

Degree Level Expectations for Graduates Receiving the Degree of Doctor of Dental Surgery, D.D.S.

Faculty of Dentistry

University of Toronto

1 Introduction

The program leading to the Doctor of Dental Surgery Degree (DDS) is a four year, full-time course of studies including didactic, preclinical and clinical learning experiences. The program follows the standards and guidelines of the Commission on Dental Accreditation of Canada. It undergoes a vigorous accreditation process every seven years or earlier if any major changes are instituted. An annual report is required to maintain the accreditation status, including a summary of any changes in the program itself or the facilities available.

2 Degree Learning Objectives and Requirements

2.1 Overall Learning Objectives

The Faculty of Dentistry's primary objective is to ensure that its DDS graduates, at a minimum achieve, but preferably exceed, the standard required for a practitioner to provide quality oral health care for the public. To accomplish this, the Faculty must also provide leadership in the development of novel approaches to redefining the teaching/learning environment for our students, incorporating basic sciences into clinical training.

2.2 Requirements to Graduate

In order to graduate from the DDS program in the Faculty of Dentistry, a student must have achieved the following:

1. Obtained standing (ie achieved a final grade of at least 60%) in all courses in the four year curriculum,
2. Be judged by each clinical discipline to be competent in the preclinical and then clinical component of that discipline,
3. Successfully complete a designated course in Ethics and Jurisprudence,
4. Attend all clinical rotations,
5. Obtain at least a passing grade (60%) in a final Comprehensive Care examination.

These requirements meet, and occasionally exceed the minimum requirements of the Commission on Dental Accreditation of Canada.

3 Degree Level Expectations for the Doctor of Dental Surgery

Description of each of the degree level expectations in place for graduates. This should have a subsection for each of the six Ministry expectations, as well as any additional expectations relevant to the divisions degrees. In cases where there are several degrees, separate sections can be provided for each degree, presuming that there are significant differences between the degrees.

3.1 *Depth and Breadth of Knowledge*

The curriculum is designed such that by graduation each student demonstrates the competencies outlined by the National Dental Examining Board of Canada and supported by all provincial regulatory agencies. These are to be able to:

1. recognize the determinants of oral health in individuals and populations and the role of dentists in health promotion, including the disadvantaged.
2. recognize the relationship between general health and oral health.
3. evaluate the scientific literature and justify management recommendations based on the level of evidence available.
4. communicate effectively with patients, parents or guardians, staff, peers, other health professionals and the public.
5. identify the patient's chief complaint/concern and obtain the associated history.
6. obtain and interpret a medical, dental and psychosocial history, including a review of systems as necessary, and evaluate physical or psychosocial conditions that may affect dental management.
7. maintain accurate and complete patient records in a confidential manner.
8. prevent the transmission of infectious diseases by following current infection control guidelines.
9. perform a clinical examination.
10. differentiate between normal and abnormal hard and soft tissues of the maxillofacial complex.
11. prescribe and obtain the required diagnostic tests, considering their risks and benefits.
12. perform a radiographic examination.
13. interpret the findings from a patient's history, clinical examination, radiographic examination and from other diagnostic tests and procedures.
14. recognize and manage the anxious or fearful dental patient.
15. recognize signs of abuse and/or neglect and make appropriate reports.
16. assess patient risk (including, but not limited to, diet and tobacco use) for oral disease or injuries.
17. develop a problem list and establish diagnoses.
18. determine the level of expertise required for treatment and formulate a written request for consultation and/or referral when appropriate.
19. develop treatment options based on the evaluation of all relevant data.
20. discuss the findings, diagnoses, etiology, risks, benefits and prognoses of the treatment options, with a view to patient participation in oral health management.
21. develop an appropriate comprehensive, prioritized and sequenced treatment plan.
22. present and discuss the sequence of treatment, estimated fees, payment arrangements, time requirements and the patient's responsibilities for treatment.
23. obtain informed consent including the patient's written acceptance of the treatment plan and any modifications.
24. modify the treatment plan as required during the course of treatment.
25. provide education regarding the risks and prevention of oral disease and injury to encourage the adoption of healthy behaviors.
26. provide therapies for the prevention of oral disease and injury.
27. recognize and institute procedures to minimize occupational hazards related to the practice of dentistry.
28. achieve local anesthesia for dental procedures and manage related complications.

29. determine the indications and contraindications for the use of drugs used in dental practice, their dosages and routes of administration and write prescriptions for drugs used in dentistry.
30. manage dental emergencies.
31. recognize and manage systemic emergencies which may occur in dental practice.
32. manage conditions and diseases of the periodontium, provide periodontal treatment when indicated and monitor treatment outcomes.
33. assess the risk, extent and activity of caries and recommend appropriate non-surgical and surgical therapy.
34. manage dental caries, tooth defects and esthetic problems and, when restoration is warranted, use techniques that conserve tooth structure and preserve pulp vitality to restore form and function.
35. manage patients with orofacial pain and/or dysfunction.
36. manage surgical procedures related to oral soft and hard tissues and their complications
37. manage trauma to the orofacial complex.
38. manage conditions and pathology of the pulp and provide endodontic treatment when indicated.
39. manage abnormalities of orofacial growth and development and treat minor orthodontic problems.
40. recognize and manage functional and non-functional occlusion.
41. select and, where indicated, prescribe appropriate biomaterials for patient treatment.
42. manage partially and completely edentulous patients with prosthodontic needs including the provision of fixed, removable and implant prostheses.
43. make records required for use in the laboratory fabrication of dental prostheses and appliances.
44. design a dental prosthesis or appliance, write a laboratory prescription and evaluate laboratory products.
45. apply accepted principles of ethics and jurisprudence to maintain standards and advance knowledge and skills.
46. apply basic principles of practice administration, financial and personnel management to a dental practice.
47. demonstrate professional behaviour that is ethical, supercedes self-interest, strives for excellence, is committed to continued professional development and is accountable to individual patients, society and the profession.

This is accomplished by utilizing various teaching modalities including lectures, small group seminars, case based learning, laboratory sessions, preclinical simulation, supervised clinical instruction and extramural rotations. In all teaching, emphasis is placed on evidence based decision making.

3.2 Knowledge of Methodologies

Instruction is carried out by leaders in each field, most of whom are active in associated research. Students are encouraged to review recent literature in each field and question dogma. The program includes courses that teach critical evaluation, biostatistical analysis and teaching staff are encouraged to emphasize evidence based decision making.

3.3 Application of Knowledge

In order to satisfy the requirements for all the competencies listed in 3.1 students must demonstrate knowledge as well as skill in a variety of techniques to critically evaluate ever evolving concepts and methodologies in oral health sciences. This is done both in case based learning and patient based instruction. As students progress through the program, the degree of complexity of the situations they encounter increases. The learning experience is dependant on interaction with scientists and practitioners, including both generalists and specialists.

3.4 Communication Skills

Communication skills are demonstrated and evaluated in all aspects of the learning experience. Most preclinical courses include small group sessions in which discourse is mandatory. Students are often graded based on both knowledge and participation. Later, during the clinical teaching, students are taught to and required to maintain clear and concise patient records as well as communicate with patients and colleagues both in dentistry and other health related fields. Along with the other health sciences, a writing facility is maintained to advise students and ensure they develop the necessary skill in written communication.

3.5 Awareness of Limits of Knowledge

The courses are structured such that the student initially reviews basic science background and then applies it to oral health science. This is then applied to clinical science and clinical care. Each step includes noting inconsistencies, ambiguities or uncertainties in the translation of information from one level to the next. Educators are each experts in their fields and point out the limitations.

3.6 Autonomy and Professional Capacity

The competencies listed in 3.1 have been developed over a number of years and extensive consultation across North America with universities, professional associations and regulatory agencies. It is generally accepted that graduates who have demonstrated these have obtained the skills necessary for employment in their chosen field, further study, community involvement and other relevant activities. Professionalism and ethical service is emphasized throughout the program.

3.7 Other Degree Level Expectations

Graduates are encouraged to develop the ability to collaborate with colleagues through group projects and extramural rotations. Recently, an interdisciplinary education program was initiated with the other health science faculties to emphasize the importance of collaboration and cooperation. As well, electives are available for students to get research experience or exposure to provision of oral health care to various distinct and different populations.