Program-Level Assessment Plan

Program: Graduate Orthodontics	Degree Level (e.g., UG or GR certificate, UG major, master's program, doctoral program): Master
Department: Orthodontics	College/School: Center for Advanced Dental Education
Date (Month/Year): August / 2021	Primary Assessment Contact:

Note: Each cell in the table below will expand as needed to accommodate your responses.

#	Student Learning Outcomes What do the program faculty expect all students to know or be able to do as a result of completing this program? Note: These should be measurable and manageable in number (typically 4-6 are sufficient).	Curriculum Mapping In which courses will faculty intentionally work to foster some level of student development toward achievement of the outcome? Please clarify the level at which student development is expected in each course (e.g., introduced, developed, reinforced, achieved, etc.).	Assessment Methods	
			Artifacts of Student Learning (What) 1. What artifacts of student learning will be used to determine if students have achieved this outcome? 2. In which courses will these artifacts be collected?	Evaluation Process (How) 1. What process will be used to evaluate the artifacts, and by whom? 2. What tools(s) (e.g., a rubric) will be used in the process? Note: Please include any rubrics as part of the submitted plan documents.
1	To be competent in all aspects of clinical orthodontics. This includes; conducting a clinical examination, listing orthodontic problems, prioritizing orthodontic problems, recognizing and listing pathology, formulating a diagnosis, formulating a treatment plan, and performing treatment.	The following courses: 1. Contemporary Orthodontics: Introduced, developed 2. Clinical Orthodontics: achieved 3. Diagnosis Seminars: developed, reinforced 4. Temporary skeletal anchorage course: developed 5. Current Literature: reinforced 6. Fundamentals of Orthodontics: Introduced, developed 7. Clinical Case Conference: developed, reinforced 8. Dental Sleep Medicine: Introduced 9. Digital Orthodontics: Introduced,	Performance is measured directly through class participation, written and oral examinations, daily assessment of clinical activities by individual instructors, and through competency reports formulated by individual faculty and the program director each semester. Three comprehensive examinations are conducted, one by external examiners. These items are evaluated. 1. Data gathering and creating the problem list 2. Establish the proper treatment objectives 3. Demonstrate the appropriate	In addition to ongoing assessment from the individual instructors and the program director, the Core Graduate Orthodontics Faculty Committee is made up of 5 faculty members and meets regularly (weekly). Assessment results are reviewed and either corrective action for performance improvement is made regarding student performance and/or program improvement.

		developed	treatment plan 4. Demonstrate the treatment sequences and mechanics 5. Demonstrate the alternative treatment plans A case display at the end of the program measures student performance indirectly. Grades (as indirect measures) for each course are awarded. ABO Objective Grading System is used to evaluate the quality of treatment.	
2	Graduates of the program are expected to have a foundational knowledge of orthodontics. Foundational knowledge includes 1. craniofacial anatomy 2. craniofacial growth 3. biomechanics 4. early and adult treatment 5. diagnosis 6. treatment planning 7. orthognathic surgery 8. oral medicine 9. bone biology 10. temporomandibular disorders 11. temporary skeletal anchorage devices 12. Digital orthodontics 13. Clear aligner therapy 14. Dental sleep medicine	Courses are given in all these areas. The American Board of Orthodontics board certification process assesses this outcome in the quarter prior to graduation.	Grades (as indirect measures) are used to assess student knowledge. A written examination is administered by the American Board of Orthodontics. The examination is a comprehensive, criterion-referenced multiple-choice examination administered at a testing center.	The American Board of Orthodontics Part II Written exam has four domains. 1. Basic and applied biomedical sciences 2. Clinical Sciences A 3. Clinical Sciences B 4. Clinical Case Analysis The American Board of Orthodontics Part III Scenario Based Exam has four domains. 1. Data Gathering and Diagnosis 2. Treatment Objectives and Planning 3. Treatment Implementation and Management 4. Critical Analysis and Outcomes Assessment The test results are evaluated for each category among the Core Graduate Orthodontic Committee. If residents have difficulty in a particular section of the exam, program changes are implemented to improve performance. Results are also reviewed during the program's professional accreditation process.

3	Each resident designs an original research project, carries it out, analyzes data, and reports results during oral defense of the thesis.	During the course Thesis Research. This course takes place during the 2nd year and 3rd year. At the beginning of 2nd year, the research proposal must be presented, and the literature review and detailed research protocol have to be presented at the end of 2nd year. Progress is also assessed via the thesis committee.	Residents conduct a research project. Residents complete and defend a written thesis during an oral examination with their Graduate Thesis Committee. They also present their results at a formal presentation at the end of the program.	In addition to ongoing assessment from the Program Director, the Core Graduate Orthodontic Committee is made up of 4 faculty members and meets regularly (i.e., weekly). Assessment results are reviewed and either corrective action or suggestions for program improvement are made.
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Use of Assessment Data

1. How and when will analyzed data be used by program faculty to make changes in pedagogy, curriculum design, and/or assessment practices?
   Individual data will be analyzed as it comes with core faculty members. After gathering all the data, the program director will present the findings to the year-end annual faculty meeting and adopt recommended changes.

2. How and when will the program faculty evaluate the impact of assessment-informed changes made in previous years?
   At the year-end annual faculty meeting, the changes that took place the previous year will be evaluated.

Additional Questions

1. On what schedule/cycle will program faculty assess each of the program's student learning outcomes? (Please note: It is <u>not recommended</u> to try to assess every outcome every year.)

Clinical competency is assessed at the end of each clinical course. American Board of Orthodontics certification is assessed following the annual examination. Theses are completed in the 3rd year fall semester prior to graduation. All learning outcomes are assessed by the Core Graduate Orthodontic Committee meets weekly throughout the program.

2. Describe how, and the extent to which, program faculty contributed to the development of this plan.

The program director and the Core Graduate Orthodontic Committee meet weekly to evaluate the current status of learning outcomes based on the comments from the faculty and discuss the possible ways to improve the outcomes.

IMPORTANT: Please remember to submit any rubrics or other assessment tools along with this plan.