REGULATIONS FOR THE DEGREE OF

MASTER OF DENTAL SURGERY IN ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

MDS(Orthodontics&DentofacialOrthopaedics)

These regulations apply to candidates admitted in 2023-2024 and thereafter.

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

The degree of Master of Dental Surgery in Orthodontics and Dentofacial Orthopaedics [**MDS**(**Orthodontics&DentofacialOrthopaedics**)] is a postgraduate degree awarded following the satisfactory completion of a prescribed programme of study and research related to orthodontics.

Admission requirements

D158 To be eligible for admission to the curriculum for the degree of Master of Dental Surgery in Orthodontics and Dentofacial Orthopaedics, a candidate shall

- (a) comply with the General Regulations and the Regulations for Taught Postgraduate Curricula;
- (b) hold the degree of Bachelor of Dental Surgery of this University, or a degree or other qualification of equivalent standard from another university or comparable institution accepted for this purpose;
- (c) for a candidate who is seeking admission on the basis of a qualification from a university or comparable institution outside Hong Kong of which the language of teaching and/or examination is not English, shall satisfy the University English language requirement applicable to higher degrees as prescribed under General Regulation G2(b); and
- (d) satisfy the examiners in a qualifying examination if required.

Qualifying examination

D159 (a) A qualifying examination may be set to test a candidate's formal academic ability or his/her ability to complete the prescribed programme of study and practice. It shall consist of one or more written papers or the equivalent and may include a project report, a practical examination and oral examinations.

(b) A candidate who is required to satisfy the examiners in a qualifying examination shall not be permitted to register until he/she has satisfied the examiners in the examination.

Award of degree

D160 To be eligible for the award of the degree of Master of Dental Surgery in Orthodontics and Dentofacial Orthopaedics, a candidate shall

- (a) comply with the General Regulations and the Regulations for Taught Postgraduate Curricula; and
- (b) complete the curriculum and satisfy the examiners in accordance with the regulations set out below.

Period of study

D161 The curriculum shall normally extend over a period of thirty-six months of full-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of sixty months of full-time study, unless otherwise permitted or required by the Board of the Faculty.

Completion of curriculum

D162 To complete the curriculum, a candidate shall

- (a) satisfy the requirements prescribed under TPG 6 of the Regulations for Taught Postgraduate Curricula:
- (b) follow instruction in the courses prescribed and complete satisfactorily all coursework requirements:
- (c) achieve a minimum of 270 credits;
- (d) satisfy the examiners in all examinations as may be required; and
- (e) complete and submit a dissertation or research paper in publication format which satisfies the examiners.

Dissertation or Research Paper

The title of the research project shall be submitted for approval not later than April 30 in the D163 final academic year of study. Dissertations or research papers should be submitted to the Programme Director not later than August 1 in the same year; the candidate shall submit a statement that the dissertation or research paper represents his/her own work undertaken after registration as a candidate for the degree. The examiners may prescribe an oral examination on the subject of the dissertation or research paper.

Assessments

D164 Assessments may be held in each year of study and may take the form of written papers and oral examinations, assessments of coursework, or a combination of these methods.

D165 A candidate who has failed to satisfy the examiners in any part of the assessments may be permitted to present himself/herself again for assessment at a time to be determined by the Board of Examiners; or he/she may be recommended for discontinuation of studies under the provisions of General Regulation G12.

D166 A candidate who has presented a dissertation or research paper which has failed to satisfy the examiners may be permitted to revise and re-present the dissertation or research paper within a period to be determined by the Board of Examiners; or he/she may be recommended for discontinuation of studies under the provisions of General Regulation G12.

D167 In accordance with TPG 5(c), candidates who have exceeded the maximum period of registration specified in Regulation D161 shall be recommended for discontinuation of studies.

D168 Failure to take any assessment as scheduled normally shall result in automatic course failure.

A candidate who is unable, through illness, to be present at an examination may apply in D169 writing within 2 weeks of the assessment for permission to be examined at some other time to be determined by the Board of Examiners.

Grading System

Assessment results

D171 Upon successful completion of the curriculum, candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded in the candidates' degree diploma.

December 21, 2022

SYLLABUSES FOR THE DEGREE OF MASTER OF DENTAL SURGERY IN ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

A. **PREAMBLE**

- 1. The objectives of the **MDS(Orthodontics&DentofacialOrthopaedics**) curriculum are to enable candidates to achieve an advanced level of knowledge and competence in a branch of orthodontics by means of
 - (a) a prescribed course of study having a minimum of 5400 hours of coursework (i.e., lectures and seminars and related written and practical work); and
 - (b) additionally, a supervised research project and the submission of a dissertation or research paper in publication format.

The prescribed course of study will include subjects to be taken by all candidates, in accordance with the syllabus specified by the Programme Director. The supervised research projects will be related to each candidate's prescribed programme of study.

- 2. Candidates must attend for clinical practice for at least five sessions a week in such programme area or areas as are prescribed.
- 3. The methods and pattern of assessment and examination of each candidate will be determined by the Board of the Faculty.

B. SYLLABUSES FOR THE DEGREE OF MASTER OF DENTAL SURGERY IN ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

- (a) The curriculum covers a wide range of topics relevant to the diagnosis, management and treatment of advanced and multidisciplinary orthodontic cases, including aspects of applied human biology and psychology; statistics, epidemiology and research methods; imaging, cephalometry and mechanical analysis; types of appliance, design and materials; practice management, administration and ethics.
- (b) The curriculum consists of lectures, seminars, assignments, clinical and laboratory demonstrations, practical, clinical work, and training in research methods. Specific training programmes relevant to the candidate's research project will be provided in consultation with the supervisor.
- (c) The curriculum will be based on the concept of providing orthodontic therapy as a part of the promotion of dental and general health for children and adults.

Curriculum structure

All the components of the curriculum are compulsory. The Curriculum includes the following courses/components:

A. Faculty Core Courses (15 credits)

Year 1

- DENT7505 Biomaterials I (3 credits)
- DENT7506 Biomaterials II (3 credits)
- DENT6023 Oral epidemiology and clinical research methodology (3 credits)
- DENT6024 Introduction to statistical analysis in dental research (3 credits)
- DENT6025 Multivariable statistical analysis in dental research and use of statistical software (3 credits)
- DENT7030 Dissertation writing for Master of Dental Surgery and Master of Science An Induction Course (non-credit bearing)

B. Discipline Specific Courses (72 credits)

Year 1, 2 and 3

• DENT7256, DENT7257 and DENT7258 Orthodontic diagnosis and treatment planning 1, 2 and 3 (24 credits each)

C. Clinical Components (153 credits)

Year 1, 2 and 3

- DENT7251, DENT7252 and DENT7253 Clinical orthodontics 1, 2 and 3 (48 credits, 48 credits and 51 credits)
- DENT7250 Capstone Experience: Clinical Portfolio (6 credits)

D. Research Components (30 credits)

Year 2 and 3

• DENT7254 and DENT7255 Original research 2 and 3 (15 credits each)

Description of courses

DENT7505 Biomaterials I (3 credits)

This course aims to introduce the post-graduate students to the various types of dental materials and biomaterials. On completion of this course, a student should be able to critically appraise knowledge and reports from various metallic, polymeric and ceramic materials used in dentistry. The student should also be able to choose an appropriate method for assess and evaluate biomechanical, chemical and biological properties of dental materials.

Assessment: One 2-hour written paper; 100% examination

DENT7506 Biomaterials II (3 credits)

The course Biomaterials II aims to introduce and guide the students to silicon chemistry and its vast amount of applications in dental materials and biomaterials. Moreover, the course explains various biomechanical features in dentistry. Dental ceramics and some novel synthetic materials for clinical use are described in details and introduced to the student to critically appraise them. The use of diverse dental cements with their indications will be explained for the student for critical selection in the clinic. On completion of this course, a student should be able to address biomechanics, adhesion and durability aspects in contemporary dentistry.

Assessment: One 2-hour written paper; 100% examination

DENT6023 Oral epidemiology and clinical research methodology (3 credits)

This course aims to introduce the students to the various types of epidemiological studies and how to conduct clinical trials. On completion of this course, a student should be able to critically appraise reports from oral epidemiological studies and the level of evidence generated. The student should also be able to choose an appropriate design for a clinical study on a specific topic of interest.

Assessment: One 2-hour written paper; 100% examination

DENT6024 Introduction to statistical analysis in dental research (3 credits)

This course aims to introduce the students to the basic statistical methods used in dental research; the interpretation of results of statistical analysis and the statistical content of published research papers. On completion of this course, a student should be able to address statistical issues when formulating a research project, and to appraise the basic statistical content of a published dental research paper.

Assessment: One 2-hour written paper; 100% examination

DENT6025 Multivariable statistical analysis in dental research and use of statistical software (3 credits)

This course aims to introduce the students to the multivariable statistical methods used in dental research and to provide basic training to the students in using the software SPSS for Windows to analyze dental research data. On completion of this course, a student should be able to appraise the statistical contents of a published dental research paper, and be able to carry out basic analysis of the data collected in a dental research using the software SPSS for Windows.

Assessment: One 2-hour written paper; 100% examination

DENT7030 Dissertation writing for Master of Dental Surgery and Master of Science – An Induction Course (non-credit bearing)

This Induction Course aims to raise course participants' awareness of essential aspects of academic writing which contribute to overall communicative success in dissertations. Its ultimate aim is to provide a useful induction experience so that you will be able to approach your writing with more confidence and skill at key stages of your research. Specific objectives are listed as themes in the course schedule.

Assessment: No formal assessment

DENT7256 Orthodontic diagnosis and treatment planning 1 (24 credits)

Seminars/Case discussion on orthodontic cases focusing on orthodontic diagnosis and treatment planning

Assessment: One 3-hour written paper; 100% examination

DENT7257 Orthodontic diagnosis and treatment planning 2 (24 credits)

Seminars/Case discussion on orthodontic cases focusing on different treatment mechanics

Assessment: One 3-hour written paper; 100% examination

DENT7258 Orthodontic diagnosis and treatment planning 3 (24 credits)

Seminars/Case discussion on orthodontic cases focusing on comprehensive clinical scenarios

Assessment: One 3-hour written paper; 100% examination

DENT7251 Clinical orthodontics 1 (48 credits)

Treatment of different malocclusions

Assessment: 100% presentation

DENT7252 Clinical orthodontics 2 (48 credits)

Treatment of different malocclusions

Assessment: 100% presentation

DENT7253 Clinical orthodontics 3 (51 credits)

Treatment of different malocclusions

Assessment: 50% portfolio and 50% presentation

DENT7254 Original Research 2 (15 credits)

Original research in orthodontics

Assessment: research manuscript

DENT7255 Original Research 3 (15 credits)

Original research in orthodontics

Assessment: research manuscript

DENT7250 Capstone Experience: Clinical Portfolio (6 credits)

Log book of 6 orthodontics cases

Assessment: clinical portfolio

December 21, 2022