Cooperation of the tutors with the students.*

The cooperation of the tutors of the department with the students is considered quite satisfactory. Issues are rarely raised and are always faced in the best way. The tutors' scientific training and education but also the students' high standards due to the national examinations, contribute to a good climate. (It is noted that the serving permanent staff are all dentists, university graduates of academic qualifications defined by their grade)

The cooperation is not only directed towards educational subjects by answering questions and the implementation of exercises and dissertations but also expands in a consultative way to a number of issues which preoccupy students; the most important concern professional orientation after graduation and postgraduate options. That is why the Institute has established the enactment of Counselor Instructor.

(Website: <http://www.teiath.gr/seyp/dentaltechnology/articles.php?id=6132&lang=el>)

Before the beginning of each academic semester, to cooperate with students, tutors have to announce office hours at the meeting of sectors and a comprehensive record is forwarded to the head of the department. The observance of this schedule is both obligatory and committing for the instructor and constitutes a part of his weekly educational obligations. The office hours of tutors are announced outside their offices and

at the secretariat. In the case of absence, the instructor briefs the students through a printed announcement on the announcement Council of the Department.

## **6.9 How do you rate the linkage between teaching and research?**

### *6.9.1 How are students trained in writing a research paper?*

In the framework of the assignments the students have to work out during their studies and, more specifically for the needs of their diploma thesis, it is necessary that students use the proper bibliography and scientific articles. For that purpose, they are informed by the teaching staff about the use of the TEI library and the cooperating electronic libraries. Moreover, it is recommended that they look for articles and e-sources via Internet, always focusing on the need for documentation according to the international systems. To this end, the syllabus includes the subject “Research Methodology” which aims at familiarizing students with research paper writing and documentation.

### *6.9.2 Are students given the opportunity to participate in research projects?*

Not, for the time being. As it is mentioned in the unit concerning research, the organization of a research laboratory also aims at giving the students the opportunity to participate, at least in the beginning by doing quality control of the projects they do themselves.

## **6.10 What do you think of the cooperation among national educational centers, foreign ones and the public entity?**

### *6.10.1 National educational centers which the Department cooperates with.*

The Department cooperates with the Dental School, University of Athens, mainly for the co-organization of the postgraduate department. Also the library of the Dental School constitutes an excellent source of information for our students as it provides books, journals, theses, monographies and access to electronic data bases.

### *6.10.2 Educational cooperation with local, regional and national social agents.*

The department has repeatedly cooperated with the Institution of Social Insurance (IKA) about the absorption of our practicing students. Also, it cooperates closely with the National Association of Dental Technicians to face a series of issues, such as the improvement of the enactment concerning Dental Technician profession, organization of national conventions, practice of dental technicians and other subjects concerning the branch.

## **6.11 What do you think of the mobility of both teaching staff and students?**

### *6.11.1 Strategic planning of the department as to the mobility of the academic community.*

The department supports and facilitates the mobility of the members of the department whether this concerns the research activity or their absence at conventions and sees to substitute the absent members in the instructory procedure, always in cooperation with the Institute.

*6.11.2 How many and what agreements have been made to support the mobility of the educational staff?*

The institute provides for a minimum allowance for the participation in conferences. Also, funding projects for the submission of research Programs are announced regularly.

*6.11.3 How many students of the department have moved to other institutes/universities in the framework of academic activities during the past 5 years?*

Two persons.

*6.11.4 Procedures for the acknowledgement of the educational activities which were realized in another institute/university.*

As soon students have returned they submit an application at the secretariat of the department to have their courses acknowledged. The tutor in charge of the relevant course verifies in writing the students' evaluation (credits) after comparing the syllabuses and the evaluation provided by the corresponding educational institute/university.

*6.11.5 How satisfactory is the function and staffing of the Central Office for International/European Projects and their associations?*

The Office of International and European Projects operates centrally at TEI level. Its operation and staffing are considered satisfactory. At the Department there are tutors in charge guiding the interested students. The enactment though does not produce results equal to its possibilities and importance; this is due to a limited projection but mainly to the decreasing interest of the students.

*6.11.6 What are the actions of the department concerning the promotion and briefing of the academic community on mobility projects?*

Announcements, the internet and briefing at the freshmen's reception.

*6.11.7 How are entering students supported?*

Through the Students' Providence Office of the Institute.

*6.11.8 Is there an additional financial support for both students and members of the academic staff who take part in the mobility projects (from the Department or/and the Institute)?*

There is no financial support but expenses on either communications or feeding are covered minimally.

*6.11.9 How is the quality of the staff's mobility evaluated?*

Through common publications of the research studies or the proceedings of the conventions they have been taken place.

## 7. Research work

### 7.1 Promotion of research in the framework of the Department.

#### *7.1.1 Significant research policy of the Department.*

The research carried out until now concerns the research interests of the educational staff and takes place either individually or in cooperation with other members of the educational staff within the framework of research suggestions that are often submitted to TEI-Athens. A research policy has not been scheduled in the department up to this time. Neither is there a research committee to attend and synchronize the progress of a research project in the department until its completion and the publication of the results. Definitely, there are future plans at the Department to call such a special committee that will bear the responsibility to plan the research policy of the Department in cooperation with the tutors. Nevertheless, it is not enough to call and operate such a committee to support the conduction of research. The attitude of each tutor is considered a definitive factor. The enactment of such motivations by both the state and TEI will contribute greatly to enhance such motivations.

#### *7.1.2 Follow up of the Department's research policy.*

Since a comprehensive research policy hasn't been planned yet by the Department of Dental Technology no follow up can be conducted. If the research suggestions that are submitted to TEI -Athens are funded by TEI the procedure indicated by the significant project is followed (e.g. Thalís). The realization of the significant research is attended through this project. If the research suggestion is self-funded (that is, to be supported by the Department and the tutors who participate in the research), progress reports on the research work until the full completion of the research should be submitted to the Research Committee of TEI.

#### *7.1.3 The announcement of the statement on completion of the research project of the Department to the Research Committee.*

The notification of the research results that are finally carried out is done by the tutors who have submitted them and it may be issued in a scientific journal of weight or announced at a scientific convention.

#### *7.1.4 Motivation of the members of the academic community for the realization of the research.*

Generally speaking, one might say that no motivation is offered to conduct research. Even whenever a research suggestion is integrated within a EU project it cannot serve as a motivation for a tutor in TEI; this is due to the low allowances provided for a heavy work load required until the assignment has been completed. In most cases allowances to third persons who may carry out a part of the assignment on behalf of the researchers such as the construction of testing specimens or their elaboration, the use of laboratory appliances with an allowance etc. Also secretarial support is not provided so this becomes an adverse motivation which increases the work load (written work) of the tutor. These problems are more intense in departments that do not have a large number of permanent

tutors, as it is the situation in the Department of Dental Technology. The fact that quite a few instructors in the department are of advanced age (50 years and above), with little aspiration and perspective to evolve to a higher grade, is another adverse motivation. If there were some perspective to evolve both the personal aspiration for progress and the motivation for research for producing relevant research work for their evolution might be a motivation.

#### *7.1.5 Briefing of the academic staff on financing possibilities in research.*

The staff is briefed by the announcements of the Research Committee which are put up on the central website of the Athens TEI, via e-mail forwarded to the tutor's gate.

#### *7.1.6 Support of the research procedure.*

The research suggestions which are submitted (individually or collectively) by the tutors are either self-funded or included in a European research project and are financed by the EU. Research projects are often financed from the special account of TEI. As mentioned above the assets are scarce and this becomes also adverse motivation for the conduction of research. Besides the assets there is no support in the research process at central level (TEI) so as to create a research laboratory with infrastructures, secretarial support, technical staff etc.

Thus, most of the research attempts are due to the initiatives of the members of the educational staff and are carried out with much labor, lost time and certainly cost.

#### *7.1.7 Infusion of the research result into the department and also the Greek and international academic and scientific community.*

Tutors who have performed the research take the initiative to distribute copies of the published scientific assignments or conventional announcements to the students of the department. The results of the research are communicated to the research community through issues in both Greek and foreign journals and also in national and foreign conventions.

#### *7.1.8 Infusion of the research results into the local and national-social environment.*

The results of the research work are announced either to firms or industries that might be interested and also the possibility for cooperation with these firms or industries in common research projects is examined.

## **7.2 Research projects and assignments performed at the Department.**

### *7.2.1 Research projects and activities which were realized or have been in progress for the last 5 years.*

I. A study of reinforcing the acrylic of complete denture bases with fibers from different materials. The above research has been completed and its results were published in a home scientific journal. (Odontostomatological Progress 2004;58:80-92)

II. A study of reinforcing the plaster with various reinforcing agents. The first part of the research has been completed and the results are to be published in a national scientific

journal. (An assignment that has been accepted to be issued in Odontostomatological Progress) The study on reinforcing the plaster continues and its second part is in progress. (progress report to the Research Committee, register no. 1207/19-10-06)

III. Manufacture of an electromagnetic fatigue machine for the study of fatigue strength of complete dentures. The research is in progress (progress report to the Research Committee register no. 208/10-10-06)

IV. The influence of the labial notch and the anterior diastema on the stress field of complete upper dentures. In this experimental research the alterations of the maximum stresses of the complete upper denture, caused by deepening the notch and the diastema, are measured using electrical strain gauges. The research is in progress.

V. In the framework of the “Thalis” project an assignment is being carried out under the title; “Improving fit in implant prostheses. An in-vitro study.” One of the important factors in determining success of implant supported restorations is the precise fit between the superstructure and the implant body or an implant abutment. A poor fit introduces tensile, compressive and bending forces and may result in mechanical complications. The stresses introduced at the time of prosthesis placement may remain after several years in service. Moreover the growth of microflora into an existing gap at the implant or the abutment level may produce complications to the surrounding tissues. Thus, accurate fit of prosthetic components to implants has been considered as prerequisite for successful long-term osseointegration.

As far as the passive fit is concerned there is a number of questions which bibliography deals with, e.g. which fit is considered passive, what are the reasons which hinder the absolute and non-tense fit, in which stages of the manufacturing dimensional changes affect fit, and so on.

The purpose of this in-vitro study is to investigate the strain development during tightening of a screw-retained 5-unit superstructure constructed by 5 different methods.

#### *7.2.2 Percentage of members of the educational staff undertaking initiatives.*

Approximately 30% of permanent tutors.

### **7.3 Research infrastructures.**

#### *7.3.1. Number and capacity of research laboratories.*

Recently the Department has acquired a space of 30m<sup>2</sup> which is planned to be turned into a research laboratory; however the constructional reformative works are in progress. All the scientific instruments of the department have been moved there. At this time it is being equipped with C/Ps and we do hope that it will soon be in full order.

#### *7.3.2 Adequacy, convenience and quality of research labs.*

The new area of the Department is being rearranged properly, and will be able to cover the basic needs of the department during research.

#### *7.3.3 Adequacy, convenience and quality of lab equipment.*



Up to this time, the laboratorial scientific equipment of the Department has been sufficient for the research carried out in the Department. Specifically there is a bending test machine for materials and an electronic bridge to measure distortion by strain gauges. Also there is a stereomicroscope. As far as the convenience and quality of appliances are concerned they are considered satisfactory enough for basic research needs. Certainly there are bigger and more punctuate appliances which though are too costly for the budget of the Department. The equipment which is relevant to Dental Technology and is used as subsidiary in the conduction of research is considered satisfactory and qualitatively suitable. With the assistance of this equipment matrixes, testing specimens of various dimensions and of different materials and also original prosthetic work (complete dentures, bridges, partial dentures) can be constructed in the Department and used as testing specimens in the research.

#### *7.3.4 Available infrastructure and needs in the research procedure.*

The available infrastructures do not cover the research needs. Enrichment of infrastructures, with new appliances and improvement of the existing ones, is necessary. This however might not be feasible at department level. Nevertheless, the Institute could equip and organize a common research center which may become accessible to all departments after proper programming.

#### *7.3.5 Research subjects that are not covered by the available infrastructures.*

The current infrastructure allows the conduction of research in the study of static mechanical properties of both dental materials and prosthetic work, though to a limited extent. The available infrastructures do not cover the field concerning the study of dynamic properties of prosthetic structures and materials. For example, indices on the study of dynamic distortion of prosthetic work and the structural continuity of materials by vibration analysis can be reported. Other mechanical properties of materials and prosthetic work not covered by the available infrastructures are the fatigue strength and measurement of hardness.

Of course the mechanical properties of materials do not constitute the only research section of biomaterials in dental technology. The determination of the Molecular Weight of polymers, the degree of polymerization, water absorption, solubility, porosity, tolerance against discolourization but also lots of other properties need to be studied so as the structure techniques can be improved and proper material selected. Another research section, not covered by the available infrastructures is the entire spectrum of non-destructive test methods as for example the study of the structural continuity of testing specimens with the assistance of ultrasounds. Conclusively, we may say that the present infrastructure confines the research of the department to a rather limited extent. Nevertheless, once a budget is achieved, the instructors of the department who are experienced in research will be able to help with the selection of equipment so as to be able to upgrade the infrastructure, at either department or institute levels.

#### *7.3.6 Use of research infrastructures.*

The research infrastructures are used whenever needed. This means that the equipment is used during the conduction of the experimental part of a study. The researchers arrange about the utilization of the equipment.

### *7.3.7 Renewal, age and operational condition of the existing equipment.*

The infrastructures are not renewed often. The present equipment functions perfectly until now and responds well to the current needs of the department during research but with limited sufficiency, as mentioned before. In the future, the Department will have to modernize and supplement the equipment as normally the needs will increase.

### *7.3.8 Financing of provisions, maintenance and renewal of the research infrastructures.*

New and more modern appliances are provided when a new EU project is carried out or there is funding through the TEI special account; also on the funds distribution for the provision of permanent equipment for the Department.

## **7.4 Scientific publications of the members of the educational staff of the Department during the past 5 years.**

### *7.4.1 Books/monographs published by the members of the E.S. of the Department.*

Three books.

### *7.4.2 Assignments published by the members of the E.S.*

(a) In scientific journals with reviewers.

13 assignments.

(b) In scientific journals without reviewers.

4 assignments

(c) On the records of scientific conventions with reviewers.

13 assignments

(d) On the records of scientific conventions without reviewers.

Presentations in scientific conferences not keeping records.

(a) In conferences with reviewers.

5 announcements

(b) In conferences without reviewers

8 announcements

## **7.5 Acknowledgement of the research performed in the Department by third persons.**

### *7.5.1 Citations in publications of the members of E.S. of the Department.*

Approximately 73 citations.

### *7.5.2. Participations of members of the E.S. of the Department in committees of scientific conventions during the past 5 years.*

7 participations in Greek conventions.

### *7.5.3 Invitations for lectures/presentations etc. for the members of the E.S. of the Department from other academic/research agents during the past 5 years.*

6 invitations

*7.5.4 Members of the E.S. of the Department and times they have served as critics in scientific journals.*

2 members served as reviewers. Twice one member and twice the other one.

*7.5.5 Practical exploitation (e.g. industrial applications) of the research results concerning work carried out by the members of the E.S. of the Department.*

The results of the research performed in the Department are notified to firms or industries relevant with the subject of the research and are applied in production; a research for the confirmation and enrichment of the results may be conducted collectively. Recently the Department has been elaborating a suggestion for a research project collectively with an industry which produces dental material. This will soon be submitted to the Research Committee of the Athens TEI.

## **7.6 The Department's cooperation in research.**

There are cooperation of the members of the E.S. with other members of the department, with members of other TEI Departments or members of Greek and foreign universities with initiatives at personal level without the participation of the Department.

## **7.7 Students' participation in research.**

*Participation of undergraduate or postgraduate students in research activities of the Department.*

Despite the fact that the students are taught “Methodology-Research” and also have been doing bibliographic reviews for other subjects there has been no participation in the research in the Department until this time. We do hope that by the time the research laboratory of the Department has been organized our students will be able to practice in the laboratory and at least, at the first stage learn elements from the research procedure; for example to practice quality control of the work they have performed.

## **8. Relationships with social, cultural and productive (SCP) agents.**

### **8.1 Cooperation of the Department with the above agents.**

*8.1.1 What cooperational assignments with the above mentioned agents are being performed or were performed in the Department during the last 5 years?*

Cooperational assignments have been performed over the last 5 years with the above agents. Graduates of the old TEE having the specialty of “assistant dental technician” were examined to acquire a license for a dental laboratory. This has been a great achievement. These practical and theoretical examinations were organized and carried out by the Department in 2003 in cooperation with the Ministry of Health and Social Solidarity (YYKA). The Department provided the labs, premises and the technical infrastructure in the first part which was the practical exam. It also provided the premises and members of the E.S. in the second part which was the theoretical exam. The Department has had objections about this practice which was established by the order of law 1666/86 because the professional rights of its students are offered; nevertheless these exams were carried out. The department has been cooperating with YYKA for the re-organization of the exams.

It participates with members of the E.S. in work groups to improve laws and define the professional rights of various groups which relate with the profession of dental technology.

Another cooperation of the department is the participation and organization of both dental and dental technology conventions. Specifically, during the last five years it has been participating steadily in the organization of the Panhellenic Dental Technology Convention which is carried out every 2 years, in Athens.

Also the department cooperates closely with productive agents, as for example, with laboratory dental technicians to realize the practical exercise of the students of the department but also to improve it as it is reported in the relevant evaluation paragraph.

*8.1.2 How many members of the E.S. participated in these?*

Two members of the E.S. of the department participated in the dental technicians’ exams. Four members participated in the organization of conventions while the entire E.S. participates for the realization of the practical exercise.

*8.1.3 How is the scientific cooperation of the department with agents of SCP acknowledged and projected?*

The scientific cooperation with the above agents is acknowledged and projected through dental and dental technology conventions either by members of organizing committees or through announcements and presentations of scientific assignments.

### **8.2 The department’s dynamics for the development of cooperation with SCP agents.**

*8.2.1 Are there any mechanisms and procedures for the development of cooperation? How effective are they in your opinion?*

The department cooperates with the Ministry of Health and Social Solidarity, the Dental Faculty of Athens and also with associations and unions of the branch of dental technicians. This cooperation is being developed along with the appearing needs. There are mechanisms and procedures for the development of cooperation but further improvement is needed to shape a policy.

*8.2.2 How do the members of the E.S. face the development of such cooperation?*

The members of the E.S. of the department face this cooperation positively, express interest and make attempts towards this direction. The cooperation with SCP agents has contributed to the upgrading and extroversion of the department.

*8.2.3 How do the SCP agents face the development of such cooperation?*

All the agents which have cooperated with the department were interested in the cooperation and hope to establish and improve the cooperation. This has become obvious after the repeated contacts.

*8.2.4 Does the department provide certified labs which supply services?*

The laboratorial infrastructure of the department is sufficient to provide cooperational services. Besides, the members of E.S and E.T.S. are willing to show flexibility in the organization of cooperation.

*8.2.5 Are the laboratorial infrastructures being sufficiently exploited during the cooperation with SCP agents?*

As it has been mentioned they have been exploited to some degree. A lot though could be done for the improvement of the cooperation of the department in relation to its infrastructures and cooperation with these agents. Specifically there is a plan in cooperation with the Dental Faculty of Athens, supported by all tutors at a level of prosthetic work for the training needs of the students of dentistry. As it is known students of dentistry produce work for the patients who attend the clinics of the faculty. This work is carried out by private dental labs at a high cost and of questionable quality; this may have an impact on the patients' oral health. If cooperation develops the students of the department will be able to produce work on behalf of the dentistry students, though this requires better technical infrastructure. The benefit is multiple:

- Work quality
- Low cost (students are benefit, strong social motivation)
- The students of the department are trained in actual working conditions. (educational quality)
- Development of cooperation among candidates of dental technology and candidates of dentistry (interpersonal relationships, trade branch)

- Practical exercise of students in the department (direct control)
- Better control and surveillance of dentistry students by the members of the E.S. of the Faculty.

### **8.3 Activities of the department to the direction of development and support of cooperation with SCP agents.**

*8.3.1 Are the results of the cooperational work announced in special journals or in the press?*

The results of the cooperational assignments are announced in special Greek and foreign journals, and the published issues of the Athens TEI.

*8.3.2 Does the department organize or participate in events to brief the SCP agents on the targets, subjects and the produced work of the department?*

In the conventions that the department organizes and participates SCP agents are always briefed about its targets, subjects and produced work.

*8.3.3 Is there any contact and cooperation with the department's graduates that staff SCP agents?*

It is natural for the department to cooperate more sufficiently with graduates that are members of the productive agents it cooperates with. The fact that the Panhellenic Committee of Laboratory Dental Technicians has changed its views as to the professional rights of dental technologists is a strong example. This is due to the gradual changes of conditions and the increase of the members of the confederation who are graduates of the department and support the views of the department strongly. Every now and again the department convokes its students who exercise the practice and participate in the collective agents for briefing and discussion on issues concerning the branch. These attempts are of course made voluntarily. The ambition of the department is that this will be established as an enactment with the help of the office of public relations.

### **8.4 Connection of the cooperation of SCP agents with the educational procedure.**

The programmed visits of students in productive premises such as dental technology labs and firms of dental and dental technology materials are included in the educational procedure. Also the participation of the students of the department in conventions is 100% funded by the collective or productive agents. This constitutes a part of the educational process and also contributes to the development of bonds with the agents.

## **9. Strategy of Academic Development**

### **9.1 Design Process of a short-medium-term (e.g. 5-year) development plan. Effectiveness of the process.**

The department through the opinions shaped at the level of Sectors or the Council considers that future prospects of development and improvement concern the following issues:

A. Improvement of the educational infrastructures with the help of means and resources available (financing of the Institution, Community Support Frameworks, etc.)

B. Upgrading of the curriculum of studies whenever required, following the proposals of Sectors and the ratification of the General Assembly. Upgrading of the curriculum of studies suggests a process that enhances the flexibility of the Department in order for the education of students to be adjusted to the actual needs of the labor market.

C. Relation to the production processes. In specific, the plan invests on the development of collaborations with the organizations and bodies relative to the profession (associations, federation, etc.) at the level of both undergraduate studies (practical training) and professional re-establishment.

D. Postgraduate programs. The department has co-organized with the Dental School of the Athens University according to the law 2083/92 and the Ministerial Decision 41518/B7 ([NKG]787/30.06.2006 Vol. (B) - a Postgraduate Program of Studies that leads to the acquisition of a Postgraduate Diploma of Specialization (Master of Science) in the "Materials of Dental Technology" field, while according to the Department intentions, expansion of the co-organization should lead to the elaboration of a PhD thesis. At the same time the Department further contributes to the progress of its graduates by acting as a consulting instrument with regards to information asked on postgraduate courses conducted abroad. Overall, the aim of the department lies on the idea of developing competent staff and scientific staff that come from the Department itself, thus constantly feeding the domestic educational system with up to date scientific knowledge of high standards. Finally, it should also be noted that since autonomous and self-reliant postgraduate programs become established by law for the Technological Educational Institutions (TEIs), then among the objectives of the Department is also the design and operation of a fully autonomous postgraduate program.

### **9.2 Process of monitoring the development plan**

Due to the fact that the Department actually finds itself in the process of determination of objectives and future planning, an evaluation process for the development plan cannot be presently considered.

### **9.3 Contribution of the academic community to the design, monitoring of implementation and diffusion of the development strategies results.**

The department of Dental Technology belongs to the Faculty of Health and Caring Professions and thus to the TEI of Athens. Therefore, each activity of the Department is first communicated to the competent bodies and is then evaluated, while some of the activities are also published in the local press or announced in the official web-site of the Institution.

### **9.4 Collection and exploitation by the Department of data and indicators required for the effective design of the academic development.**

Through the evaluation process, a part of which is also the current text, the Department collects, analyzes and exploits all the information necessary for the configuration of the optimum academic development process. Furthermore, among the plans of the Department is also the collection of information from the TEI Public Relation department and the Liaison Office in specific, concerning the professional re-establishment of its graduates and the use of contact information in order to obtain a regular contact with the graduates. This may result in a more rationalized design of the program of studies, based on the actual needs of the profession and the developments encountered in the field of the Dental Technology.

### **9.5 Publication and diffusion of the development plan and its results**

The aim of the Department is that when reaching the next evaluation period, a specific development plan along with the process of its determination, its results and its publication method are all available in time.

### **9.6 Efforts of the Department to attract teaching staff of high standards**

Since the enactment of new laws concerning the employment of academic staff and the requirement for high qualities that are equivalent to those necessary in University Schools, the standards of the employed staff are considerably upgraded. Beyond that, the strategic of the Department for the employment of high-quality new academic staff also concerns:

- A. Upgrading of the curriculum of studies so as to obtain up to date programs, in accordance with the existing international standards.
- B. Participation of its staff in scientific conferences so as to both underline and commercialize the academic profile of the Department.
- C. Provision of support to the unions and professional entities (e.g. the federation) at all levels and establishment of collaborations. This extroversion sets out the modern image of a developing academic cell.



### **9.7 Planning of staff employment and advancements for the academic staff members based on the academic development plan of the Department**

Through the employment of highly-qualified members of teaching staff the Department aims at the promotion of its academic profile, while through the employment of staff wherever inadequacies are noted, the Department aspires to become self-sufficient. Besides, through the announcement of staff needs to fill spots of specialized scientific subjects and by considering the international trends in the profession of the Dental Technician the Department also aims to be in the front line of developments and offer up to date knowledge of high quality.

### **9.8 Number of students required by the Department per year. Number of students eventually attends per year way of entering the Department (Pan-Hellenic exams, transfers, special categories, etc.)**

The number of students required by the Department is 65. The number of students admitted by the Department per year, although reduced when compared to the past, is still higher than the required one, reaching approximately 80-85 students. Since the Department is unique in the Greek territory there are no transfers, while 3% entering the School as students with special needs, plus 2 additional students admitted through placement exams correspond to special categories. At this point, it should be noted that 30% more than the number of students required causes a series of problems in the operation of the Department. Based on the number of working posts in the labs, afternoon classes along with adjuncts are unavoidable, whatever the result of this outcome might be for the satisfaction of both smooth operation and high quality education offered to students.

### **9.9 Efforts of the Department to attract high quality students**

To enter the Department, students should according to the education system in force choose the Direction of Sciences, which by tradition attracts high quality students. In fact, many of the students entering the Department did not achieve admission at the first place to either the Medical or the Dental School, while during their studies local instructors perceive some of the students' desire to continue their studies, after graduation, in the Dental School. Based on their desire, these students are much consumed in their effort to get higher grades and thus tend to upgrade the standards of the entire student community. Besides, the local academic staff is occasionally found to play a consulting and in many cases catalytic role in the process of elaborating the students' future plans, often underpinning the belief that the profession of the Dental Technician offers considerable opportunities in comparison with other already satiate professions.

Thus, through the qualifications provided to students at the undergraduate level, the encouragement for continuing to postgraduate programs, the development and operation of a postgraduate program and the assistance for finding a job after graduating, something that at present is performed at personal level, the Department establishes an environment of trust between its staff and students. Besides, even in the case that graduates do not acquire

their own enterprise (laboratory), the fact that they can occupy working posts of good prospects comprises a strong motive for selecting the Department.

### **9.10 Design process of a strategic academic development for the Department**

The design process of the development strategy, although serious effort is recorded, is still thought to be inadequate, mainly due to the following two reasons:

A. Lack of an adequate number of teaching staff members

B. Lack of resources that could help towards that direction

C. Efforts undertaken by the members of the teaching staff are usually at the personal level in the absence of institutional providence that could initiate an ongoing planning procedure the results of which could then be evaluated.

It becomes clear that in order to obtain a long-term planning, qualified staff provided with the material and technical infrastructure required should work and dedicate a lot of time and effort for an effective development plan to be elaborated at some time in the future. Nevertheless, the aim of the Department is that an integrated development plan will be presented in the next evaluation.

## 10. Administrative services and infrastructures

### 10.1 Effectiveness of the administrative and technical services

The administrative support of departments is undertaken at both the Central (TEI of Athens) and the level of departments along with the secretariats of departments. There is also one more administrative structure, i.e. the School secretariat, which is however assigned with the transaction of documents.

At the central level, the administrative structure is as follows:

A) The *Administrative Affairs Directorate* dealing with all sorts of administrative issues concerning the TEI. It also supports the President and vice-President offices and collaborates with both the Legal Service and the rest of the departments reported below.

B) The *Economics Affairs Directorate* dealing with all sorts of economic nature issues that concern the institution (e.g. payrolls, budgets, expenditures, European programs, supplies, fortune etc.).

C) The *Co-ordination of Studies and Study Welfare Directorate* that deals with all academic nature issues such as the student care, the library, the practical training and the re-establishment of students, etc.

The effectiveness of the above services is at the moment thought to be sufficient, although improvement of the response times is required.

Technically the Department is supported by the technical services of the TEI and in particular by the *Directorate of Informatics and Technical Services*. This service is in charge of the constructions and repairs of the Institution, the determination of standards, the auctioning and the supervision of works, the inspection of the building, the electrical, the cabling, the phone, the air conditioning and the hydraulic infrastructure of the Institution. These services are thought to be moderate, with the main criteria for that outcome being the time required for project delivery and the respective quality. So it results that the specific service needs restructuring in order to establish a more flexible mechanism on the basis of specialized staff employed. In the same service the Centre of Network Administration is also included, being in charge for the connection of the entire Institution and other users with the network services. This service is responsible for the design, installation, fine operation, maintenance, and repair and upgrading of network services, in accordance with the technological developments of the time. These services are until today thought to be more than adequate.

#### 10.1.1 What is the staff and organizational structure of the Department and Sectors' Secretariat?

The staff of the Secretariat of the Department is comprised by one regular employee of Administration-Accountancy who is occupied with the administration issues of the Department and two employees of administration and technological background with an indefinite contract that deal with student issues. Due to the increased number of students (almost 500) and the burden of everyday ongoing cases of the Department, the number of three employees working in the Secretariat is thought to be inadequate, while it should also be noted that there is no separate secretariat for the different sectors.

*10.1.2 How effective do you consider the services provided and the time schedule of the Department secretariat to be for the satisfaction of needs of the academic staff and the students?*

The services provided by the Secretariat are sufficiently effective, although there are certain times that the completion of tasks lies on the good will of employees. In order to improve the situation encountered, especially as far as response times are considered, increase of the number of employees is necessary. On the other hand, the time schedule is very convenient for both the academic staff and the students, although operation during some of the afternoon hours would be very useful for working students and members of the teaching staff that only teach in the afternoon classes. In general and regardless of other changes, increase of the Secretariat staff is required immediately in order to encounter any deficiencies noted.

*10.1.3 How effective do you consider the collaboration between the administrative services of the Department and the respective of the central administration of the Institution?*

Collaboration with the central administration services is very effective although there are certain times when delays are met, mainly due to heavy work and bureaucracy issues caused by the traditional communication methods, i.e. by documents in the forms of written texts. Thus, it would be advisable for the collaboration to continue on a more flexible basis that will also exploit the already existing infrastructure.

*How satisfying is for the Department needs*

*(a) The organization and the time schedule of the Library?*

Organization of the library which is centrally performed (for the entire TEI) has through the introduction of all references (books and electronic databases) in an electronic platform -where one may easily obtain the required sources of information- considerably improved the effectiveness of the library. The time schedule of the library is rather satisfying for the needs of the Department. What could be improved are the services of the study room, where first the necessary technological equipment should be installed and secondly the number of working seats should be increased, whereas security measures concerning the books and maintenance provision concerning the equipment must also be considered.

*(b) The organization of the information services?*

The information services at both the educational and the level of providing information, e.g. announcements, are thought to be satisfying. With the introduction of the new computerized system in the secretariats of the departments, via which every student can keep up with his/her progress, register to modules, fill in application forms of various subjects, etc., the situation is much improved, especially as far as the immediacy of providing the information required is considered. At the Department level, through the website of the Department, information are provided to both the students and any person interested in the curriculum of studies, the department organization, the teaching staff, guidance on issues that according to the Department need to be further explained, announcements, etc. What might be missing and would much help, especially the graduates, is information concerning occupational guidance, posts of employment, etc., as

well as the contact with graduates with regards to their progress in the labor market, actions that could however function only at the central level of the TEI.

*10.1.4 What are the staff and organizational structure of the Laboratories and/or study rooms of the Department?*

No support is considered for laboratories or study rooms at the level of departments.

*10.1.5 What is the support for the infrastructure and the services of informatics and telecommunication of the Department? How effective is it?*

The infrastructures and the services of informatics and telecommunication of the Department are supported by the *Technical Services* and the *Center of Network Management* of the TEI of Athens, i.e. support at central level. Regarding the *Technical Service*, delays are frequent while inefficiencies are noted in the way that problems are solved, something that can be attributed to the lack of qualified and specialized staff. On the contrary, the services of the network and informatics are thought to be rather satisfying.

## 10.2 Student welfare services

The student welfare is ensured at a very satisfying level by the TEI of Athens, by the Service of Student Welfare providing the following:

*Accommodation.* Due to the fact that the TEI of Athens does not have residence halls of its own, accommodation is provided to those eligible in the form of hired hotel rooms as well as in the form of rent subsidy that reaches 200€ per month and student, for a time duration of 10 months per year. The respective prerequisites and options are determined at the website of the institution (<http://www.teiath.gr/merimna>).

*Food Provision.* The following groups of students are eligible for free food provision (<http://www.teiath.gr/merimna>):

- Native students
- Cypriot students
- Students that are children of expatriates
- Students that come from bilateral agreements of scientific collaboration of the TEI of Athens with corresponding Institutions of other countries
- Foreign students as political refugees
- Foreign-non-native students with scholarships of mobility in the frames of Programs of the European Union
- Foreign-non-native students
- Postgraduate students

*Student Loans.* The TEI of Athens grants interest-free student loans to those students needing them for the continuation of their studies or the transaction of their own personal economic cases. Prerequisites are defined in the website of the Institution (<http://www.teiath.gr/merimna>).

*Health and Medicare.* Unless the student is insured by another public body, he/she is eligible for health and medical care that lasts from the day of his registration until the end of the regular period of studies, increased by half. Benefits and prerequisites are defined at the website of the Institution (<http://www.teiath.gr/merimna>).

*Relief Fund.* Especially for those students who are indigent, a bundle of measures is considered, i.e. material, ethical and financial, as these are defined at the website of the Institution (<http://www.teiath.gr/merimna>).

*European Illness Card.* Considering the time that the student may spend abroad in countries belonging to the European Union and others including Norway, Iceland, Lichtenstein and Switzerland, the student receive a special card of health insurance for the time being (<http://www.teiath.gr/merimna>).

Besides, at Department level, student welfare may also encompass every form of student support:

*The Institution of the Consultant Professor*

The institution of the Consultant Professor is applied in cases of supervising assignments undertaken by students, such as those carried out within the framework of individual courses or the student's dissertation, or in cases of other problems occupying the student and requiring consultancy. For this purpose, the teaching staff of the Department have determined certain hours - that do not coincide with classes- during two days of the week each in order to listen to the students' academic problems.

In specific:

	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>Dimitropoulou</b>			10.00-11.00	11.00-13.00	
<b>Galiatsatos</b>	10.00-11.00		9.00-11.00		
<b>Yannikakis</b>		9.00-10.00	9.00-11.00		
<b>Promponas</b>	11.00-13.00				13.00-14.00
<b>Boulouchou</b>		11.00-13.00	12.00-13.00		
<b>Kiparissidis</b>			11.00-13.00		8.00-9.00
<b>Zavola</b>	13.30-14.30		10.00-12.00		
<b>Ioannidou</b>				12.30-14.30	9.00-10.00
<b>Balourdas</b>	8.00-9.00			12.00-14.00	
<b>Salamaras</b>	12.30-13.30	11.00-13.00			
<b>Spyropoulos</b>		11.00-13.00			12.00-13.00

*Access of the scientific community member's to the use of Informatics and Telecommunication Technologies.*

In every office, teaching room and laboratory, electronic computers are installed, in most cases accessing the web. In this way, modern technology may be exploited and professors along with the students, even during the class, may obtain the required information through either the use of educational software of through internet access.

*Support of the more weak students and of those that do not graduate in time.*

A service of support for the more weak students as well as for those students that fail to complete their studies in time is not currently available. Nevertheless, one should not disregard the fact that welfare is actually present in the form of interaction between the tutor or the lab assistant and the more weak students, in order for the latter to keep up with the educational process. This is performed either in the form of advice or in the form of additional exercises given to the student.

*Scholarships are given to excellent students or to students belonging to special categories.* If excluding the scholarships given by the State Scholarship Foundation, this concerning a more general institution, scholarships at Department level are not currently available. However, excellent students are rewarded with certain benefits that concern provisions of the Institution such as student loans (provisions of student welfare).

*Policy of the Department concerning the smooth incorporation of the newly-admitted students.*

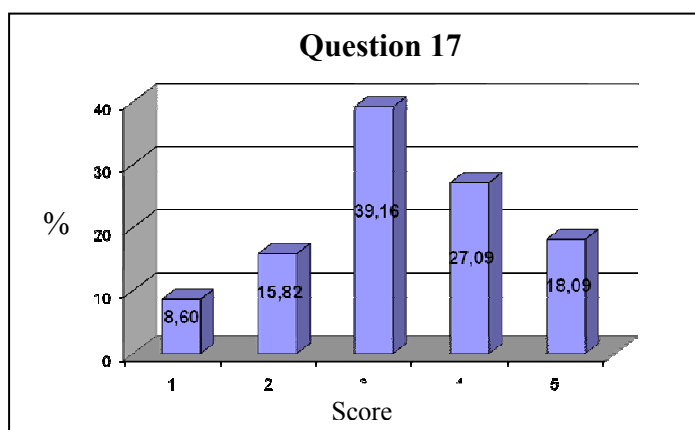
In the first semester of studies, the module of “Dental Technology Basic Principles” is included, actually welcoming the newly-admitted students, also providing an outline of the Dental Technology science. Explanations are given concerning the profession of the Dental Technician as well as the job opportunities in dental labs or in the field of marketing of dental instruments and materials. On top of these, a brief notice on the possibility of attending postgraduate programs either in Greece or abroad is also provided. Furthermore, an educational tour is carried out in order for the students to familiarize with the various laboratories, each being of different subject area, the instruments, the machinery and the materials used, and thus reduce the levels of insecurity and anxiety normally felt by the newly-admitted students.

### **10.3 Evaluation of infrastructure of every nature used by the Department**

#### *10.3.1 Adequacy and quality of the library records.*

In the Dental Technology section there are several books, the majority of which are thought to be appreciable, normally in more than one copy in order for a considerable number of students to be served. The book reference list is increased on a regular basis through the order of recently published titles. Besides, except for the list of books and in accordance with the modern methods of providing information, there are several electronic computers via which students may obtain a high-level bibliographical research from international data bases. In addition, the TEI of Athens has subscribed in several scientific databases, where from students may obtain the entire scientific article that they are interested in. Overall, records of the library are thought to be satisfying in terms of both sufficiency and quality. Answers of students concerning library.

*Was there relevant research material in the library?*



### *10.3.2 Sufficiency and quality of the communal technical equipment*

Communal technical equipment that is used by the departments is not available and is not considered. Every department has its own equipment, in accordance to its needs. The equipment of the department is evaluated accordingly.

### *10.3.3. Sufficiency and quality of the study rooms and their equipment*

Study rooms are not considered for the Department. The students may be served by the central library, already evaluated. It is reminded that the quality of rooms is thought to be satisfactory. On the other hand, in terms of sufficiency, study rooms are thought to be moderate, since working posts are limited (concerning the entire TEI). In addition, improvement is required concerning the maintenance of equipment since use on a daily basis, mostly by beginners, should be considered.

### *10.3.4 Sufficiency and quality of the academic staff offices*

The layout-zoning planning problem and the congestion of departments, offices and laboratories of the entire TEI of Athens is already known. As a result, the offices of the teaching staff are very few. In fact, some of the members of the teaching staff do not have their own office, i.e. a working post (e.g. a place with a personal computer), this resulting to the use of several working posts interchangeably. For example, when one office of two working posts is occupied by 4 academics, delays in both the educational and the administration procedures as well as discounts in the quality of the final result should be expected. In this context, immediate extension of the existing building installations is recommended.

### *10.3.5 Sufficiency and quality of the Department and the Sectors' Secretariat Rooms*

As already mentioned, a separate secretariat for each of the sectors is not available. Instead of that, the already congested offices of the teaching staff are used for the sectors' needs. Concerning the Secretariat room, it is thought to be hardly sufficient. There is no counter for the service of students, this forcing the students to enter the main room of the secretariat and cause delays and disorder in the tasks of the secretariat and the staff working on



subjects other than the strictly educational ones. On top of these, the room of the secretariat is not adequately ventilated.

#### *10.3.6 Sufficiency and quality of other rooms and infrastructures*

As already mentioned previously, the problem of the layout planning causing either congestion or absence of services is evident. In this context, no session rooms are available, this resulting to the use of classrooms and the determination of the session program (e.g. sector sessions) in accordance with the timetable of classrooms. Additionally, neither the appropriate infrastructure nor the care to develop it may be noted as far as persons with special needs –at least some of the categories- are concerned.

### **10.4 Exploitation of new technologies from the different services of the Department (excluding the educational and research work).**

#### *10.4.1 Functions of the Department supported by ICT.*

The Secretariat uses ICT through its connection to the network of the TEI. Recently, with the introduction and implementation by the Secretariat of an electronic system for the registration of students, the selection of semester courses performed individually by each student through the use of personal codes, the submission of electronic application forms on student issues (e.g. grades) and the receipt of certifications in the absence of the student natural presence, has led to the decongestion of the secretariat and the acceleration of processes including information of students on course notes on the basis of outlines given on the website of the department, information on various student issues, information on the weekly class schedule and the exam timetables and information concerning announcements that require the immediate attention of students. On the other hand, since the computerization system is relatively new, there is enough room for improvements and upgrades. Actually, it is thought that development of informative functions on the basis of simple processes (e.g. number of students, average grade of courses, statistical data, etc.) is necessary, since it is believed that the academic staff can much benefit from the awareness of statistical data that may also result to the improvement of the academics' efficiency as well.


#### *10.4.2 Members of the Department's academic staff that own a website.*

Members of the scientific staff have optionally uploaded a short CV of theirs at the website of the Department, at the following address:

([http://www.teiath.gr/seyp/dental\\_technology/training\\_staff.html](http://www.teiath.gr/seyp/dental_technology/training_staff.html)).

#### *10.4.3 Update of the Department website*

The website of the department is updated at an almost daily basis, either concerning a revision of the curriculum of studies, or the outline of courses, or announcements or exam timetables, etc. In general, the website available comprises a modern instrument for the Department's presentation and the provision of information to students as well as to anyone interested in the Department activities. Responsible for the construction and update of the website is Dr Stavros Yannikakis (Professor). A snapshot of the website is given below:



του ΤΕΙ Αθηνών και είναι το μοναδικό τμήμα ανωτατής εκπαίδευσης στην Ελλάδα, που παρέχει ολοκληρωμένη εκπαίδευση στο γνωστικό πεδίο της ΟΔΟΝΤΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ.

Οι σπουδαστές εισάγονται στο τμήμα με τη διαδικασία των πανελληνίων εξετάσεων ή σύμφωνα με τις ισχύουσες διατάξεις για τις μετεγγραφές και κατατάξεις. Σήμερα, ο αριθμός των εισακτέων είναι 85 και ο αριθμός των σπουδαστών που φοιτούν σε όλα τα εξάμηνα είναι περίπου 550.

**Ανακοινώσεις**

- Εβδομαδιαίο Πρόγραμμα Χειμερινού Εξαμήνου 2009-10 (08/09/2009)
- Σύμβουλος Καθηγητής (22/05/2009)
- Μεταπτυχιακά (11/05/2009)
- Πρόγραμμα Εξαμήνου (11/05/2009)

**ΣΠΟΥΔΕΣ**

Οι σπουδές στο Τμήμα Οδοντικής Τεχνολογίας, σύμφωνα με το νέο, αναθεωρημένο Πρόγραμμα Σπουδών που ισχύει από το 2008, διαρκούν οκτώ (8) εξάμηνα στα οποία οι σπουδαστές διδάσκονται θεωρητικά και εργαστηριακά μαθήματα. Κατά τη διάρκεια του τελευταίου εξαμήνου σπουδών, οι σπουδαστές πραγματοποιούν την πρακτική τους άσκηση στο επάγγελμα σε εργασιακούς χώρους του ιδιωτικού ή του δημόσιου τομέα και εκπονούν την πτυχιακή τους εργασία.

Το εκπαιδευτικό έτος που διαρκεί από 1η Σεπτεμβρίου μέχρι 6η Ιουλίου, περιλαμβάνει δύο εξάμηνα σπουδών. Το χειμερινό εξάμηνο σπουδών αρχίζει στο τέλος Σεπτεμβρίου και το εαρινό στο τέλος Φεβρουαρίου. Οι ακριβείς ημερομηνίες έναρξης και λήξης καθορίζονται κάθε φορά με απόφαση του Συμβουλίου ΤΕΙ και ανακοινώνονται στην αρχή του έτους (βλέπε ανακοινώσεις). Μετά το τέλος των μαθημάτων κάθε εξαμήνου, ακολουθούν οι εξεταστικές περιόδους που έχουν διάρκεια δύο εβδομάδων η κάθε μια.

**ΕΠΑΓΓΕΛΜΑΤΙΚΑ ΔΙΚΑΙΩΜΑΤΑ ΠΤΥΧΙΟΥΧΩΝ ΟΔΟΝΤΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ**

**ΠΛΗΡΟΦΟΡΙΕΣ**

Η Γραμματεία του Τμήματος Οδοντικής Τεχνολογίας δέχεται κάθε Δευτέρα, Τετάρτη και Παρασκευή, 11πμ - 2μμ.

Επικοινωνία:  
 Προϊστάμενος, Δρ Ευγενία Δημητροπούλου Καθηγήτρια: 210-5385619  
 Τηλ. Γραμματείας: 210-5385618  
 Ηλεκτρονικό ταχυδρομείο: [dentech@teiath.gr](mailto:dentech@teiath.gr)

Υπεύθυνος σύνταξης και ενημέρωσης Ιστοσελίδας: Δρ Σταύρος Γιαννικάκης Καθηγητής, ([yannista@teiath.gr](mailto:yannista@teiath.gr))

*10.5.1 Is the use of the Department infrastructure and equipment available rational? How is that ensured?*

The infrastructures and the equipment available in the Department are rationally and effectively used. The rational use is ensured by the fact that the pressure of work being huge implies exclusive use of infrastructures and equipment in accordance with their destination without leaving any room for either inefficient or other use. Besides, good operation of the department and its infrastructures is controlled on a daily basis by the responsible staff (head of the sectors and head of the department).

## **10.6. Levels of transparency and effectiveness in the management of financial resources.**

*10.6.1 Is there any process of composition and implementation of the department budget? How effectively is this performed?*

The needs of the departments are integrated and classified in accordance with the methods adopted by the TEI of Athens. More precisely, expenditures are included in categories with specific codes where from absorption of amounts of money corresponding to the department occurs whenever these are available. For example, some of the expenditures regard customary equipment while others concern consumable or supervisory means. The department maintains a database for its needs, separately for each of the categories

considered, in order for any absence or lack to be foreseen in time. In this way, needs of the department are known at any given time, thus enhancing the efforts for the compilation of the annual budget of the department. Of course, the amounts of money becoming eventually available by the TEI are found to differ from the actual needs presented by the department, this being a part of the overall financing problem of the Greek educational sector.

Based on the final amount of money becoming available, distribution is undertaken on the basis of prioritizing needs. Composition of the budget is thought to be satisfying, this being proved by the fact that educational processes are found to be unaffected although the levels of financing are limited. Thus, needs of the department are known prior to the beginning of each semester and amounts of money are only partly absorbed in order for unscheduled needs to be covered as well. Transparency during the composition of the budget and the distribution of funds is ensured on the basis of distinct proposals made by the sectors and final decisions taken at the Department Council level.

## 11. Conclusions

### 11.1 Which are according to your opinion the most positive and the most negative attributes of the Department, as resulting from the internal evaluation essay?

The present Internal Evaluation Essay is structured according to the development model of the Hellenic Quality Assurance Agency (HQAA) for Higher Education and includes certain chapters where from conclusions may be drawn along with both positive and negative attributes.

1. Evaluation Process
2. Presentation of the Department
3. Program of undergraduate studies
4. Program of postgraduate studies
5. Program of PhD studies
6. Teaching work
7. Research work
8. Relation with social, cultural and production bodies
9. Strategy of academic development
10. Administration services and infrastructures

#### *Positive attributes*

1. For reasons already noted, the participation of the Department in the evaluation process may be thought as a positive attribute, regardless of motives to do so or anti-motives in case of non-participation. The process followed abides by the HQAA regulations, being however adjusted whenever necessary in order to confront the department's special features. The effort undertaken, despite the small number of the staff, is determined by the feeling of responsibility and above all by transparency. The attributes designated, either positive or negative will comprise the material, elaboration of which is thought to be fundamental for the strategic development of the department.

2. The Department has a history of 26 years as a TEI of Athens department and a history of another 10 years as a department of the Centre of Advanced Technological and Vocational Education, thus exhibiting a total of 36 years. It is during that period that the science of dentistry shifts from its technical and mechanical nature to a more biological course. Acknowledging its responsibilities, the Department of Dental Technology managed to keep up with the evolution met and despite of all the problems and dysfunctions –which will be hopefully designated by this essay- loyally, serves the specialty of Dental Technology as **the unique department of the country**. The academic staff, although small in numbers (12), is comprised by qualified academics, having acquired either a PhD (7/12) or a Master diploma (4/12). The secretariat is comprised by three employees. On top of these, the department also has three members of the special technical staff (STS), necessary for the maintenance and operation of the department laboratories, the number of which is thought to be adequate. In addition, 31 committees (or persons in charge) being currently in force for a variety of issues, either of educational or of administrative nature, also ensure efficient operation of the department and satisfaction of the students' needs.

3. With regards to the curriculum of undergraduate studies, the recent review was consistent with the directions of developing a modern and effective program of studies in accordance with both the Greek and the European reality. New modules have been added, according to the recent trends of the market, while others have been merged. Besides, one should consider that the last review undertaken dates back 7 years (2002). The academics of the department are watching closely the developments of the market since most of them are working as dentists as well something that in our opinion comprises a considerable advantage on the basis of trends configured at both the scientific and the market fields. In fact, it is safe to say that there is no subject of the Dental Technology that is established by the scientific community which is not included in the Department curriculum of studies. In conclusion, it is thought that the curriculum of studies satisfies the aims and targets set by the Department.

Courses are properly structured in semesters with the definition of some courses as main, allowing the students to realize the importance of sequence in the educational process, based on the acquisition of knowledge gradually and effectively. No overlaps are noted among courses, apart from the case that one module is related to another and thus overlap helps the student to perceive sequence of the taught material.

The exam system is consistent with the international and European standards considering both the coverage and the marking methods. More specifically, as far as the marking system is concerned, the final mark of the students is not only based on the grade of the final exam but also takes into account the progress of the student during the semester, as well as his contribution to the course plus the possibility of him/her preparing assessments handed out by the tutors. Besides, since the student is welcome to examine his exam paper and express any objections he might have on his final mark, the system is thought to be determined by the transparency required.

Dissertations presented are of high standards, this being the result of both the students' qualifications and the continuous efforts of the teaching staff of the department. Directions and guidelines on the preparation of dissertations are clear, similar to the collaboration of the students with their supervisors, being in most cases excellent.

As far as the practical training is concerned, constant efforts are made on behalf of the teaching staff of the Department responsible for that institution in order for students to exploit in the best way the time available. In this context, efforts are usually directed towards the selection of grand and reliable laboratories that may train them in the entire range of the modern prosthodontics. Nevertheless, the institution of the practical training could be considerably improved, something that is however analyzed in the following chapter.

4. The development of a postgraduate program along with the dental school of the National and Kapodistrian University of Athens (NKUA) can only be counted as a positive attribute for the Department. The ability of the Department to select its future partners and staff out of a tank of candidates that originate from the department itself and are scientifically proficient, having acquired a Masters' degree adjusted to the subject of Dental Technology, is thought to be rather important for the strategic development of the department.

5. PhD Theses are not considered for now since this is not yet allowed by law.

6. The teaching work is undertaken by the academic staff of the Department based on the clearly and approved curriculum of studies (outline of courses) and mainly on the targets set by the Department, as these are stated in the founding law of the TEI and the 1404/83

and the Presidential Decree 83, NGG 3717-2-1989, Article 2, that concerns the professional rights of graduates.

The situation in the Department concerning courses, structure of the notes, reference books and their effectiveness in the educational part is excellent, as this result from the analysis of questionnaires answered by the students. In addition, performance of the academic staff appearing to be beyond any criticism is according to all graphs (questions 22-27) “satisfying” and “very good”. Besides, the institution of the “Consultant Professor” seems to be rather effective, giving the opportunity for close interaction between students and their tutors with multiple benefits accruing.

Reference books distributed are thought to be sufficient and effective. Either this concerns books or notes, both are considered to be rather modern, while in most cases these pieces of work correspond to the efforts of the Department academic staff, with emphasis given on the satisfaction of needs and requirements of the local students. Besides, considerable bibliography suggested in combination with easy access provided to electronic libraries complements the reference material of courses.

The department exploits the potential of modern technology in terms of contribution to the educational process via the installation and use of electronic computers, projectors and web availability in every classroom and laboratory. Extra attention is given to the familiarization of students with the use of the available technological equipment, this actually comprising a constant process of training on a daily basis in order to keep up with the technological advancements of our times. In this context and within the framework of opportunities provided by the limited department budget, efforts are constantly undertaken in order for the department to be supplied with the most advanced prosthodontic devices and instruments in order to prepare students sufficiently.

A direct bond between the educational procedure and the conduction of research is not yet apparent in the department, i.e. a fact that should be recorded as a negative attribute for the department. Nevertheless, in certain modules, something that is also considered by the profile of these modules, preparation of a study upon a certain subject area is often handed out by tutors to students. In this way the student familiarizes with the bibliographical research, broadens his way of thinking in terms of methodological research and learns how to compile an academic level assessment.

In conclusion, it is thought that although the education work offered by the department can be improved, standards of the higher education levels are satisfied.

7. Research in the field of dentistry and dental technology is in general very demanding since sophisticated equipment of high standards required implies a sufficient budget. Nevertheless, research is conducted by the members of the teaching staff, however at a personal level. In this context, publications of the last five years for the members of the teaching staff may be obtained from the CVs of members at the appendix of the essay. Members that are into research develop links and cooperation with other departments or schools of universities, thus maintaining a situation in favor of future research developments. Besides, the results of the research are either published in well known national and international journals or announced at national or international conferences.

Until recently, operation of an organized research laboratory was absent from the department. As a result the numerous research instruments of the Department were held in various rooms. However, following the establishment of a research laboratory, instruments

are now gathered in the appropriate space, while during the period the required infrastructure is completed (PCs and network) in order for the laboratory to start its regular operation.

**8.** The department is from times to times developing collaborations with social, cultural and production bodies, in order to promote and safeguard the professional rights and the opportunities for better education and establishment of its graduates.

**9.** The department has a clear orientation and vision and is well aware of the future developments in the dental engineering science as well as the requirements that the progress of the educational reality induces in the system. Combination of the two ensures a course determined by high standards and certain targets for the Department to achieve.

**10.** The administrative services are actually depending on the administrative structure of the entire Institution. In this context, even though the number of the staff (Secretariat) is limited, services provided are thought to be satisfactory.

The student welfare is carried out at the level of the Institution and is also thought to be satisfactory, although there is always room for improvements, much depending however on the increase of the State funds for the Institution. At the Department level, through the introduction of the Consultant Professor institution, students may use all the help necessary at multiple levels.

The infrastructures available, from books to modern technology equipment are thought to be satisfactory and sufficient, except for the issue of available rooms, this already brought up in several points of the essay. Furthermore, the department insists on investing on modern technology, this resulting to the effective training and familiarization of students with the corresponding equipment.

With regards to the rational use of financial resources, the fact that  $\frac{1}{4}$  of the budget available corresponds to consumables designates the limited financing opportunities and the need to prioritize. Transparency on the other hand is de facto since the department is not autonomous but lies under the control of the Institution services. Based on the plan of strategic development for the Department, submission of budgets concerning various expenditures aims at the improvement of educational procedures. In this steady rate, the Department aims to build a modern educational profile.

#### *Negative attributes*

**1.** The evaluation process further aggravated the work of the limited number teaching staff members, the Secretariat, the members of the STS and some of the students. In the absence of electronic design, standardization and computerization on behalf of the HQAA in the proposed plans, difficulties along with delays and omissions did appear. At the same time, the anti-motives established and announced concerning postgraduate and research programs (dead line in case of non participation in the evaluation process) negatively affected in a very pressing way the evaluation process itself. Therefore, the desire of the Department is that the next evaluation will be superior in terms of quality.

2. Wherever problems, dysfunctions and inefficiencies are noted concerning all the Department activities, common is the limited number of the regular staff. Presently, the number of regular teaching staff corresponds to 12 academics. In fact, three out of them have been recently employed (end of 2009 and 2010). As a result, a big part of the educational work is executed by adjuncts, whatever the consequences of this might be for the educational process. In addition, as well known, the admissible staff is not responsible for any administrative task, thus the entire burden of the department needs occupies only the members of the regular staff. As it becomes clear, it is rather difficult for an academic to handle both the educational and the administration work effectively.

Moreover, absence of sufficient rooms is one of the most important negative attributes of the department, while it is also known as one of the most common problems of the entire TEI of Athens. The staff is congested in one professor office and in a space resembling to a store room, while some of the members have their offices inside the laboratories. Reception of students takes place in parallel with other activities in the already limited-space offices, causing more difficulties to the educational and the administrative work.

3. Many of the courses of the undergraduate program are undertaken by other departments. In fact, given the absence of classrooms, these modules are always taught in the classrooms of the departments in charge, thus causing delays on behalf of the students or other problems that need to be solved. Even though these modules belong to the subjects of general background, administration, economics, legislation and human studies modules, and are taught by capable colleagues, it would still be better if these modules were undertaken by the Department.

The international perspective of the curriculum of studies appears to be rather limited. The academics responsible are not adequately active and sensitive on the specific subject in order to motivate students to acknowledge the importance of collaborations with international departments. Nevertheless, serious responsibility also lies on the students themselves, showing no actual will to be informed on the relative procedures.

4. Negative is also the fact that only some of the modules of the postgraduate course are taught by the department staff. The specific problem accrues from the legislation on force, not allowing the TEIs running autonomous postgraduate programs. On the other hand, even if the laws in action allowed for the operation of autonomous programs, the department is not in the place of responding to such a challenge at the present moment, due to both needs of staff and infrastructures not being available.

5. PhD theses are not considered for now since this is not yet allowed by law.

6. Of major importance for the department is the small number of regular staff, this causing a lot of difficulties in both the educational and the administrative processes. The academics are in many cases found absorbed by their educational work and thus arising needs are often satisfied by the contribution of the adjuncts, who although qualified –in accordance with the corresponding legislation in force- are still comprising staff of temporary character, whatever this might mean.

The average degree grade presents an increase trend since 2001 and onwards, i.e. something very encouraging for both the qualities of students choosing to enter the school



and the effectiveness of the educational procedure in the department. On the other hand, the average grade range yields a moderate 6-7, something that should be looked into.

Laboratories are well equipped in terms of customary equipment, with numerous modern devices and instruments. On the other hand, the picture obtained by the questionnaires is owed to the difficulties encountered by students and concerns the subject of education itself and the inadequacy of rooms that further encourage the insecurity of students.

Another very worrying element is the loose attendance of theoretical courses by students and the dedication of only a small portion of time for studying during the terms. In fact, studying is traditionally undertaken just before the exam period, although this may be justified by the delayed dispensation of books. In this context, although the procedure has been improved, some bureaucracy issues still lead to considerable delays.

Furthermore, negative is also the fact that students are not trained to conduct research. As already mentioned, research is done by students on the basis of assessments, however these mainly concern reviews. Hopefully, after the establishment and operation of the new research laboratory, students may in the future be trained in the methodology of research.

Activation of the staff and the students is thought to be rather limited, although the academics, often on their own initiative and expenses, travel to other departments, either in Greece or abroad, in the context of their collaborations or travel in order to attend and present their research works in conferences. Besides, the funds given by the Institution are not adequate and may be considered as the least possible. On the other hand, inconsiderable motivation of students is justified by their heavy schedule and reasons of economic nature.

7. The Department has not yet determined a strategy on the subject of research and the various issues related to it. As already mentioned, whatever research work is carried out in the department accrues from the initiatives of the academic staff. Motives provided either by the state in the form of support programs by the EU, or by the TEI of Athens, are insufficient to substantially support the conduction of research.

Payments are usually disproportional to the work required, while in most cases there is no consideration for third parties involved and secretarial support provided. Thus most of the studies elaborated in the past or being presently carried out are actually self-funded. In addition the increased amount of work for the scientific staff members concerning both educational and administrative tasks, results to the inability of the former to conduct research. As a result, research studies carried out in the department are owed to the pride and personal will of members exclusively, while no participation of students is recoded in any of the research activities, something that would be ideal for the department. Nevertheless, for this to be accomplished, infrastructures beyond the new research laboratory are necessary.

8. Collaborations developed should be more organized and should also obtain an institutional essence, something not achieved until today but still comprising one of the Department future targets.

9. Regarding the strategic development, i.e. a very important issue for the future of the Department, ideally, a number of academics should deal with the subject on a regular basis, recording their opinions and presenting them in the form of proposals as a part of a

dynamic process where improvement and review is constant. Presently, similar proposals are presented at the level of the Sectors and the Council again based on personal initiatives. Unfortunately, the limited number of the teaching staff makes this planning not feasible, at least until today. With the admission of two new members pending, this may be accomplished in the future.

**10.** Even though the services provided are thought to be sufficient, this should be attributed to the pride and extra effort of the administrative support members. Problems encountered beyond the limited staff, are the absence of sufficient rooms and the lack of adequate computerization. In particular, the fact that a single room, i.e. the one of the Secretariat (18 m<sup>2</sup>) accommodates three members, receives students and at the same time keeps the records and the documents of the Department (serves as a store room as well) illustrates the magnitude of the problem.

Concerning computerization, i.e. an issue that is exclusively under the supervision of the Institution, it appears with lots of shortcomings and inefficiencies. Many of the problems encountered until today have arisen due to the current evaluation, with data required given on the basis of the Secretariat times rather than on the basis of instant information through an upgraded computerized system.

The different nature infrastructures available in the Department, although thought to be sufficient are not exploited effectively due to the lack of the appropriate rooms, which as already seen comprises maybe the dominant problem of the Department.

Budgets submitted by the Department are rationally composed, based on the needs of the department on each of the numerous sectors (codes). Funds available are the least possible, while the “conquests” of the department are the result of long-term efforts. In this context, a more decisive lobbying in order to increase the state funds should be put forward.

In conclusion, the Department of Dental Technology may be granted as a modern educational cell of the TEI of Athens. Despite the difficulties and the negative attributes, the department manages to provide modern knowledge in the field of Dental Technology and comprises a unique Department for the Greek higher education system. Validation of the negative attributes pointed out in the current essay, under no circumstances does it change the general picture of the department, and contrariwise it illustrates the belief that acknowledgment of problems is a prerequisite for improvement of the situation.

### **11.2 Do you see any opportunities for the exploitation of positive attributes or any risks deriving from negative attributes?**

Best is said to be the enemy of good. In this context, the Department is found in a constant effort for the improvement of its procedures, regardless whether these concern the education, the administration or the infrastructure component, etc. Being aware of inefficiencies as well as the reasons that the system appears inefficient, largely owed to the evaluation carried out, the Department finds ways to improve and correct problems and dysfunctions presented.

## 12. Improvement plans

*In this section, the department is called to develop an action plan for the elimination of negative attributes and the enforcement of positive ones, determining also its priorities on the basis of its potential.*

### 12.1 Describe the short-term action plan of the department for the elimination of negative attributes and the enforcement of positive ones.

The short-term action plan encompasses the following directions:

**1. Education.** Education may and should be more effective. It comprises the work of the teaching staff members as well as the work of all other members constituting the department (STS, scientific and lab assistants, administrative staff, etc.), regardless of the post and the method of education each time considered. In this context, the main points that the department should draw its attention on are the following:

- Improvement of the existing books and elaboration of new ones in order for the recent developments in the field of the dental science to be covered as well. Update of the classic book concept through its conversion to an electronic book is thought to be both essential and feasible, especially if considering the nowadays technological potential. The composition of laboratory guides and manuals for all labs not providing one at the moment is also thought to be essential.
- Modernization of the teaching methods in the labs. Teaching in laboratories has much improved, especially since the use of audio-visual means has become available by the Department (computers, data projectors, cameras, etc.). Nevertheless, extension of the use should be applied to all laboratories, while the generation of more educational DVDs is also required.
- Improvement of the exam system through the increase of the transparency levels may be achieved by the announcement of answers and solutions to questions and exercises of the exams on the website of the Department, immediately after the exam period by the module instructor.
- Determination and application of a common -as much as possible- policy by all members of the teaching staff at both the methods of education and the exam system.
- Selection of the most appropriate scientific and lab assistants. Provision of motives to students concerning their interaction with international departments. Nevertheless, to achieve such a task, prior activation of the teaching staff members is required.

**2. Curriculum of studies.** The current curriculum of studies was recently reviewed and has been in force since the Winter Semester of the academic year 2008-2009. However, the program of studies requires constant monitoring and improvement with regards to its effectiveness and adjustment to the nowadays requirements. In this context

- Activation of the committee in charge of the implementation and the effectiveness of the curriculum of studies is required, while track of the international developments in the field of dental technology and the educational systems of similar departments is necessary

as well. In this way the committee will be prepared for the time that the next review of the program of studies will be necessary.

- Actuation of the sectors in order for proposals to be submitted concerning the Department equipment and the material-technical infrastructure required for the implementation (new courses, change in the content of courses, etc.) and the improvement of the entire curriculum is also necessary.

**3. Research activity.** The improvement of the education and the upgrade of the program of studies require that the members of the teaching staff are active in terms of research work as well. Only in this way may the science be promoted and the international developments in the field to be tracked. Benefits of the research work accruing slowly, though steadily, are then filtered and supplied to the education process.

- The Department has to determine a committee that will deal with the subject of research activities, i.e. a committee that shall study, plan and submit its proposals to the department.

- The Department is obliged to develop a research policy and a strategy in order for progress to be accomplished in the field.

- Besides, students should also contribute towards that direction, possibly through the course of “research methodology” and the elaboration at the first stage of research protocols such as the quality control of assessments composed.

- Results of research studies should after their publication or announcement at a conference are presented to the staff of the department within the framework of an analogous event.

**4. Administrative services.** Even though the administrative services are under the auspices of the Institution, the Department may still submit its proposals for the former improvement. Of primary concern is the improvement of the computerization system in order for students to be better served and in order for easy access to data required to be possible, e.g. acquisition of statistical data that are essential for the development of a strategy at different department levels.

**5. Evaluation.** Based on the experience of the current evaluation, the Department should standardize the processes in order for the latter to require less effort, become stricter, more reliable and more transparent. If the QAU or the HQAA does not ensure the installation of a computerization system for the introduction of data (e.g. questionnaires) and the generation of conclusions in time then the Department should build a properly adjusted electronic program of standard data platforms.

**6. Development of collaborations with social/cultural/production bodies.** Enforcement of the existing collaborations is necessary along with the development of new ones. The department should present an extroversion that will much improve its image. Benefits are multiple, mainly regarding the attraction of students and scientific staff of high standards and the more effective establishment of graduates as far as their careers are considered.

## **12.2 Describe the medium-term action plan of the Department for the elimination of negative attributes and the enforcement of positive ones.**

The medium-term action plan should consider the following:

**1. Increase of human resources.** The Department, based on its needs must plan and ask from the Institution and the State, the increase of human resources, either this concerns admission of new teaching staff members or STS, or administrative staff. Employment of new adequate members of teaching staff is essential. Besides, there are still structural posts in the department that remain vacant.

**2. Improvement of the practical training.** The institution of practical training is thought to be fundamental for the students' education. As the amount of theoretical knowledge and the respective amount of work tend to increase, laboratories and the respective work are in effect reduced. Thus, although Dental Technology is a science, one should not disregard its technical qualification background, actually corresponding to the second term of "technology". In this context, it is essential for each student to be trained in a dental lab, where he can familiarize with all issues of everyday dental technology. Therefore, this is a big opportunity for the Department to improve the conditions of the practical training realization in order for the student to obtain the appropriate experience towards the establishment of a concrete working profile. Steps that should be followed include the following:

- Determination of lab standards and specifications thought to be adequate for practical training.
- Cooperation with the competent bodies, such as the Pan-Hellenic federation of dental laboratories for the determination and standardization of labs meeting the specifications.
- Cooperation with the competent bodies, for the development of an educational system to be applied in the laboratories so as to ensure training of the student in all subjects required.
- Training of the persons in charge of the labs that shall receive students for their practical training is also necessary.

However, as outlined in the proposals to the administration of the Institution, creation of a practical training lab within the borders of the department would be ideal.

**3. Development of collaborations with other identical international departments.** Many of the teaching staff members maintain friendly relations with colleagues of international departments. Thus, there is an opportunity for the Department to develop new collaborations so as to obtain benefits from the respective curriculums of studies and also direct its graduates effectively in the selection of the most appropriate master's course abroad.

**4. Organization of scientific events.** The organization of scientific events by the department promotes its academic profile and motivates its academic staff and students. The potential for the entire Institution to organize such events is apparent since the operation of the renovated central amphitheatre.

### **12.3. State your propositions to be enacted by the Administration of the Institution**

The Department as already known is not self-reliant contrariwise it comprises a vital cell of the TEI of Athens. Thus, plans for improvement concern not only the Department but the entire Institution. Issues that need to be confronted by the Institution Administration encompass the following:

**1. Availability of new rooms-spaces.** Many of the dysfunctions that the Department encounters concern the lack of space available. Already mentioned, some of the classrooms are also used as labs, whatever this may imply. Furthermore, the area of rooms already in use is thought insufficient, this resulting to hygiene, security and effectiveness problems. Therefore the administration should seek for additional space available and also confront the issue of transfer for departments.

**2. Dispensation of books.** Dispensation of books in time, meaning during the first weeks of the semester, is an everlasting request of students. Although improvement has been recorded regarding the issue, delays are still noted. In our opinion, through the introduction of a computerized system that is more flexible and effective, acceleration of the process is feasible.

**3. Regulation of studies.** The problem is noted in the difference between the work burden considered by the curriculum of studies (24-26 hours per week) and the fact that the regulation of studies permits the registration to modules of 45 hours total that is even higher for those to graduate. On top of these, module chains are eliminated for those to graduate, this leading to the uncontrolled registration of modules which in turn leads to the depreciation of the educational procedures. As a result, reduced attendance of theoretical courses is noted, whatever the consequences of this might be, already underlined in the "Teaching Work" section. In this context, it is believed that the problem of reduced attendance may be solved on the basis of reviewing the current regulation of studies, requesting that its dictations concerning the hours permitted per semester correspond to contemporary curriculum of studies, correlating the hours of attendance with the work burden.

**4. Library.** Operation of the Institution library is satisfying with a sufficient number of books and adequate electronic support. Enrichment of the book list along with access rights to more electronic databases on the basis of subscriptions is necessary. Departments should be asked on the electronic databases selected by the Institution in order for the academic staff members and the students of the Department to obtain the information required.

**5. Development of a construction lab for third party service.** The problem of the practical training (concerning the quality of it and its supervision) may be easily solved if a department lab is created that is equipped with all modern devices and instruments met in a dental technology lab. Graduates dental technicians may run the lab under the supervision of the teaching staff members. During the operation of the lab, dental additives may be constructed for either the students of the dental school of NKUA (if this is agreed) or for dentists or any other that is interested.

For the work undertaken of course, prices considered may be rather competitive compared to the market standards, while as it accrues this lab may be self-reliant, and even cost-effective, thus broadening the funding sources of the Department. Besides, in a number of countries, Greece included, some of the schools/departments provide services to third parties on the basis of rewards. Furthermore, that lab may also offer training opportunities for the Department students under the control and supervision and mainly under the certified quality ensured by the modern requirements of the dental engineering science.

**6. Rational use of department funds.** The Department is thought to be poorly funded, although the problem of poor funding is common in Greece. On top of these, distribution of

funds by the Institution to the departments does not take into account the special needs of each department. Thus, bargaining often met injures the academic profile of the Department. As a result, it is believed that the funds should be distributed on the basis of objective criteria that also consider the special needs of every department.

**7. Sponsorship of the practical training.** As known, the practical training is partly financed by the Greek Manpower Employment Organization (GMEO) and partly by the employer/owner of the lab where the practical training is executed. Nevertheless, the employer is often found to avoid payment of the student based on the fact that he is a trainee and does not provide an actual service. In that case the student has to either seek for another employee or compromise with a situation that does not correspond to the status of the practical training. If the Institution was responsible for what is today the financing part of the employer, then finding a post for practical training would be much easier for students.

#### **12.4. State your propositions to be enacted by State**

**1. Establishment of professional rights for the graduates of the Department.** In specific, with regards to the profession of the dental technician, the paradox in force since the enactment of the N.166/86 law, gives the right to graduates of secondary education (graduates of TELs, etc.) after a certain time of practical training and examination to obtain the license of dental technician. As a result, professional rights of the Department's graduates are injured, which also contradicts with the Ministerial Decision A4/4112/1992 based on which the Greek legislation adapts to the Directive 89/48 of the EU, where it is clearly mentioned that in order to obtain the licence of the dental technician one needs a higher education diploma corresponding to studies of at least three years. Nevertheless, the result of these actions is that both graduates' dental technicians of the TEI and assistants of dental technicians of the TEL obtain the licence to run a dental technician's lab.

In fact, the graduates of the Dental Technology Department are found in the most aggravated place among all other graduates of the Faculty of Health and Caring Professions, since they are the only whose professional rights are the same with those given to graduates of secondary education. Furthermore, it should also be noted that the graduates of the second TEL cycle require 3 years (practical training) so as to sit exams and obtain the license, in opposition to the 4 years of studies of our graduates. In this context, the law 1666/86 should be reviewed immediately in order for the professional rights of these two different education grades to be differentiated.

**2. Reduction of students admitted.** This is also an everlasting request of the Department. Since the conditions of education are not improved (space available, staff), the number of students admitted should be reduced to 60-65, i.e. the number of students that the department may adequately educate under the given conditions. Note however that the number of student admitted is decided by the State (Ministry of National Education and Religious Affairs).

**3. Increase of education funds.** It may sound as a stereotype but upgrading of the Department and improvement of current operation conditions cannot be achieved without adequate funds.

**4. Sponsorship of the practical training.** As known, the practical training is partly financed by GMEO and partly by the employer/owner of the lab where the practical training is executed. Nevertheless, the employer is often found to avoid payment of the student based on the fact that he is a trainee and does not provide an actual service. In that case the student has to either seek for another employee or compromise with a situation that does not correspond to the status of the practical training. If the State was responsible for the entire financing, then finding a post for practical training would be much easier for students.

**5. Procedures of filling the vacant posts.** The problem of the reduced human resources has two extensions.

- Difficulties and delays in the call of new scientific staff posts and
- Difficulties and delays in the employment of newly elected scientific staff

Procedures should be simplified and bureaucracy should be eliminated in order to avoid the considerable delays in the employment of new scientific staff members. Teaching may not exist in the absence of the teacher.

**6. Enhancement of the research activities.** Increase of the funds directed to research activities should be increased by the State, either directly to the TEIs or via special programs. Upgrading may not exist in the absence of primary research. Furthermore, programs announced by the State should allow greater flexibility in the eligible expenditures in order for the latter to be adjusted to each research team's requirements and needs.

**7. Development of autonomous postgraduate programs.** Development of autonomous postgraduate programs is of fundamental importance for the self-reliance of the TEIs and the enhancement of the education they provide. Of course, for this to be achieved enactment of a law is not adequate, on the contrary interaction between the State and the Institution should configure the conditions and requirements of developing such postgraduate programs. Only in this way may the postgraduate program obtain the validity, the identification and the acceptance by high standard of candidates.

**Tables and Appendices are following, in accordance with the standard guide directions of the HQAA.**



**Table 13-1. Teaching staff promotion**

		2008-2009	2007-2008	2006-2007	2005-2006	2004-2005
Professors	Total	2	1			
	With promotion*	1	1	1	1	1
	New recruitments*					
	Retirements *					
	Resignations*					
Associate Professors	Total		1	1	1	
	With promotion *		1	1	1	
	New recruitments*					
	Retirements *					
	Resignations*					
Assistant Professors	Total	3	3	3	2	2
	With promotion *					
	New recruitments*				1	
	Retirements*					
	Resignations *					
Laboratory instructors	Total	4	4	4	4	4
	New recruitments*					
	Retirements *					
	Resignations *					
Scientific/Lab associates	Total					
Adjuncts **	Total	50	48	50	48	48
Technical Laboratory staff	Total	3	3	3	3	3
Administrative staff	Total	3	2	2	2	2

\* it concerns the last mentioned year

\*\* it concerns the number of contracts – not instructors (e.g. if an instructor has two contracts, for the fall and spring semesters, he is considered to have signed two contracts)

**Table 13-2.1. Student flow in the Department (all semesters are included)**

	2008-2009	2007-2008	2006-2007	2005-2006	2004-2005
Undergraduate	86	74	72	83	80
Postgraduate	2				
Doctoral					

**Table 13-2.2. Student entrance flow of the Department**

	2008-2009	2007-2008	2006-2007	2005-2006	2004-2005
Panhellenic examinations	77	63	64	72	70
Transfers					
Placement examinations		1		1	1
Other	9	10	8	10	9
Total	86	74	72	83	80

**Table 13-3.1. Undergraduate Program Subjects**

<b>SUBJECT</b>	<b>Website</b>	<b>Page in Studies Guide</b>	<b>Instructors</b>	<b>Compulsory / Optional</b>	<b>Evaluation by students (Yes / No)</b>	<b>Theory –Lab</b>
PHYSICS	*	16	Skouroliakou	C	Yes (E)	T
CHEMISTRY	*	17	Stathoulopoulou	C		T
ANATOMY	*	18	Lazarettos	C	Yes (X2)	T-L
BIOLOGY	*	20	Trougos	C	Yes (X1,X2)	T
PHYSIOLOGY	*	22	Maximiadis	C	Yes (X2)	T
INFORMATICS	*	23	Demetriades	C	Yes (X2)	T-L
BIOCHEMISTRY	*	24	Karikas	C		T
BIOMETRY-BIOSTATISTICS	*	26	Karayianni	C	Yes (E)	T
PROFESSIONAL ETHICS	*	66	Balourdass	C	Yes (X1,E,X2)	T
PRINCIPLES OF BUSINESS ADMINISTRATION AND LABORATORY ORGANIZATION	*	68	Boura	C	No	T
ENTREPRENEURSHIP	*	70	Chadjikian	SC	No	T
PRINCIPLES OF HEALTH SERVICES ORGANIZATION AND MANAGEMENT	*	71	Theodorakis	SC	No	T
SOCIOLOGY OF HEALTH	*	73	Patitsa	SC	No	T
PRINCIPLES OF MARKETING	*	74	Frigas	SC	No	T
PRINCIPLES OF DENTAL TECHNOLOGY	*	27	Kyparissidis	C	Yes (X1,E)	T
DENTAL MORHOPOGY	*	28	Galiatsatos	C	Yes (X1,E,X2)	T-L
DENTAL BIOMATERIALS I	*	30	Vergos	C	No	T
DENTAL BIOMATERIALS II	*	31	Zinelis	C	No	T
PHYSIOLOGY OF THE STOMATOGNATHIC SYSTEM-OCCLUSION	*	32	Galiatsatos	C	Yes (E,X2)	T
PROSTHODONTICS & AESTHETICS	*	35	Salamaras	C	Yes (E,X2)	T

ORAL MICROBIOLOGY	*	36	Yiannoulaki	C	No	T
ORAL & LAB HYGIENE	*	37	Zavola	C	Yes (E)	T
FIRST AID	*	39	Givalos	C	Yes (X2)	T
METHODOLOGY-RESEARCH	*	41	Prombonas	C	Yes (X1)	T
REMOVABLE PROSTHODONTICS I	*	42	Yannikakis	C	Yes (X1,E,X2)	T-L
REMOVABLE PROSTHODONTICS II	*	44	Kyparissidis	C	Yes (X1,E,X2)	T-L
FIXED PROSTHODONTICS I	*	46	Dimitropoulou	C	Yes (X1,E,X2)	T-L
FIXED PROSTHODONTICS II	*	49	Dimitropoulou	C	Yes (X1,E,X2)	T-L
ORTHODONTICS I	*	48	Boulouhou	C	Yes (X1,E,X2)	T-L
MANAGEMENT OF OCCLUSION AND DYSFUNCTIONAL DISORDERS OF STOMATOGNATHIC SYSTEM	*	51	Boulouhou		Yes (X1,X2)	
ORTHODONTICS II	*	52	Boulouhou	C	Yes (X1,E,X2)	T
DENTAL CERAMICS I	*	54	Spyropoulos	C	Yes (X1,E,X2)	T-L
MAXILLOFACIAL PROSTHODONTICS	*	56	Vergos	C	Yes (X1,X2)	T
IMPLANT PROSTHODONTICS	*	57	Yannikakis	C	Yes (X2)	T
DENTAL CERAMICS II	*	58	Spyropoulos	C	Yes (X2)	T-L
REMOVABLE PROSTHODONTICS III	*	60	Prombonas	C	No	T-L
COMBINED PROSTHODONTICS-PRECISION ATTACHMENTS	*	62	Prombonas	C	Yes (X1,E,X2)	T-L
ENGLISH FOR DENTAL TECHNOLOGY	*	63	Kapellou	C	No	T
DISSERTATION	*	64		C		T

\* [http://www.teiath.gr/sevp/dental\\_technology/](http://www.teiath.gr/sevp/dental_technology/)

**X1: Winter semester 2007-2008**

**E: Spring semester 2007-2008**

**X2: Winter semester 2008-2009**

**Table 13-3.2. Undergraduate Program Subjects**

<b>Subject</b>	<b>Multiple bibliography</b>	<b>Total hours</b>	<b>ECTS</b>	<b>General Background Subjects (GBS) Special Background Subjects (SBS) Specialization Subjects (SS) Administration, Economy, Legislation &amp; Humanistic Studies (AAELHS)</b>	<b>Registered students</b>	<b>Number of students who participated in the examinations*</b>	<b>Sufficiency of educational means Nai/Oxi</b>	<b>Number of students who passed successfully either in the first or in the second examination period*</b>
PHYSICS	YES	3T	5	GBS	136	70	Yes	24
CHEMISTRY	YES	3 T	3	GBS	363	309	Yes	241
ANATOMY	YES	3 T+2L	7	GBS	92	54	Yes	45
BIOLOGY	YES	3 T	5	GBS	145	119	Yes	61
PHYSIOLOGY	YES	3 T	5	GBS	128	73	Yes	24
INFORMATICS	YES	3 T+2L	5	GBS	63	55	Yes	30
BIOCHEMISTRY	YES	3T	5	GBS	68	-	Yes	-
BIOMETRY-BIOSTATISTICS	YES	3T	5	GBS	62	29	Yes	24
PROFESSIONAL ETHICS	YES	2T	3	AELHS	148	105	Yes	77
PRINCIPLES OF BUSINESS ADMINISTRATION AND LABORATORY ORGANIZATION	YES	2T	3	AELHS	50	24	Yes	12
ENTREPRENEURSHIP	YES	2T	3	AELHS	21	-	Yes	1
PRINCIPLES OF HEALTH SERVICES ORGANIZATION AND MANAGEMENT	YES	2T	3	AELHS	29	8	Yes	9
SOCIOLOGY OF HEALTH	YES	2T	3	AELHS	33	17	Yes	10
PRINCIPLES OF MARKETING	YES	2T	3	AELHS	40	-	Yes	2
PRINCIPLES OF DENTAL TECHNOLOGY	YES	3T	5	SBS	101	65	Yes	49
DENTAL MORPHOLOGY	YES	4 T+5L	8	SBS	112	110	Yes	52
DENTAL BIOMATERIALS I	YES	3T	5	SBS	67	15	Yes	4
DENTAL BIOMATERIALS II	YES	4T	5	SBS	91	47	Yes	15

PHYSIOLOGY OF THE STOMATOGNATHIC SYSTEM- OCCLUSION	YES	4T	5	SBS	131	75	Yes	40
AESTHETICS & PROSTHODONTICS	YES	3T	5	SBS	90	67	Yes	40
ORAL MICROBIOLOGY	YES	3T	5	SBS	248	215	Yes	192
ORAL & LAB HYGIENE	YES	2T	3	SBS	35	10	Yes	8
FIRST AID	YES	2T	3	SBS	35	15	Yes	10
METHODOLOGY-RESEARCH	YES	3T	5	SBS	47	24	Yes	12
REMOVABLE PROSTHODONTICS I	YES	3 T+9L	10	SS	120	119	Yes	53
FIXED PROSTHODONTICS II	YES	3 T+9L	10	SS	27	24	Yes	19
FIXED PROSTHODONTICS I	YES	3 T+9L	10	SS	121	110	Yes	57
FIXED PROSTHODONTICS II	YES	2 T+9L	9	SS	72	72	Yes	32
ORTHODONTICS I	YES	3 T+3L	7	SS	66	52	Yes	40
MANAGEMENT OF OCCLUSION AND DYSFUNCTIONAL DISORDERS OF STOMATOGNATHIC SYSTEM	YES	3T	5	SS	141	82	Yes	69
ORTHODONTICS II	YES	3 T+3L	7	SS	84	47	Yes	27
DENTAL CERAMICS I	YES	3 T+9L	10	SS	74	46	Yes	20
MAXILLOFACIAL PROSTHODONTICS	YES	3T	4	SS	82	64	Yes	53
IMPLANT PROSTHODONTICS	YES	6T	8	SS	69	61	Yes	49
DENTAL CERAMICS II	YES	3 T+4L	8	SS	77	50	Yes	47
REMOVABLE PROSTHODONTICS III	YES	3 T+4L	8	SS	27	23	Yes	18
COMBINED PROSTHODONTICS- PRECISION ATTACHMENTS	YES	3 T+4L	8	SS	22	18	Yes	2
ENGLISH FOR DENTAL TECHNOLOGY	YES	3T	3	SS	93	48	Yes	17
DISSERTATION	YES		20	SS			Yes	

\* it concerns winter semester 2008-2009

**Table 13-4.1 Distribution of grading and Grade Point Average (GPA) of the Department graduates**

Graduation Year	Grade distribution (%)				GPA (total graduates)
	5.0-5.9	6.0-6.9	7.0-8.4	8.5-10.0	
2004-2005	3	25	39		7
2005-2006	3	30	32	1	7.01
2006-2007	2	25	21		6.9
2007-2008	1	34	22		6.9
2008-2009		23	17	1	6.8
Total					



**Table 13-4.2 Flow of Undergraduate Program graduates and duration of studies**

Entrance Year	Duration of Studies (years)								Have not graduated yet	Total
	K	K+1	K+2	K+3	K+4	K+5	K+6			
2002-2003	23	24	10					38	95	
2003-2004	19	12						59	90	
2004-2005	20							80	100	
2005-2006								83	83	
2006-2007								72	72	
2007-2008								74	74	
2008-2009								86	86	

Table 13.5.1 Subjects of Postgraduate Program

Title of the Program: «DENTAL TECHNOLOGY MATERIALS»						
Subject	Website	Page in Studies Guide	Instructors	compulsory / optional	Evaluation by students (Yes / No)	Lectures
<b>Basic Subjects</b>						
Biochemistry			K. Dimopoulos, Professor	Compulsory	NO	YES
Anatomy of the head / Physiology			I. Iatrou, Associate Professor	Compulsory	NO	YES
Microbiology			M. Nakou, Associate Professor	Compulsory	NO	YES
Occlusion			St. Yannikakis, Professor of Athens TEI	Compulsory	NO	YES
Introduction to Organic Analysis			G. Iliadis, Professor	Compulsory	NO	YES
Research methodology			A. Prombonas, Assistant Professor of Athens TEI	Compulsory	NO	YES
Epidemiology – Biostatistics			A. Polychronopoulou, Assistant Professor	Compulsory	NO	YES
Dental Technology			E. Dimitropoulou, Professor of Athens TEI K. Spyropoulos, Lab Instructor of Athens TEI	Compulsory	NO	LAB
<b>Specialization Subjects</b>						
Mechanics of Materials			G. Iliadis, Professor	Compulsory	NO	YES
Polymer Materials			A. Zissis, Associate Professor	Compulsory	NO	YES
Electromechanical and chemical behavior of materials			Sp. Zinelis, Lecturer	Compulsory	NO	YES
Metal science			Sp. Zinelis, Lecturer	Compulsory	NO	YES
Ceramics			Tr. Papadopoulos, Associate Professor I. Nikelis, Assistant Professor	Compulsory	NO	YES
Prosthetic Alloys			Tr. Papadopoulos, Associate Professor	Compulsory	NO	YES
Orthodontic Wires			U. Boulouhou, Assistant Professor of Athens TEI	Compulsory	NO	YES
Polymers			A. Zissis, Associate Professor	Compulsory	NO	YES
Biological properties of materials - testing			G. Vougiouklakis, Professor	Compulsory	NO	YES
Dental ceramics			Tr. Papadopoulos, Associate Professor	Compulsory	NO	YES
Specifications-Τυποποίηση Βιοϋλικών			G. Vougiouklakis, Professor	Compulsory	NO	YES
Principles of sample pre-work and construction			E. Dimitropoulou, Professor of Athens TEI	Compulsory	NO	LAB

---

			I. Nikelis, Assistant Professor K. Spyropoulos, Lab Instructor of Athens TEI			
Dissertation preparation			Current supervisor	Compulsory	NO	

**Table.5.2 Subjects of Postgraduate Program**

Title: «DENTAL TECHNOLOGY MATERIALS»								
Subject	Multiple bibliography	Total hours	ECTS	Background (B) Scientific Field (SF) General Background(GB) Skills Development(SD)	Core (co) Specialization(S) Career Direction(CD)	Registered students	Number of students who participated in the examinations	Number of students who passed successfully either in the first or in the second examination period
<b>Basic Subjects</b>								
Biochemistry	YES	30	3	SF	CD	2	2	2
Anatomy of the head / Physiology	YES	30	3	SF	CD	2	2	2
Microbiology	YES	30	3	SF	CD	2	2	2
Occlusion	YES	30	3	SF	CD	2	2	2
Introduction to organic analysis methods	YES	30	3	SF	CD	2	2	2
Research methodology	YES	15	1,5	SF	CD	Will register in the next semester		
Epidemiology – Biostatistics	YES	30	3	SF	CD			
Dental Technology		45	1,5	SD	CD			
<b>Specialization Subjects</b>								
Mechanics of materials	YES	30	3	SF	S	2	2	2
Polymer materials	YES	30	3	SF	S	2	2	2
Electromechanical and chemical behavior of materials	YES	30	3	SF	S	2	2	2
Metal science	YES	30	3	SF	S	2	2	2
Ceramics	YES	30	3	SF	S	2	2	2
Prosthodontic Alloys	YES	30	3	SF	S	Will register in the next semester		
Orthodontic Wires	YES	15	1,5	SF	S			
Polymers	YES	15	1,5	SF	S			
Biological properties of materials- testing	YES	30	3	SF	S			
Dental Ceramics	YES	30	3	SF	S			

---

Specifications-Standardization of Biomaterials	YES	30	3	SF	S			
Principles of sample pre-work and construction		90	4		S			
Dissertation preparation			5		S			

**Table.5.3 Flow of applications, number places offered, registered students and graduates of Postgraduate Program (PGP)**

PGP title: «DENTAL TECHNOLOGY MATERIALS»						
		2007-2008	2008-2009	2009-2010		
applications ( $\alpha+\beta$ )						
	( $\alpha$ ) graduates of the Department	6	4	3		
	( $\beta$ ) graduates of other Departments	0	0	1		
Applications		2	2	2		
Registrations		0	2	2		
Graduates		0	0			

**Table 13.5.4 Distribution of grades and GPA of the Postgraduate Program graduates**

PGP title:	«DENTAL BIOMATERIALS»				
Graduation Year	Grade distribution (%)				GPA (total graduates)
	5.0-5.9	6.0-6.9	7.0-8.4	8.5-10.0	
					No graduates yet
<i>Total</i>					

**Table 13.6.1 Scientific publications****Stavros Yannikakis - Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		1		3	2				
2007	1			2	3				
2006		1		3					
2005		2		2					
2004		1	1	4	1			1	
Total	1	5	1	14	6			1	

**Eugenia Dimitropoulou - Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008								1	
2007									
2006		1						1	
2005		1						2	
2004	1	2						1	
Total	1	4						5	

**Aristidis Galiatsatos– Assistant Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		2							
2007									
2006									
2005		4							
2004		2						3	
Total									



**Urania Boulouhou– Assistant Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008							1		
2007									
2006				1				1	1
2005									
2004									3
Total				1			1	1	4

**Antonios Prombonas– Assistant Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		4							
2007		2							
2006		1						1	
2005									
2004		1						1	
Total		8						2	

**Panagiota Tsolka-Katritsi– Assistant Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008									
2007									
2006									
2005									
2004									
Total									

**Stavros Kyparissidis– Assistant Professor**

	A	B	Γ	Δ	E	Z	H	Θ	I

2009									
2008									
2007									
2006		1							
2005									
2004		1							
Total		2							

#### Anna Zavolla– Lab Instructor

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008									
2007									
2006		1							
2005									
2004		1							
Total		2							

#### Alexandra Ioannidou– Lab Instructor

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008									
2007									
2006									
2005									
2004									
Total									

#### Theodoros Balourdas– Lab Instructor

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008									
2007									

2006									
2005									
2004									
Total									

**Panagiotis Salamaras– Lab Instructor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		1							
2007									
2006									
2005									
2004									
Total		1							

**Constantine Spyropoulos– Lab Instructor**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		1							
2007									
2006		1							
2005		1							
2004									
Total		3							

**Total**

	A	B	Γ	Δ	E	Z	H	Θ	I
2009									
2008		9		3	2		1	1	
2007	1	2		2	3				
2006		6		4				1	1
2005		8		2				2	

---

2004	1	8	1	4	1			5	3
Total	2	33	1	15	6		1	9	4

**Explanations :**

- A: books/monographs
- B: works in peer-reviewed scientific journals
- Γ: works in open-access scientific journals
- Δ: works in peer-reviewed conference proceedings
- E: works in open-access conference proceedings
- Z: Participations in scientific manuals
- H: other
- Θ: papers presented in scientific conferences published in peer-reviewed proceedings
- I: papers presented in scientific conferences – no proceedings published

**Table 13.6.2 Citations****Stavros Yannikakis - Professor**

	A	B	Γ	Δ	E	Z	H
2008	*			1			
2007	*				1		
2006	*			1			
2005	*						
2004	*			1			
Total	*42			3			

**Eugenia Dimitropoulou - Professor**

	A	B	Γ	Δ	E	Z	H
2008				2			
2007				1			
2006				2			
2005				1			
2004				1			
Total				7			

**Aristidis Galiatsatos - Assistant Professor**

	A	B	Γ	Δ	E	Z	H
2008	*						
2007	*						
2006	*						
2005	*						
2004	*						
Total	*12						

**Urania Boulouhou– Assistant Professor**

	A	B	Γ	Δ	E	Z	H
2008				1		2	

2007				1			
2006	1			1		2	
2005				1		1	
2004				1			
Total	1			5		5	

#### Antonios Prombonas– Assistant Professor

	A	B	Γ	Δ	E	Z	H
2008	1						
2007							
2006	3						
2005							
2004	1						
Total	5						

#### Stavros Kyparissidis– Assistant Professor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							
2005							
2004							
Total							

#### Anna Zavolla– Lab Instructor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							
2005							
2004							
Total							

## Alexandra Ioannidou– Lab Instructor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							
2005							
2004							
Total							

## Theodoros Balourds– Lab Instructor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							
2005							
2004							
Total							

## Panagiotis Salamaras– Lab Instructor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							
2005							
2004							
Total							

## Constantine Spyropoulos– Lab Instructor

	A	B	Γ	Δ	E	Z	H
2008							
2007							
2006							

---

2005							
2004							
Total							

**Total**

	A	B	Γ	Δ	E	Z	H
Total	61			15	1	5	

**Explanations:**

- A: citations
- B: citations in field-specific/scientific journals
- Γ: book reviews
- Δ: participation in conference scientific committees
- E: participation in editorial boards of scientific journals
- Z: Invitations to lectures
- H: Patents



