



**QUALITY STANDARDS FOR
GRADUATE PROGRAMS IN PERIODONTOLOGY,
PERIODONTICS AND IMPLANT DENTISTRY**

**European Federation of Periodontology
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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.

Accreditation of a graduate program in Periodontology by the EFP may be obtained by Periodontal Departments of Universities or Postgraduate Institutes after formal application and hence has the formal responsibility for the program

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.

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 specialist program and shall have at least 10 years of experience as a practicing periodontist after graduation.

R.2. The program director shall have a PhD degree or proven academic experience and hold an academic rank of senior lecturer or more.

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, or proven management education activities in a university setting

R.4. The program director shall be extensively involved in all aspects of the postgraduate program. Another staff member shall serve as co-director and be extensively involved in the postgraduate program. At least one of them needs to have a full time appointment in the program and the second work in the program for at least 3 days weekly.

R.5. The program director shall:

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

5.2. shall be practicing the specialty of periodontology in its full extent;

5.3. continue to show scientific interest and capabilities by recent publications in a PubMed listed peer reviewed English language scientific international journal and by regular attending scientific meetings;

5.4. show effective management of the training program;

5.5. contribute to the didactic teaching in the program

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

R.6. The program co-director should fulfill the following requirements:

6.1. Be specialized in periodontology and/or have completed a periodontology program, and have at least 3 years of experience as a practicing periodontist after graduation.

6.2. Have a number of publications in the field of periodontology in PubMed listed peer reviewed English language international scientific journals and be active in research.

6.3. Is active in direct patient treatment

6.4. Is actively involved in periodontal education

6.5. Has the experience and capability to temporarily replace the director if necessary

6.6. Be a member of the national Periodontology Society or a foreign Society representing his country

R.7. The program director shall ensure that:

7.1. the additional clinical teaching staff are specialized in periodontology and have sufficient experience as practicing periodontists

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 have the possibility of doing so.

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

7.7. the ratio between the number of teaching staff and the number of students provides close personal monitoring of the trainee during the 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.

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

7.10. students 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. Recognition as a program director will be granted to one training program 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.

Requirements in general terms of a Postgraduate Periodontal Program aimed for Training Specialists in Periodontology

A periodontist is a specialist in a specific discipline in dentistry which encompasses the prevention, diagnosis and treatment of diseases and conditions of the supporting and surrounding tissues of the teeth or their substitutes, including implant site development and their surgical placement, as well as the maintenance of health, function and aesthetics of these structures and tissues.

In full accordance with the European Directives, the specialist postgraduate program in Periodontology must comprise a three-year full-time course, enabling the successful postgraduate student to practice Periodontics and Implant Dentistry at a specialist level. This course must consist of a didactic, a clinical and a research component. The didactic component may be delivered using different learning methods, but must include an extensive overview of the periodontal literature, both current and historical. The clinical component must include the treatment of all patients referred for periodontal therapy and the fulfilment of a set of competencies and proficiencies as defined below. The research component should include the undertaking of a research project by the graduating students, whose results should be presented in the form of a written report or publication.

Upon completion of the post graduate program the graduate may receive a certificate from the university and is eligible to apply for recognition as a specialist. Graduates from programs accredited by the European Federation of Periodontology can apply for a certificate from the European Federation of Periodontology. The post graduate program may be extended so that a PhD degree can be obtained, however this would involve an extra period of time.

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 course may contain an Academic Degree in Periodontology and a specific clinical training in all aspects of Periodontology and Surgical Implant Dentistry. These two parts of the training have to be inter-linked, and the application for the EFP certificate is possible only after completing both.

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

A candidate for a post graduate program leading to a specialist in periodontology must be a dentist that graduated from an accredited dental school. It is recommended that the candidate should demonstrate significant experience in general dentistry.

R.3. Competences and Proficiencies in Periodontal Education at the Post-Graduate level.

In a competence-based postgraduate training program leading to a specialist in periodontology competency statements should describe the knowledge, skills, attitudes and values that a graduate must have and they are usually expressed in four levels (ADEE: Chambers 1993, Sanz 2003)

- **Be familiar with:** graduates should have a basic understanding of the subject, but need not have direct clinical experience or be expected to carry out procedures independently.

- **Have knowledge of:** graduates should have a sound theoretical knowledge of the subject, but need have only a limited clinical/practical experience.

- **Be competent at:** graduates should have a sound theoretical knowledge and understanding of the subject together with an adequate clinical experience **to be able to** resolve clinical problems encountered, independently, or without assistance.

- **Be proficient in:** 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 advanced treatment plan that takes due regard of the patient's needs, wishes and level of co-operation.

Following the same curricular structure in a competence-based curriculum according to the ADEE (Sanz 2003) the postgraduate curriculum is organized in domains with major and supporting competences.

Domain I. Professionalism

Major Competence:

Professional behaviour: A specialist **must** be proficient in a wide range of skills, including investigative, analytical, problem solving, planning, communication, presentation, team building and leadership skills and has to demonstrate a contemporary knowledge and understanding of the broader issues of dental practice. The specialist should fully understand and implement these issues in clinical practice.

Supporting competences:

A specialist in periodontology **must**:

Be proficient at displaying appropriate professional behaviour and communication towards all members of the periodontal team and the referring dental practitioner, since part of the periodontal services may be delegated to other members of the dental team, mainly dental/oral hygienist/therapist/GDP. This delegation, however, must be undertaken under the leadership of the periodontist who is responsible for the diagnosis, treatment planning and overall periodontal care of the patient.

Be competent at critically evaluating the scientific literature, updating their knowledge base and evaluating scientific and technological developments as they arise. The specialist should demonstrate commitment to the maintenance of high levels of professionalism and continuous training of the periodontal team.

Be competent at managing and maintaining a safe working environment and working with other members of the periodontal team with regard to health and safety and clinical risk management, since cross-infection control is of great concern due to invasiveness of most periodontal procedures.

Major Competence:

Ethics and Jurisprudence: A specialist must display knowledge of the content and have a thorough understanding of the moral and ethical responsibilities involved in the provision of care to individual patients, to populations and communities. The specialist must display knowledge of contemporary laws applicable to the practice of dentistry.

Supporting competences:

The specialist in periodontology **must**:

Be proficient at selecting and prioritizing treatment options that are sensitive to each patient's individual needs, goals and values, compatible with contemporary methods of treatment, and congruent with an appropriate periodontal, oral and general health care philosophy, acknowledging that the patient is the centre of care and that all interactions, including diagnosis, treatment planning and treatment, must focus on the patient's best interests. The main goal of periodontal care is the reinstatement of periodontal health to insure the longevity of the natural dentition.

Be critical towards their own achievements in the light of the complexity of some periodontal conditions.

Be competent in the application of the principles of regulatory law and ethical reasoning and professional responsibility as they pertain to the practice of periodontics.

Domain II. Communication and interpersonal skills

Major Competence:

A specialist must be proficient to communicate effectively, interactively and reflectively with patients, their families and carers, and with other health professionals involved in their care.

Supporting competences:

The specialist in periodontology **must**:

Be proficient at establishing a patient–dentist relationship that allows the effective delivery of periodontal treatment, since long-term treatment outcomes depend on patient compliance, both with self-performed preventive measures and with appropriate supportive therapy.

Be proficient in identifying patient’s expectations (needs and demands) and goals for periodontal care, since the patient should participate in the therapeutic decision, once he/she is provided with all the relevant information.

Be proficient in sharing information and professional knowledge with both the patient and other professionals and specialists in other dental and medical disciplines, verbally and in writing.

Be proficient at working with other members of the periodontal team, since the communication with the hygienists and dental assistants is particularly relevant for the successful therapy outcome.

Have comprehensive knowledge of behavioural risk factors for periodontal diseases and methods for their modification (including tobacco, alcohol, and diet).

Domain III. Knowledge base, information, information literacy, clinical sciences and clinical skills

Major competence:

Basic knowledge and critical thinking.

A specialist in periodontology must have comprehensive knowledge of the basic sciences relevant to dentistry in general and to periodontology in particular. Moreover he/she must be proficient in all areas of clinical periodontology.

Supporting competences:

The specialist in periodontology **must**:

Have comprehensive knowledge of the biomedical sciences relevant to dentistry in general and to periodontology in particular.

Should have knowledge to be able to integrate all aspects of clinical and public health dentistry into the practice of periodontics.

Have comprehensive knowledge of those aspects of medicine relevant to periodontics and should be competent to interact with the respective health care providers. He/she should have comprehensive knowledge of all possible interactions between oral and systemic diseases and be competent to manage the periodontal problems of the medically compromised patient.

He/she must be competent in the application of the principles of regulatory law and ethical reasoning and professional responsibility as they pertain to the practice of periodontics.

Have comprehensive knowledge of the historical development of periodontics.

Be competent at critically evaluating the scientific literature, updating their knowledge base and evaluating scientific and technological developments as they arise.

Be competent in posing pertinent research questions and hypothesis

Be competent in designing scientific experiments

Be competent in writing a literature review

Be competent in writing a research paper

Have knowledge in the statistical analysis of research data

Major competence:

Diagnosis, treatment planning and patient management

A specialist in periodontology must be able to evaluate the relevant clinical conditions in such a way that a comprehensive treatment plan can be designed and appropriate treatment, taking into consideration the individual patient needs and expectations, can be provided.

Supporting competences:

The specialist in periodontology **must** have:

Comprehensive knowledge of the anatomy, histology and physiology of the tissues of the oral cavity and related structures.

Comprehensive knowledge of oral microbiology with emphasis on the following: the nature, composition and physiology of plaque biofilm and its relationship to inflammatory periodontal and periimplant diseases; techniques to identify microorganisms, their application and utility in periodontal practice; calculus formation.

Comprehensive knowledge of infectious, inflammatory, immunological and genetic processes in oral diseases with

emphasis on the pathogenesis of periodontal and periimplant diseases.

Comprehensive knowledge of the principles of wound healing and regeneration.

Comprehensive knowledge of the classification and epidemiology of the periodontal and periimplant diseases

Comprehensive knowledge of imaging techniques and their interpretation as they are related to the diagnosis of periodontal diseases and for implant therapy.

Knowledge of behavioural/life style risk factors for periodontal diseases and periimplant and methods for their modification (including tobacco use, alcohol consumption, and diet).

Proficiency in diagnosing abnormalities in the anatomy and morphology of periodontal periimplant, and oral mucosal tissues that may compromise periodontal health, function or aesthetics, identifying the conditions, which may require management.

Proficiency in determining a patient's aesthetic requirements and determining the degree to which those requirements/desires can be met. This is particularly relevant when recommending periodontal plastic surgical procedures or pre-prosthetic procedures

Proficiency in the collection and interpretation of all data necessary to establish the diagnoses, including all diseases and conditions affecting the periodontium, peri-implant tissues and neighbouring structures.

Proficiency in determining prognosis and developing a comprehensive periodontal treatment plan, including implant therapy, and to communicate effectively to patients the nature of their periodontal health status and treatment needs.

Proficiency in the selection and prescription of medications for the management of preoperative, operative and postoperative pain and anxiety and be familiar with the appropriate sedation techniques that can be useful in the most complex periodontal surgical procedures.

Major competence:

Establishment and maintaining periodontal/oral health

Be proficient in the full scope of non-surgical and surgical periodontal and implant therapy.

Be proficient in providing each patient with an appropriate, tailor made maintenance program.

Supporting competences:

The specialist in periodontology **must:**

Be proficient in all methodologies for plaque biofilm control.

Be proficient in educating patients the aetiology and prevention of periodontal, periimplant and mucosal diseases and to motivate them to assume responsibility for their periodontal health.

Be proficient in all aspects of non-surgical therapy.

Be proficient in the mechanisms, application, effects and interactions of medications used for the prevention and therapy of periodontal and periimplant diseases.

Have comprehensive knowledge of the mechanisms, effects and interactions of medications used for the management of systemic diseases that may affect periodontal and periimplant tissues and surrounding structures.

Have comprehensive knowledge of the effects and interactions of medications used for the management of systemic diseases that may affect the outcome of periodontal and periimplant surgical interventions.

Have comprehensive knowledge of the periodontal-systemic relationships.

Have comprehensive knowledge of the influence of forces (trauma, parafunction, orthodontic forces etc.) on the periodontium and related structures and their management.

Be proficient in all surgical techniques used in periodontics and implant dentistry, their indications and contraindications, advantages and disadvantages.

Have comprehensive knowledge of the interrelationship of periodontitis to pulpal disease and the various approaches to treatment.

Have comprehensive knowledge of the interrelationships of orthodontic, restorative therapies and periodontal treatment.

Have comprehensive knowledge of periodontal supportive therapy.

Be proficient in surgical implant therapy, including site development, surgical placement and maintenance.

Be proficient in evaluating the results of periodontal treatment and establishing and monitoring a maintenance programme, in co-operation with other members of the dental team, including the evaluation of likely risk factors.

Be proficient in methods for soft and hard tissue reconstruction.

Be proficient in the treatment of all periimplant diseases.

R.4. Learning outcomes in periodontal education at the post-graduate specialist level

Formal instruction must be provided for the student to achieve the following learning outcomes:

Comprehensive knowledge of the anatomy, histology and physiology of the tissues of the oral cavity and related structures.

Comprehensive knowledge of oral microbiology with emphasis on the following: the nature, composition and physiology of plaque biofilm and its relationship to inflammatory periodontal and periimplant diseases; techniques to identify microorganisms, their application and utility in periodontal practice; calculus formation.

Have comprehensive knowledge of infectious, inflammatory and immunological processes in oral diseases with emphasis on the pathogenesis of periodontal and periimplant diseases.

Have comprehensive knowledge of the principles of wound healing as well as soft and hard tissue regeneration and repair.

Have comprehensive knowledge of the process of osseointegration as well as the biology of the periimplant tissues.

Have comprehensive knowledge of the classification and epidemiology of the periodontal and periimplant diseases

Have comprehensive knowledge of imaging techniques and their interpretation as they related to the diagnosis of periodontal diseases and for implant therapy.

Have knowledge of behavioral risk factors for periodontal and periimplant diseases and methods for their modification (including tobacco, alcohol, and diet).

Have comprehensive knowledge of all aspects of non-surgical therapy.

Have comprehensive knowledge of the mechanisms, effects and interactions of medications used for the prevention and therapy of periodontal and periimplant diseases.

Have comprehensive knowledge of the mechanisms, effects and interactions of medications used for the management of systemic diseases that may affect periodontal tissues and surrounding structures.

Have comprehensive knowledge of the effects and interactions of medications used for the management of systemic diseases that may affect the outcome of periodontal and periimplant surgical interventions.

Have comprehensive knowledge of the periodontal-systemic relationships.

Have comprehensive knowledge of the influence of forces (trauma, parafunction, orthodontic forces etc.) on the periodontium and related structures and their management.

Have comprehensive knowledge of the historical development of periodontics.

Have comprehensive knowledge of all surgical techniques used in periodontics and implant dentistry, their indications and contraindications, advantages and disadvantages.

Have comprehensive knowledge of the interrelationship of periodontitis to pulpal disease and the various approaches to treatment.

Have comprehensive knowledge of the interrelationships of orthodontic, restorative therapies and periodontal treatment (including implant therapy).

Have comprehensive knowledge of supportive periodontal therapy.

Have comprehensive knowledge of the historical background to the development of oral implants and the various types of implant material / surgical techniques, in use.

Be proficient in the indications and contraindications when considering placement of different implant materials and their advantages and disadvantages, as well as alternatives. The specialist should be proficient in all aspects of implant site development, placement and maintenance.

Have comprehensive knowledge of the (cellular) immunological mechanisms involved in the inflammatory response in the peri-implant soft tissues.

Have comprehensive knowledge of the various (cellular) mechanisms leading to bone loss around oral implants.

Have proficiency in the mechanical, surgical, and/or antimicrobial treatment of peri-implant pathologies.

Have comprehensive knowledge of the diagnosis, etiology and treatment of halitosis.

Have comprehensive knowledge of the diagnosis, etiology and treatment of dentinal sensitivity.

Have knowledge of the diagnosis, etiology and treatment of mucosal lesions.

At the completion of the specialist program the graduate is expected to have accomplished the following in the **clinical component** of the program:

Be able to recognize the various forms of periodontal and periimplant diseases in order to make a diagnosis and prepare a treatment plan (including alternatives).

To fully document each phase of treatment in order to subsequently present these cases for evaluation.

To attend clinics in which patients are referred by general dental practitioners and are treated by specialists in a specialist setting.

Be able to diagnose and develop a treatment plan for advanced multidisciplinary cases (combined problems of periodontal disease plus systemic and restorative considerations) and be able to carry out the periodontal component of such treatments.

Be able to document and carry out (in a timely manner) a wide range of surgical procedures, including: Gingivectomy/local excision,

All types of Periodontal Flap Surgery, with or without concomitant osseous surgery,

Root resection/hemisection procedures,
Mucogingival and plastic periodontal surgery procedures,
Regenerative periodontal surgery procedures,
Pre-prosthetic periodontal surgical procedures
Surgical implant therapy, including surgical placement of oral implants in all areas of the dentition, in both fully and partially edentulous patients, bone augmentation procedures and soft tissue surgical procedures in conjunction with oral implants.

Be able to evaluate the results of the treatment and to carry out any further procedures required to maintain (supportive periodontal therapy) or improve the obtained treatment outcome.

Be able to diagnose and treat periimplant diseases

R.5. Research

At the completion of the specialist program the graduate must have accomplished the following learning outcomes: Design and carry out a research project, including a thorough literature review with the necessary background to define the hypothesis and objectives of the proposed research. In addition, it should include 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 comprehensive literature review in conjunction with the research report may constitute the thesis of the postgraduate program.

R.6. Methods of learning and teaching

Although each University and Dental School may have different approaches to education and training influenced by structures, cultures and resources, the curricular structure of the Postgraduate Program in Periodontology may be organized in modules according to the European Credit Transfer System (ECTS). Within this context of a competence-based curriculum there should be a strong emphasis on learning. With this aim, different learning methods may be used, but preferably those that are student centred, such as problem-based, project-based or case-based learning. The postgraduate student should take full responsibility for their learning and acquire learning characteristics such as critical thinking, decision-making, active learning and autonomous learning and problem solving.

R.7 Tutoring and mentoring

The program must have a system of tutoring and mentoring for each student. The methodology can be different for each postgraduate program depending on local educational and organization reasons. However, the evaluation methodology and the required relevant specific tutoring must be clear and well organized.

R.8. 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. All documentation should be collected and disseminated according to current legislation on general data protection regulation.

Directive for case documentation

Case reports must contain the following data:

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

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.

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.

Photographic status:

The following views must be presented:

Anterior view of both arches with teeth in contact

Buccal view of the lateral aspects of the arches

Palatal/lingual view of both arches

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.

Special tests: When indicated bacteriological and/or hematological tests

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

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

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

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

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

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.

Qualification of the assessment

Standard:

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

R.8. Assessment of learning outcomes

Assessment should be valid, and therefore should be developed in alignment with the curriculum content and the learning outcomes. Assessments should also be reliable, reproducible and feasible.

Requirements for such assessments procedures and performance criteria:

Clearly defined criteria for the learning outcomes which should be communicated to the students.

Multiple methods of assessments should be used and multiple samples of performance should be taken.

Both formative and summative assessment should be employed.

The alignment of the learning content, the method of teaching and learning as well as the assessment should be clear as well as demonstrable.

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

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

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

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.

At the end of the training period, the graduates can apply for the EFP certification exam. The exam will be held in the English language. Students are allowed to apply for the EFP exam only if referred by the program director and the program directors' confirmation that the student met all the requirements for graduation according to the EFP quality standards. For the exam the student has to provide to the examination board:

5 fully documented clinical cases that present different aspects of periodontal therapy including at least one case of implant therapy

A research report in the format of a manuscript eligible for publication in an international peer reviewed journal

For the EFP examination the student has to prepare for two parts:

Clinical case presentation: this part encompasses the whole field of periodontology and implant dentistry. The student needs to participate in a discussion of the diagnostic elements and treatment stages of at least one of the 5 documented cases. The student must be prepared to answer questions related to the general subject of Periodontology and implant dentistry

Research project presentation: presentation of the research project performed during the postgraduate training (remark: not a research, Master of PhD thesis performed previous to the beginning of the program). The presentation needs to include an introduction with a significant literature review related to the research subject. The student must be prepared to answer questions related to the literature review, the methodology and results of the research project.

After passing the EFP examination, the graduate will be eligible to receive the EFP Certificate of Completion of Specialized Training in Periodontology (Periodontics and Implant Dentistry)

Students who fail the EFP exam may apply for a second exam no sooner than the next exam organized by his program director

A graduate cannot apply for the EFP exam more than twice

References:

Chambers DW. Toward a competency-based curriculum. *J Dent Educ* 1993; 57: 790–793.

Sanz M. Dental education and the Bologna Process. *Eur J Dent Educ* 2003;7:143–6.

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CHAPTER III

Qualifications of the periodontology training facility

Standard:

S.1. The periodontal clinic shall serve as the principal 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. Enough treatment units should be available for the training of all students in the program

R.3. The training facility shall offer complete and up to date library facilities that shall be accessible for all students. Subscriptions of 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;
- Medical and dental multidisciplinary 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 national and local laws, codes, statutes and requirements.

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

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.

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 be kept current. All personnel should be familiar with the policies and procedures applicable to their respective areas. Responsibilities for all staff should be delineated in current position descriptions.

Sufficient appropriate personnel implies, but is not limited to:

professional staff should be adequate to carry out the stated objectives for the periodontal clinic according to scope of practice.

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

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.