

**QUALITY STANDARDS FOR
GRADUATE PROGRAMS IN
PERIODONTOLOGY**

European Federation of Periodontology

2008

Introduction

The European Federation of Periodontology (EFP) has as one of its missions the improvement of the quality of periodontal practice in Europe. Within this objective, education and training are key elements and with this document, the EFP aims to formulate guidelines and common quality standards for Graduate Training Programs in Periodontology. This document further defines the competences, learning outcomes and content of any Postgraduate Program aimed to graduate students as dental specialists in Periodontology, according to the provisions defined in the European Directive for Professional Qualifications (2005).

The EFP in this document sets forth the standards and requirements to be used in the evaluation of Graduate Programs in Periodontology seeking the formal accreditation by the EFP Education Committee. Once accredited, the programs are registered during a period of 8 years, when this accreditation must be renewed. The EFP, however, claims the right to evaluate a periodontal clinic/program at any desired time.

The *standards* are defined in general terms, followed by more specific, concrete *requirements* and learning outcomes. The standards establish the minimum criteria defined by the EFP; the requirements can be seen as the interpretation of the standards. In complying with the standards, one should not limit oneself to the requirements listed. The visiting evaluation committee will be more than interested in any additional local qualifications that support the mandatory standards.

In order for a graduate program in periodontology to gain recognition by the EFP, compliance with the following quality standards is needed. The standards are grouped into 4 main categories:

1. qualifications of the *director* of the periodontology training program (the trainer);
2. qualifications of the periodontology training *program*;
3. qualifications of the periodontology training *facility*, and;
4. qualifications of the periodontal *service*.

The standards and requirements can be found per category in the chapters 1 to 4.

The EFP expects this document to be a valuable contribution to the quality of dental specialist training in Europe.

CHAPTER 1

Qualifications of the director of the periodontology training program

Standard:

S.1. Graduate Programs in Periodontology must be directed by individuals who hold a high professional profile in Periodontology, including a distinguished record both in academia and in practice, and who have the desire and aptitude to teach.

Requirements of the Program Director:

R.1. The program director shall be specialized in periodontology and/or have completed a periodontology program (in the future: accredited by the EFP), shall have at least 10 years of experience as a practicing periodontist and is a well recognized clinician in the field of Periodontology.

R.2. The program director shall have a doctor's degree (PhD).

R.3. The program director shall have at least two years of administrative experience in a (private or university based) periodontal clinic of considerable size.

R.4. The director shall have demonstrated superior capabilities in the operation of a periodontal clinic and made substantial contributions to the development and improvement of such a clinic.

R.5. The program director shall have a (nearly) full time appointment. At least one other (nearly) fulltime staff member shall also be working at the periodontal clinic.

R.6. The program director shall:

6.1. take part in direct patient care activities at least one day a week;

6.2. the director and his staff shall be practising the specialty of periodontology in its full extent;

6.3. (continue to) show his scientific interest and capabilities by first author publications in a hard core periodontal journal describing results of own research (at least one every 5 years) and by attending scientific meetings;

6.4. (continue to) show his capabilities as a manager of the training program;

6.5. be a member of the national Periodontology Society or a foreign Society representing his country;

6.6. meet the ethical standards prevalent in dental care;

R.7. The program director shall ensure that:

7.1. the clinical teaching staff is specialized in periodontology and has at least 5 years of experience as a practicing periodontist

7.2. the seminars and tutorials are given by experts in the field of interest.

7.3. staff consultations, clinical conferences and report meetings with the students are held regularly;

7.4. the students are sufficiently in touch with other specialists;

7.5. students perform scientific work and further the possibility of doing so;

7.6. the students' case-reports, dental documentation and correspondence meet reasonable requirements;

7.7. he/she has considerable latitude in delegating preceptorial responsibilities for the training program to other staff members. Each staff member designated as a preceptor must have demonstrated outstanding strengths in those areas of practice for which he serves as preceptor;

7.7.1. the ratio between the number of teaching staff and the number of students shall provide close personal monitoring of the trainee during his training and provide adequate exposure of the trainee to the training (a recommended ratio should be at least one teaching staff for four students).

7.8. students will be able to function in a safe environment and will be acquainted with the risks involved in using apparatus and materials emitting ionizing radiation;

7.9. the attitude of students towards patients and colleagues should be appropriate at all times;

7.10. students should acquire and apply adequate knowledge and skills, according to the requirements as set forth by the European Federation of Periodontology, and undertake (corrective) actions if necessary.

R.8. The validity of the recognition of the director of the program as the trainer of the

periodontology students will last at most until the day when the trainer will have reached the age of 65.

R.9. Recognition as a trainer will be granted as a rule with reference to one training facility only.

CHAPTER II

Qualifications of the periodontology training program

Standards:

S.1. The periodontology training program shall be organized in accordance with sound educational principles.

S.2. The periodontology training program shall be predicated on the knowledge, skills and attitudes, required in contemporary periodontal practice at specialist level.

S.3. The periodontal clinic shall conduct the training program in such a way that the educational benefits to the student should be prioritized over the service benefits the clinic may obtain from the student.

Program requirements in general terms:

The program must comprise a three-year full-time course or its equivalent part-time, enabling the successful postgraduate student to practice Periodontics and Oral Implant Therapy at a specialist level.

This course must consist of a didactic, a clinical and a research component. The didactic component can be delivered by different teaching methodologies, but must include an extensive review of the literature. The clinical component must include the treatment of all patients referred for periodontal therapy and the fulfillment of the set of competencies and proficiencies defined below. The research component should include the undertaking of a research project, whose will be presented in the form of a written report or publication.

At the end of the three-year program and after passing a final examination and a successful defense of the research thesis, in presence of a designated EFP Examiner, the students will be conferred an EFP-Certificate in Periodontology together with the appropriate qualification from the host academic institution. The graduate program may be extended so that a PhD degree can be obtained, however this would involve an extra period of time.

By the end of the program students will be expected to have acquired the following set of competencies and proficiencies:

1. Competence in understanding the basic sciences relevant to dentistry in general and to Periodontology in particular.
2. Proficiency in understanding all areas of clinical Periodontics.
3. Competency in understanding all aspects of clinical and public health dentistry, including clinical epidemiology and evidence-based dentistry.
4. Competency in understanding those aspects of clinical medicine and surgery relevant to clinical dentistry. He/she should be competent to understand all possible interactions between oral and systemic diseases and to manage the periodontal problems of the medically compromised patient.
5. Competency in understanding the occlusal and restorative aspects of oral rehabilitation
6. Competency in understanding the important ethical and social issues that affect dental practice, including all possible legal and professional implications of practicing as a specialist in Periodontology.
7. Proficiency in carrying out the appropriate presentation, diagnosis and management of diseases and disorders of the periodontium.
8. Proficiency in carrying out the appropriate diagnosis, case selection, treatment planning and surgical procedures for the successful placement and maintenance of oral implants.
9. Proficiency in carrying out the appropriate diagnosis and management of peri-implant diseases and implant associated complications.
10. Competency in evaluating scientific literature, in posing pertinent research questions and hypotheses, in experimental design, and in the prosecution and communication of a research project.

Competent is defined as: responsible for carrying out the procedure, requiring little or no advice to

complete the task. He/she should complete the procedure within a reasonable time, period given individual circumstances. He/she displays understanding or insight in the rationale underlying the decision, he/she is able to discuss a range of possible treatment options, and defend appropriately their treatment decision. He/she should be able to anticipate common problems and to discuss appropriate possible remedial action with staff. He/she easily maintains 'professional' contact with the patient and staff and displays appropriate caring behaviour. He/she should be able to reflect on the experience and identify positive learning aspects unaided.

Proficient is defined as: responsible for carrying out the procedure, requiring no advice to complete the task in a timely manner. He/she should be able to undertake competently a small number of procedures that are beyond core. He/she should be able to demonstrate an understanding of the indications, process and outcome of the procedure to peers. He/she should be able to provide a logical, sequenced, integrated treatment plan that takes due regard of the patient's needs, wishes and level of co-operation. He/she should be able to reflect easily and accurately and identify future self-development needs

Clinical Competence and Proficiency should be evaluated through the students undertaking competence and proficiency tests designed to ensure that the student's understanding and practical skills are such that she/he would be able to carry out that clinical exercise in a safe and competent way, without supervision, in a practice setting. These tests should be implemented in the appropriate setting and the student is expected to provide a suitable patient with, where appropriate, full diagnosis and treatment planning. The student is expected to have ready and available all the clinical requirements to complete the particular task.

The graduate program must ensure that for each clinical procedure a competency/proficiency test document is provided where the student will find all the requirements and outcome measurements that will be recorded and tested.

Each student is required to fully document each phase of treatment (slides, models, records) in order to subsequently present these cases for evaluation. During the 3rd year, students will be required to visit (private) periodontal clinics in order to gain insight into the accepted manner of patient treatment and administration.

In order to gain insight into the problems of treating advanced cases (combined problems of periodontal disease plus complex orthodontic, restorative and prosthetic considerations) students are encouraged to seek consultation with the appropriate departments and present both a multidisciplinary treatment plan and the results of the comprehensive treatment in combination with all aspects of the periodontal and or implant therapy rendered.

At the completion of the course each student is expected to have accomplished a wide range of therapeutic modalities. The documentation of these various therapeutic phases should contribute to the construction of case reports.

The following is the list of minimum procedures that an EFP postgraduate specialist in Periodontology should be proficient in:

1. Diagnosis and treatment planning of any patient demonstrating periodontal disease and/or in need of tooth replacement and/or periodontal tissue reconstruction.
2. Non surgical cause-related periodontal therapy, including: subgingival debridement, use of systemic and topical antimicrobials, together with assessment and control of other important risk factors, such as smoking cessation, appropriate oral hygiene motivation, etc.
3. Surgical periodontal therapy, including: access flaps, apically repositioned flaps, regenerative and resective procedures, periodontal plastic surgical procedures and pre-prosthetic surgical procedures.
4. Surgical implant therapy, including: surgical placement of dental implants in all areas of the dentition in both fully and partially edentulous patients as well as competent in bone regenerative

procedures including grafting, membrane techniques, sinus floor elevation and soft tissue surgical procedures in conjunction with oral implants.

Program requirements in specific terms:

R.1. Course program

This course should be organised in three full-time years (6 semesters – 40 weeks/year) comprising 180 European Credits (ECTS – 1 ECT accounts for 25 hours of work load). Parts of the program may be exchangeable between the 3 years of education as long as the general structure of the program is maintained. The academic content leading to an Academic Master Degree will be 120 ECTS, including the Research Presentation. The Speciality Certificate can only be obtained after completing both the Academic Degree and the required clinical time. Both the Academic Degree and the Speciality Certificate are inter-linked in such a manner that one cannot be obtained without the other

General Distribution of ECTS Credits by Year

	Didactic Learning	Study and preparation	Evaluation	Research	Clinical Learning	ECTS
1° year	8	16	2	12	22	60
2° year	8	16	2	12	22	60
3° year	8	16	2	18	16	60
Total	24	48	6	42	60	180

R.2. Applicants

- 2.1. Must have received a dental degree from an accredited Dental School.
- 2.2. Must have not less than one, preferably not less than two years experience in general dental practice prior to commencing the program.

R.3. Didactic Component

This part of the program is designed to provide detailed information and discussion of the literature related to the various topics. Where possible, reading lists will be provided. The student will be expected to present summaries and a critical evaluation of relevant articles or texts in group discussion.

31. First year

3.1.1. Seminars and tutorials

This part of the program is designed to provide detailed information and discussion of the literature related to the various topics. The student will be expected to present summaries and a critical evaluation of relevant articles or texts for group discussion. Further details of the organization of these seminars and tutorials will be given at the start of the program. The content of the course is listed below.

3.1.2. Subject matter

1. Biology of the periodontium and oral physiology.
2. Microbiology of dental plaque and oral microbial ecology
3. Clinical features and diagnosis of periodontal diseases.
4. Therapy of periodontal diseases - initial treatment.
5. Functional anatomy of the head and neck.
6. Radiology and other imaging techniques.
7. Pharmacology

3.1.3. Learning Outcomes

The student:

1. Must be aware of the biology of cell function, cell-cell interactions, cell-matrix interaction, regulation of cellular function and the role of cytokines and growth factors. In addition the student must be acquainted with the principles related to wound healing and regeneration. Oral physiology will emphasize salivary functions and crevicular fluid biology.

2. Must have an in-depth knowledge of the composition of plaque and the chemical and microbial structure. He/she must be familiar with the literature pertaining to the relationship of plaque to inflammatory periodontal disease and have a basic understanding of culture techniques and tests to identify bacterial strains. Furthermore the student should be acquainted with the relationship of diet to plaque and be familiar with the various theories of calculus formation. This should be seen in the context of microbial ecology on skin and mucosal surfaces.

3. Must be acquainted with the research showing the relationship of gingivitis to plaque. In addition he/she must be fully acquainted with the clinical features and diagnosis of both chronic and acute forms of gingivitis and the etiologic factors related to these inflammatory disease processes. Furthermore the student must be fully acquainted with the clinical features of chronic, adult periodontitis, periodontal disease in children and young adults, rapidly progressing periodontitis and the differential diagnosis of these problems.

4. Must be fully acquainted with the literature pertaining to the effects of oral hygiene, scaling and planing (hand and ultrasonic methods) on inflammatory gingival and periodontal diseases.

5. Should be familiar with the diverse anatomical features of the head and neck including the temporo-mandibular joint and their interrelated functional aspects.

6. Must be familiar with the interpretation of both normal and pathological structures to be found on radiographs of the oral cavity. In addition the student should be aware of the techniques available for detecting changes in bone height on radiographs.

7. Must have knowledge of the action of the more commonly used analgesics, anti-inflammatory and antimicrobial agents. Furthermore, the problem of drug interactions must be reviewed.

3.2. SECOND YEAR

3.2.1. Seminars and tutorials

Following an extensive discussion of the pathogenesis of plaque-associated periodontal diseases and the epidemiology of periodontal diseases, attention will be given in this part of the program to the evaluation of different treatment modalities and the interrelationships of the aetiology and treatment of periodontal diseases with other disciplines within the field of dentistry. The method of discussion of the various topics (seminar/tutorial) is the same as in the 1st year.

3.2.2. Subject matter

1. Pathogenesis of plaque-associated periodontal diseases: The role of the host response.
2. Epidemiology of periodontal diseases.
3. Manifestations of systemic disorders in the oral cavity.
4. Medically compromised patients.
5. Antimicrobial treatment of periodontal diseases.
6. Occlusal trauma.
7. Therapy of periodontal diseases - periodontal surgery.
8. Treatment of furcation problems.
9. Interrelationships of periodontal disease and therapy with other dental disciplines.
10. Maintenance.
11. Behavioral sciences.

3.2.3. Learning Outcomes

The student:

1. Must understand the histopathological development of periodontal diseases and the pathogenic mechanisms of inflammation. In addition, the student should comprehend the immune reactions in the pathogenesis of gingival inflammation, and of lesions affecting the deeper tissues.

2. Must be acquainted with the major research works which have led to present day therapeutic

modalities for individual and community treatment.

3. Must be fully acquainted with the systemic disorders which may modify the response of the periodontal tissues to plaque associated inflammatory disease. The student must also be aware of those systemic diseases which can manifest themselves in the periodontal tissues with or without a pre-existing plaque induced inflammatory response.

4. Must be aware of the best way to obtain a medical history and thereby assess the degree of risk (using a modified version of the ASA-score or other scientifically validated method).

5. Must have a broad knowledge of the effects of antibiotics on the bacteria associated with inflammatory periodontal diseases. In addition he/she must be aware of the work comparing the effect of antibiotic treatment compared with mechanical therapy. Furthermore, the student must be fully acquainted with the role of antiseptics in the control of bacterial plaque and the effectiveness and use of these agents regarding the treatment of gingivitis and periodontitis.

6. Must be familiar with the literature relating to occlusal trauma. This includes the clinical and histological changes associated with traumatic occlusion and the modifying effects of this problem when combined with inflammatory periodontal disease. In addition the student must be aware of the place of the various treatment modalities used to treat a pathological occlusion.

7. Must be familiar with the historical background associated with the development of the various surgical methods of treating periodontal problems. Furthermore he/she must be fully acquainted with the following techniques, their indications and contraindications, advantages and disadvantages and effectiveness: gingivectomy, apically positioned flap and modified Widman flap with and without bone surgery, gingival extension techniques (mucogingival surgery), electrosurgery and guided tissue regeneration (GTR). The last subject (GTR) introduces the problem of new attachment versus re-attachment and the student must be fully aware of the research associated with this topic.

8. Must have a complete understanding of the treatment of furcation problems and the means of diagnosis. He/she must be acquainted with research evaluating the different treatment modalities.

9. Should be aware of the interrelationship of periodontitis to pulpal disease and the various approaches to treatment. In addition he/she must understand the place of adjunctive orthodontic, restorative and prosthetic therapy in the definitive phase of treatment.

10. Must understand the importance of maintenance therapy and he/she must be fully aware of the research associated with evaluation of aftercare.

11. Should understand the science behind alteration of behavior patterns (including tobacco-cessation and dietary advice).

3.3. Third year

3.3.1. Seminars and tutorials

This part of the program is designed to provide in depth knowledge with regard to implant dentistry. Following basic knowledge on osseointegration and the pathogenesis of plaque associated peri-implantitis, attention will be given to the evaluation of different treatment modalities. The method of discussion of the various topics (seminar/tutorial) is the same as in the previous years.

3.3.2. Subject matter

1. bone biology
2. implant placement
3. implant surface/ osseointegration/ soft tissue interface
4. inflammatory reactions in peri-implant soft tissues
5. peri-implant bone pathology
6. microbiological aspects related to implants
7. occlusal loading
8. treatment of peri-implantitis
9. interrelations of implant therapy with other dental disciplines
10. maintenance

3.3.3. Learning Outcomes

The student:

1. Must be acquainted with the mechanisms of bone formation, the healing of sockets, bone grafting, guided bone regeneration. The student should comprehend the cellular reactions in the process of bone formation and remodeling.

2. The student must be aware of the historical background to the development of dental implants and the various types of implant material currently in use. He/she must understand the indications and contraindications when considering placement of different implant materials and their advantages and disadvantages. The student should be fully acquainted with the present implants, flap design, implant position and direction, cortical stabilization and healing time. Furthermore he/she must be well aware of the esthetic aspects of implant placement.

3. Must have a complete understanding of the process of osseointegration as well as the biology of the transmucosal attachment

4. Must be acquainted with the (cellular) immunological mechanisms involved in the inflammatory response in the peri-implant soft tissues.

5. Must be acquainted with the various (cellular) mechanisms leading to bone loss

6. Must have a broad knowledge of the bacterial flora of the oral mucous membranes of subjects with or without teeth or implants as well as of the biofilms formed on teeth and implants. This includes the subgingival bacterial flora.

7. Must be fully acquainted on the effect of direct or indirect loading.

8. Must have a broad knowledge of the effect of mechanical/surgical or antimicrobial treatment of peri-implantitis.

9. Must be fully aware of the restorative and prosthetic therapy in the definite phase of treatment. In addition he/she must be aware of the place of adjunctive orthodontic therapy.

R. 4. Research Component

Students must take part in the research program of the department of periodontology or a relevant collaborating department. An academic full-time member from these departments should be responsible for tutoring the approved research project and for mentoring the student during its development. At a stage convenient to the host institution, perhaps during the second year, the program must to give the students the opportunity to follow a course in biostatistics. The organization of the course, number of contact hours and preparation time will be determined not later than the commencement of the second year. Students may be exempted from this course on the basis of documented proficiency in biostatistics. Once this academic requirements are completed, the proposed research work will be presented to an examining committee for evaluation, discussion and subsequent approval.

Learning Outcomes

4.1. First year

By designing and carrying out a research project, the student will become familiar with the problems encountered in periodontal research. By the end of the 1st year all pilot work should have been completed and a document with the final research protocol must be ready.

4.2. Second year

During this year students are required to execute the research protocol. By the end of the second year the students must have completed all research measurements.

4.3. Third year

The students are required to undertake a literature review, including the necessary background to define the hypothesis and objectives of the proposed research. In addition, they should carry out the appropriate statistical analysis of the obtained research data. The results must be presented in the form of a written report amenable for publication in an English-language international refereed scientific journal. The literature review in conjunction with the research report constitute the thesis of the graduate program

R.5. Clinical Component

This part of the program is designed to enable the student to obtain the required clinical competences and proficiencies. The following learning outcomes and objectives should be met after the 3 years.

5.1. Learning outcomes

1. The student must be able to recognize the various forms of periodontal disease in order to make a diagnosis and prepare a treatment plan for each patient.
2. Each student is required to fully document each phase of treatment (slides, models, records) in order to subsequently present these cases for evaluation.
3. Students will be given the opportunity to attend clinics in which patients, referred by general dental practitioners, are treated by individual staff members.
4. In addition, during the 3rd year, students will be required to visit (private) periodontal clinics in order to gain insight into the accepted manner of patient treatment and administration.
5. In order to gain insight into the problems of treatment planning the advanced case (combined problems of periodontal disease plus systemic restorative and prosthetic considerations) students are encouraged to see the results of treatment of cases in which such problems were present in combination with periodontal disease.
6. At the completion of the course it will be expected that each student has been able to carry out a wide range of therapeutic modalities. The documentation of these various phases of treatment will contribute to the construction of case reports.

5.2. Clinical requirements

1. Preclinical training
2. Initial therapy
3. Occlusal/orthodontic therapy
4. Surgical therapy
5. Maintenance therapy
6. Implant therapy

The student:

1. Becomes familiar with the recommended instruments for initial therapy and learns how to maintain these instruments. Furthermore the student learns the ergonomic aspects of positioning of these instruments in the mouth. Subsequently the student is introduced to surgical instruments and is able to practice various techniques on pig's jaws.
2. Must be able to make an extensive investigation of the periodontal problems and document them thoroughly. He/she must be able to make a diagnosis and suggest a treatment plan, with various alternatives. When required, the student must discuss the treatment plan with the referring dentist and ensure that the restorative aspects of the therapy are correctly integrated with the periodontal treatment.
The student must then be able to carry out the initial therapy - oral hygiene instruction, scaling and root planing (ultrasonic and hand instruments) so as to bring the inflammatory processes, as far as possible, under control. Whenever possible the student will be encouraged to carry out any necessary restorative and endodontic treatment.
3. Must have insight into the problems arising from occlusal trauma including orthodontic aspects and temporo-mandibular joint dysfunction. When present these problems will be treated either by the referring dentist or a specialist in this field.
4. Must be proficient with the following techniques and be able to perform these procedures when indicated, including aftercare:
 - a. gingivectomy/local excision
 - b. modified Widman flap
 - c. apically positioned flap
 - d. root resection/hemisection
 - e. mucogingival surgery

f. regenerative periodontal surgery

5. Must be able to evaluate the results of his/her own treatment and to carry out any further procedures required to maintain the case.

6. Must be able to carry out surgical implant therapy, including surgical placement of dental implants in all areas of the dentition in both fully and partially edentulous patients, bone regenerative procedures including grafting, membrane techniques, sinus floor elevation and soft tissue surgical procedures in conjunction with oral implants. Furthermore, he/she should be able to carry out the necessary maintenance therapy.

5.3. Case documentation

From the first year and onwards, students will be required to present the various phases of treatment of their patients for discussion within the group. This will provide students with the opportunity to see and discuss a wide range of problems. Emphasis will be placed on diagnosis and treatment planning.

Directive for case documentation

Case reports must contain the following data:

1. A full history, including medical history, an assessment of the patient's expectations and desires for treatment, evaluation of the patient's motivation.

2. Clinical examination:

This should be both extra-oral and intra-oral. The intra-oral examination will include information concerning the functional state of the gingiva, probing pocket depth, probing attachment loss and furcation involvement in addition to the state of the oral mucous membranes. Where applicable, a restorative status and pulp vitalities should be recorded.

The examination must include plaque and bleeding indices.

3. Radiographic examination:

A complete long-cone, standardized radiographic survey must be presented, together with vertical bite wings. A full assessment of the radiographs from a diagnostic point of view must be given.

4. Photographic status:

The following views must be presented:

a. Anterior view of both arches with teeth in contact

b. Buccal view of the lateral aspects of the arches

c. Palatal/lingual view of both arches

d. Occlusal views of the upper and lower arch

The photographic documentation should allow assessment of the clinical status of the case at initial presentation, during treatment and at completion of treatment. Where possible, photographs should also be taken throughout the treatment in order to illustrate the various procedures.

5. Special tests: When indicated bacteriological and/or hematological tests

6. Models: In cases where occlusal discrepancies are present, orthodontic type models should be available. Study models should be made of all cases.

7. Diagnosis: This must relate to the overall case as well as each individual tooth.

8. Aetiology: The major causes and the predisposing factors should be presented.

9. Prognosis: This must relate to the overall situation as well as each individual tooth.

10. Treatment plan: The treatment plan must be described in detail together with possible alternatives.

11. Progress of treatment: The treatment carried out must be described in detail together with an ongoing assessment, including all aspects of documentation. The time spent on various aspects of treatment should also be recorded.

Standard:

S.4. *The student's competence shall be attested to by the academic institution and (therefore) by the European Federation of Periodontology.*

R.6. Assessment

During the program participants will be assessed on their performance as follows:

1. After each course/series of seminars an examination is held, organized by those giving each course.

2. Six months after the start of the program and at the end of each academic year, an assessment of each student's clinical performance.

3. At the end of each academic year, a pass grade must be obtained for all examinations and assessments in order that a student may proceed to the following year.

4. In each academic year a failed examination can be repeated once only. Should a student's clinical performance be inadequate, extra time may be allocated to the student. This extra time is only available in the first academic year.

5. In the third year, the training period at the clinic of a department of Periodontology or when available at an accredited Periodontal Specialty Clinic have to be attended. Students must show proficiency in clinical treatment of cases involving both periodontics and the surgical component of oral implant therapy.

6. At the end of the third year a final oral examination will take place. The must be held in the English language. Students are allowed to enter after all regular examinations during the program have been graded as pass and clinical performance assessed as proficient. At the final examination students must be able to present 5 fully documented cases to the Board of Examiners. The final examination encompasses the whole field of periodontology and implant dentistry. Students must be able to participate in a discussion of the diagnostic elements and treatment plans of at least one of the documented cases. Furthermore, the students must be prepared to answer questions related to the general subject of Periodontology and implant dentistry.

In addition, students are required to present a scientific report to the Board of Examiners. This document must consist of at least two parts - a literature review and a report of the research project carried out by the student, presented in a format demonstrating the potential to be published in a hard core journal. The final examination will therefore include:

a. A clinical part in which at least 1 documented case is presented by the graduate student in the presence of the Board of Examiners. After presentation, the case will be extensively discussed followed by a discussion encompassing the whole field of periodontology and implant dentistry. This part lasts at least 60-75 minutes per candidate.

b. An oral presentation of their research project in the presence of the Board of Examiners. After this presentation, the research will be extensively discussed which enables the student to demonstrate his maturity in science. In addition the students must be prepared to answer questions related to their literature review. This part lasts at least 60-75 minutes per candidate.

7. The board of examiners of a graduate program must include an EFP representative fulfilling the following criteria:

a) He/She should come from a foreign country

b) He/She should be a well-recognised clinician who is still active in patient treatment.

c) He should have a PhD and a number of publications in the field of Periodontology

d) He/She should be actively involved in periodontal education

In order to promote the true external character of the EFP examiner, an EFP examiner can only participate at 2 consecutive occasions in an examination committee of an institution. This examiner may only return to a given institution in his capacity of examiner after he/she participated at least in the board of examiners of 2 other EFP accredited programs.

The EFP representative in the board of examiners is appointed by the EFP-PEC on proposal from the program director.

8. After passing the final examination and successfully defending the thesis, a diploma in Periodontology recognized by the EFP appropriate to, and of, the host academic institution will be conferred on the student.

9. Students who fail the examination but have attended the program may receive an Attendance Certificate.

10. Students who pass the final examination but are unable to present a thesis suitable for publication may receive an Attendance Certificate.

CHAPTER III

Qualifications of the periodontology training facility

Standard:

S.1. The periodontal clinic shall serve as the principle teaching facility for the student(s) and shall be adequate to make possible the attainment of the objectives as set forth in the program description/requirements as approved by the European Federation of Periodontology.

Requirements training facility:

R.1. The periodontal clinic shall be physically and functionally (and organizationally) linked with an academic dental and medical institution in order to guarantee for the students of the periodontology training program the possibility to call dental and medical specialists into consult.

R.2. For the training of individuals at least one treatment-unit per student is available.

R.3. The training facility shall offer complete and up to date library facilities that shall be accessible for all students. Subscriptions of the hard core periodontal journals as well as the general dental and medical journals shall be available.

R.4. The facility shall have an internal quality assurance and improvement system.

R.5. Recognition as a training facility for periodontology shall be granted only on condition that the director of the periodontology program has been recognized as a trainer for the periodontology program.

CHAPTER IV

Qualifications of the periodontal service

Standard:

S.1. The principal goal of the periodontal service shall be to ensure safe, appropriate and cost-effective periodontal diagnostic and therapeutic services.

Requirements:

R.1. The periodontal clinic shall have adequate facilities and resources to carry out a broad scope of (supporting) services related to standard S.1. These services include, but are not limited to:

- practice administration;
- registration of dental and periodontal care;
- technology and quality control activities;
- informational and educational services;
- consulting services.

R.2. The periodontal clinic shall be organized in accordance with the principles of good management under the direction of a professionally qualified periodontist (see chapter I) and with sufficient appropriate personnel to perform a broad scope of periodontal services, and shall comply with all applicable European, national and local laws, codes, statutes and requirements.

Good management requires, but is not limited to, the following:

1. there should be an organizational chart for the periodontal clinic illustrating the chain of authority, delineating the responsibilities of the professional and supporting staff, and depicting what services the periodontal clinic presumes to carry out. (Specific) practice objectives should be clearly defined in a written statement. If the periodontal clinic is organizationally a part of an academic dental institution or hospital, than the practice objectives should be in accordance with the established objectives of that institution.

2. written policies to govern the conduct of periodontal services should exist and should be kept current. Also, there should be written procedures for all routine transactions, functions and operations within the practice, and these should kept current. All personnel should be familiar with the policies and procedures applicable to their respective areas.

3. Responsibilities for all staff should be delineated in current position descriptions.

Sufficient appropriate personnel implies, but is not limited to:

1. professional staff should be adequate to carry out the stated objectives for the periodontal clinic and to provide legally competent services at all times.

2. professional staff members should demonstrate their interest in maintaining professional competency by attending continuing education activities, reading professional literature etc.

3. the supportive staff should be adequate to support the professional staff. The basic criterion for determining the required number of supportive staff members is whether or not the supportive staff is adequate to relief the professional staff members from performing a large number of responsibilities and functions that can be appropriately assigned to para-professional personnel.