Master of Science Program Prosthodontics

International Program

(Academic Year B.E. 2543)

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1. Program : Master of Science Program in Prosthodontics

2. Degree Program: Master of Science (Prosthodontics)

   M.Sc. (Prosthodontics)

3. Program Administrator

   3.1 Department of Prosthodontics, Faculty of Dentistry, Khon Kaen University
   3.2 Graduate School, Khon Kaen University

4. Rational, Philosophy and Objective of the Program

   4.1 Rational of the Program

   Maintaining and improving the quality of advanced education in nationally recognized specialty areas of dentistry is a primary aim of the graduate dental education program of the department of prosthodontics, faculty of dentistry, Khon Kaen University. It is the responsibility of the faculty to the public and dental profession as a specialized institution recognized by the ministry of university affair. The department has had a long standing interest in graduate education to prepare qualified dental graduates for leadership careers as clinical scholars in research, teaching and administration as well as in general and specialty practice. This interest has resulted in the development of the graduate program to provide the education need by the graduate students to move toward their career goals. Since the Department consists of a number of qualified personels who came back from their studies, and the faculties believe in the educational value of an appreciate research experience during graduate training, the Master degree program in prosthodontic is designed to meet the requirement of the graduated study of the graduate school, Khon Kaen University as well as the professional requirement in prosthodontic practice.

   4.2 Philosophy of the Program

   The primary goal of the master degree program in prosthodontics is to develop practitioners who will be leaders in clinical practice and education by strengthening and extending
their knowledge and skills in the biological, physiological, behavioral, moral, ethic and clinical discipline, as they relates to the specialty of prosthodontics. An additionally prepared students in the vital and critical area of research for the future role of prosthodontics. The program is designed to be internationally comparable, and to satisfy the educational requirements of the Thai Board of Prosthodontics as well as leading to a Master of Science in Prosthodontics.

4.3 Objective of the Program

The aims of the program are as follow

4.3.1 To strengthen the education in relevant aspects of biomedical science to develop a fundamental background for sound understanding in the theory and practice of clinical prosthodontics.

4.3.2 To educate the student in the most recent treatment in advanced prosthodontics and allied disciplines in order to provide pathways for the students to emphasize personal interests in the areas of removable prosthodontics, fixed prosthodontics, maxillofacial prosthetics, occlusal problems and temporomandibular disorders (TMDs).

4.3.3 To develop in the student increase skills and appreciation for dental research which will promote enhanced reasoning powers, good judgement, technical knowledge and clinical capabilities.

4.3.4 To promote versatility and competency by providing a comprehensive program which embraces a wide range of biomedical and clinical disciplines

5. Instruction Planning

The program shall be starting from the first semester of the academic year B.E 2543

6. Qualification of Applicant for Admission

To be considered for admission to the program, an applicant:

6.1 must successfully completed D.D.S degree or equivalent degree from an accredited dental institution by the ministry of university affair and civil organization

6.2 with Thai nationality must have a license to practice dentistry from the Dental Council of Thailand. An international applicant must be approved for temporary license to be practice under staff’s supervision
6.3 has an experience in practicing dentistry for at least 2 years
6.4 has good academic record and has the GPA at least 3.0 or equivalent
6.5 has general requirement according to the rule of graduate study, Khon Kaen University B.E. 2541 section No. 5, clause 19.1
6.6 successfully has TOEFL score 500 or above
(N.B. The administrative committee shall consider an applicant’s requirement according to the item 6.3- 6.6 on the basis of an individual record to be permitted into the program.)

7. Admission Procedure
The administration procedure process shall be follow the role of graduate study, Khon Kaen university B.E 2541 section 5, clause 20 and 21. An application procedure shall be obtained and followed the admission announcement of the graduate school, Khon Kaen University.

8. Educational System
The educational system shall be followed the rules of the graduate study, Khon Kaen university B.E 2541 section 2, clause 7

9. Length of the program
The program is designed to meet the requirement for the role of graduate study, Khon Kaen University B.E. 2541 section 3, clause 11. The usual length of program is 3 years

10. Registration
The registration to the program shall be followed the rules of the graduate study. Khon Kaen University B.E 2541 section 6, clause 24, 25 and 26

11. Evaluation and Graduation
The assessment of the education shall be evaluated according to the role of graduate study, Khon Kaen University B.E. 2541 section 7 except 34.2, 34.5, 34.6 and section 8 except 39.5
### 12. Graduate Educational Staff

#### 12.1 Staff in the Program (Teaching Staff)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name- Surname</th>
<th>Scientific Bibliography</th>
<th>Academic Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mr. Jarin Paphangkorakit</td>
<td>D.D.S., Ph.D.</td>
<td>Lecturer</td>
</tr>
<tr>
<td>2.</td>
<td>Mrs. Charunee Rattanayatikul</td>
<td>D.D.S., M.D.Sc.(Orthodontics)</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>6.</td>
<td>Ms. Tipawan Techanitisawad</td>
<td>B.Sc., D.D.S, Grad. in Pediatric Dentistry, M.S.,Cert. Of residency in Pediatric, Ph.D., Dip. Th. Bo. Pedo.</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>8.</td>
<td>Mrs. Tasanee Wangsrimongkol</td>
<td>B.Sc., D.D.S, M.S., Cert. in Advance Orthodontics</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>12.</td>
<td>Mr. Niwut Jantavee</td>
<td>D.D.S., C.A.G.S. (Prosthodontics), M.S.D. (Prosthodontics), Sc.D</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>No.</td>
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<td>Scientific Bibliography</td>
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</tr>
<tr>
<td>13</td>
<td>Mr. Namchai* Suksantisakulchai</td>
<td>D.D.S., Grad. Dip. In Clin. Sc (Prosthodontics)</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>14</td>
<td>Ms. Pattama Chailertvanitkul</td>
<td>D.D.S, Ph.D. (Endodontology)</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>16</td>
<td>Mr. Lertrit Sarinnaphakorn</td>
<td>D.D.S., M.Sc.Dent</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>17</td>
<td>Mrs. Wirawan Weerachagul</td>
<td>D.D.S , M.P.H.,</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>18</td>
<td>Mr. Wisit Sakaratanan**</td>
<td>D.D.S.</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>19</td>
<td>Ms. Sajee Sattayut</td>
<td>D.D.S, Ph.D. (Oral and Maxillofacial Surgery)</td>
<td>Lecturer</td>
</tr>
<tr>
<td>20</td>
<td>Mr. Subin Puasiri</td>
<td>D.D.S., M.P.H.</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>21</td>
<td>Mr. Supreda Adulyanon</td>
<td>B.Sc., D.D.S, M.P.H., Ph.D.</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>22</td>
<td>Ms. Suwadee Kosit bowonchai</td>
<td>D.D.S., Dr. Med Dent. (Radiology), Certificate in Periodontology</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Mr. Suwit Udompanich</td>
<td>B.Sc., D.D.S, M.P.H., Dr.P.H. Dip. Th. Bo. (Public Health)</td>
<td>Lecturer</td>
</tr>
<tr>
<td>24</td>
<td>Ms. Suwimol Taweechaisupapong</td>
<td>D.D.S., Ph.D.(Pathobiology)</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>25</td>
<td>Mr. Anan Jiraviboon</td>
<td>B.D.S., M.D.S. (Oral Surgery)</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>26</td>
<td>Mr. Aroon Teerakapong</td>
<td>B.Sc., D.D.S., Cert.in Periodontics, M.S., Dip. Th.Bo. Perio.</td>
<td>Assistant Professor</td>
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<tr>
<td>27</td>
<td>Mrs. Ariya</td>
<td>D.D.S., MSc. (Medical)</td>
<td>AssociateProfessor</td>
</tr>
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* Continue studying in Thailand Master degree level
** Continue studying aboard Master degree level
*** Continue studying aboard Doctorate degree level

### 12.2 Adjunct Instructors

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<th>Academic Position</th>
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<tbody>
<tr>
<td>2.</td>
<td>Mr. Chaiwut Preukngarmpun</td>
<td>D.D.S., MSc(Prosthodontics)</td>
<td>Instructor</td>
</tr>
<tr>
<td>3.</td>
<td>Ms. Daraporn Lee</td>
<td>D.D.S., MSc(Prosthodontics)</td>
<td>Instructor</td>
</tr>
<tr>
<td>4.</td>
<td>Ms. Pitpern Chanatapakorn*</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>5.</td>
<td>Mrs. Varaporn Arornchayanol</td>
<td>B.Sc., D.D.S., Cert. In Prosthodontics.</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>6.</td>
<td>Ms. Warangkana Buddee</td>
<td>D.D.S., MSc(Prosthodontics)</td>
<td>Instructor</td>
</tr>
<tr>
<td>7.</td>
<td>Ms. Sukoltip Arwatchanakarn***</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>8.</td>
<td>Ms. Sudarat Kiatamnuay**</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>9.</td>
<td>Ms. Sutatip Limratchatamorn**</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>10.</td>
<td>Ms. Suwadee Auearunchot</td>
<td>D.D.S., MSc(Prosthodontics)</td>
<td>Instructor</td>
</tr>
<tr>
<td>11.</td>
<td>Ms. Orathai Wichianmongkolkul*</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>12.</td>
<td>Ms. Onanong Pombut*</td>
<td>D.D.S.</td>
<td>Instructor</td>
</tr>
<tr>
<td>13.</td>
<td>Mr. Iven Kleinberg</td>
<td>B.Sc., MDS, Ph.D</td>
<td>Professor</td>
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* Continue studying in Thailand Master degree level
** Continue studying aboard Master degree level
*** Continue studying aboard Doctorate degree level
13. Number of Student

<table>
<thead>
<tr>
<th>Number of Student</th>
<th>Year</th>
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<td>Year 2</td>
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<td>Expected Graduate Student</td>
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<td>5</td>
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</table>

14. Places and Facilities for Instruction

14.1 Places

14.1.1 Existing building

A. Mahittraranusorn Building

The administrative office of the graduate master degree program in prosthodontics shall be conducted at Mahittraranusorn building which contains:

- Room for chairman: 1 room
- Room for staff: 6 rooms
- Conference room: 1 room
- Lecture room for 60 seats: 5 rooms
- Lecture room for 30 seats: 1 room
- Central Laboratory for Dentistry: 2 rooms
- Laboratory for Pathology: 1 room
- Laboratory for Oral Biology: 1 room
- Biomatceral research room: 1 room
- Microcomputer room: 1 room

B. Hospital Building
The clinical practice for graduate master degree students in prosthodontics shall be utilized at hospital building. This also included 2 laboratory section for Prosthodontic practice.

14.1.2 Required Building

- Seminar room: 1 room
- Graduate student’s room: 1 room

14.2 Teaching Equipments

14.2.1 Existing Equipments

14.2.1.1 Equipment for lecture:
- Overhead projector: 6 items
- Slide projector: 12 items
- Screen: 16 items
- Television and Video: 30 items

14.2.1.2 Equipment for Laboratory:
- X-ray unit and processing equipment: 10 items
- Phantom head: 20 items
- Micromotor and high speed handpiece: 20 items
- Television and Video: 20 items
- Light unit: 20 items
- Casting machine: 4 items
- Burn out furnace: 4 items
- Porcelain furnace: 2 items
- Glazing furnace: 2 items
- Soldering unit: 1 item
- Polishing unit: 5 items
- Electric soldering unit: 1 item
- Silicoater: 1 item
- Sandblaster: 2 items
- Steam cleaning machine: 1 item
- Vibrator: 1 item
- Vacuum mixer: 5 items
- Metal grinder 1 item
- Porcelain grinder 1 item
- Acrylic grinder 3 items
- Acrylic polisher 3 items
- Bench press 3 items
- Flask boiling processor 2 items
- Wax boiling unit 3 items
- Trimmer 3 items

14.2.1.3 Equipment for clinical practice:
- Dental unit 12 items
- X-ray unit and processing equipment 2 items
- Pulp tester 2 items
- Electrosurgery 1 item
- Steam cleaning machine 1 item
- Autoclave 2 items
- Ultrasonic cleanser 1 item
- Hot air oven 2 items
- Articulator 10 items
- Fully adjustable articulator 2 items
- Semiajustable articulator 5 items
- Plain line 12 items
- Intraoral video camera 1 item
- Pantograph machine 2 items

14.2.1.4 Equipment for research:
- Universal testing machine 1 item
- Vicker hardness tester 1 item
- Knoop hardness tester 1 item
- BrilliNel hardness tester 1 item
- Measuring microscope 1 item

14.2.2 Additional Equipment need
Slide projector* 1 item
Overhead projector* 1 item
Screen* 1 item
(*for graduate lecture room)
Computer** 1 item
(**for graduate student’s room)
Porcelain furnace*** 2 items
Glazing furnace *** 1 item
(*** for Prosthodontic clinical practice laboratory)
Scanning electron Microscope **** 1 item
(**** for dental research)

15. Library
15.1 The Central Library Academic Service Institute
15.1.1 Textbook
Thai edition 42 items
Foreign edition 158 items
15.1.2 Journal
Thai edition 15 items
Foreign edition 17 items
15.1.3 Database
15.1.3.1 CD-Rom 4 items
15.1.3.1.1 Health Star
15.1.3.1.2 Medline
15.1.3.1.3 Dissertation Abstract On Disc (DAO)
15.1.3.1.4 International Pharmaceutical Abstracts (IPA)
15.1.3.1.5 Thai Thesis
15.1.3.2 OPAC (Online Public Access Catalog)
15.1.3.3 Internet information center

15.2 Somnuk Poonthrap Library, Faculty of Dentistry, Khon Kaen University
The dentistry collection is housed in attractively appointed Mahitraranusorn Building. The collection includes:
15.2.1 Textbook
Thai edition 40 items
15.2.2 Journal

Thai edition                     20 items
Foreign                          49 items

15.2.3 Database

15.2.3.1 CD-Rom 4 items

15.1.3.1.1 Health Star
15.1.3.1.2 Medline
15.1.3.1.3 Dissertation Abstract On Disc (DAO)
15.1.3.1.4 Thai Thesis

15.2.3.2 Internet information center

15.3 Medical Library, Khon Kaen University

15.3.1 Textbook

Thai edition                     more than 100 items
Foreign                          more than 100 items

15.3.2 Journal

Thai edition                     more than 20 items
Foreign                          more than 50 items

15.3.3 Database

15.3.3.1 CD-Rom 4 items

15.1.3.1.1 Health Star
15.1.3.1.2 Medline
15.1.3.1.3 Dissertation Abstract On Disc (DAO)
15.1.3.1.4 Thai Thesis

15.3.3.2 Internet information center

16. Budget

The budget for proceeding graduate master degree program in prosthodontics during the primary phase (B.E.2543-2547) shall be administrated as follow:

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Budget Year B.E</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td>2543</td>
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<tr>
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<tr>
<td>Expense</td>
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<td>Fee</td>
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<td>Utility</td>
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<td>Equipment</td>
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<td>Deposit</td>
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<td>Total</td>
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<td>Expense per head (per year)</td>
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17. Curriculum

Master degree program in prosthodontics as defined as Plan I type 1(2)

17.1 Total credit 71 credits

17.2 Structure of program

Compulsory course

- General compulsory course 9 credits
- Program compulsory course 48 credits
- Elective course at least 2 credits
- Thesis 12 credits

17.3 Course

17.3.1 Compulsory course

17.3.1.1 General compulsory course 9 credits

563 701   Oral Biology I  2(2-0-6)
563 703   Biomedical Science 3(3-0-9)
564 711   Research Methodology in Dentistry 2(2-0-6)
564 712   Biostatistics and Data Management 1(0-3-1)
564 713   Ethics in Medicine and Dentistry 1(1-0-3)

17.3.1.2 Program compulsory course 48 credits

551 704 Dental Photography 1(1-0-1)
17.3.2 Elective course (at least 2 credits)

566 702 Lasers in Dentistry 1(1-0-1)
569 701 Advanced Radiology 1(1-0-1)

17.3.3 Thesis  12 credits

567 899 Thesis 12 (credits)

17.4 Descriptive to course

17.4.1 The first three digit code identifies faculty and department

The Faculty of Dentistry possesses code No. 550 to 569 according to this document as follow

551 Course belonging to interdepartmental responsibility
Courses belonging to the department of Orthodontics
Courses belonging to the department of Pediatric dentistry
Courses belonging to the department of Oral Biology
Courses belonging to the department of Community dentistry
Courses belonging to the department of Restorative dentistry
Courses belonging to the department of Oral and Maxillofacial
Courses belonging to the department of Prosthodontic
Courses belonging to the department of Periodontology
Courses belonging to the department of Oral Diagnosis

17.4.2 The fourth digit code identifies level of course
Digit 7, 8 and 9 identify graduate level

17.4.3 The fifth digit code identifies Group of course
0 identifies Lecture
1 identifies Lecture
2 identifies Laboratory or Clinical practice group
3 identifies Masticatory and related subjects group
4 identifies Fixed prosthodontics subjects group
5 identifies Removable prosthodontics subjects group
6 identifies Maxillofacial prosthodontics subjects group
7 identifies Dental Implantology subjects group
8 identifies Biomaterials subjects group
9 identifies Seminar group

17.4.4 The sixth digit code identifies the order of the subject to be instructed or nature of subjects. (Lecture, Clinic, Seminar)

17.5 Study Plan and Schedule

Year 1
First semester
Subject code Course Credit
551 704 Dental Photography 1(1-0-1)
<table>
<thead>
<tr>
<th>Subject code</th>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>563 701</td>
<td>Oral Biology I</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>563 703</td>
<td>Biomedical Science</td>
<td>3(3-0-9)</td>
</tr>
<tr>
<td>564 713</td>
<td>Ethics in Medicine and Dentistry</td>
<td>1(1-0-3)</td>
</tr>
<tr>
<td>567 821</td>
<td>Prosthodontic Clinic I</td>
<td>3(0-9-9)</td>
</tr>
<tr>
<td>567 841</td>
<td>Fixed Prosthodontics</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>XXX XXX</td>
<td>Electives</td>
<td>1(X-X-X)</td>
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<td></td>
<td><strong>Total</strong></td>
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**Second Semester**

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<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>567 822</td>
<td>Prosthodontics Clinic II</td>
<td>6(0-18-18)</td>
</tr>
<tr>
<td>567 852</td>
<td>Removable Prosthodontics: Complete Denture</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>567 853</td>
<td>Removable Prosthodontics: Partial Denture</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>567 881</td>
<td>Biomaterials for Prosthodontic Applications</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</table>

**Year 2**

**First Semester**

<table>
<thead>
<tr>
<th>Subject code</th>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>564 714</td>
<td>Behavioral Science for Dental Therapy</td>
<td>1(1-0-3)</td>
</tr>
<tr>
<td>566 703</td>
<td>Advanced Hospital Dentistry</td>
<td>1(1-0-3)</td>
</tr>
<tr>
<td>567 823</td>
<td>Prosthodontic Clinic III</td>
<td>6(0-18-18)</td>
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<tr>
<td>567 831</td>
<td>Advanced Dental Occlusion</td>
<td>1(1-0-3)</td>
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<tr>
<td>567 891</td>
<td>Prosthodontic Seminar I</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>567 893</td>
<td>Advanced Clinical Science Seminar</td>
<td>1(1-0-3)</td>
</tr>
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**Second Semester**

<table>
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<tbody>
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<td>Prosthodontics Clinic VI</td>
<td>4(0-12-12)</td>
</tr>
<tr>
<td>567 851</td>
<td>Gerontology and Geriatric Dentistry</td>
<td>1(1-0-3)</td>
</tr>
<tr>
<td>567 861</td>
<td>Maxillofacial Prosthetics</td>
<td>1(1-0-3)</td>
</tr>
<tr>
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<td>Credit</td>
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<tr>
<td>567 871</td>
<td>Implantology for Dental Applications</td>
<td>1(1-0-3)</td>
</tr>
<tr>
<td>567 892</td>
<td>Prosthodontic Seminar II</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>xxx xxx</td>
<td>Elective</td>
<td>1(x-x-x)</td>
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**Year 3**

**First Semester**

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<tbody>
<tr>
<td>564 711</td>
<td>Research Methodology in Dentistry</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>564 712</td>
<td>Biostatistics and Data Management</td>
<td>1(0-3-1)</td>
</tr>
<tr>
<td>567 825</td>
<td>Prosthodontics Clinic V</td>
<td>4(0-12-12)</td>
</tr>
<tr>
<td>567 899</td>
<td>Thesis</td>
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<td><strong>Total</strong></td>
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**Second Semester**

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<tbody>
<tr>
<td>567 826</td>
<td>Prosthodontics Clinic VI</td>
<td>3(0-9-9)</td>
</tr>
<tr>
<td>567 894</td>
<td>Special Problems in Prosthodontics</td>
<td>2(2-0-6)</td>
</tr>
<tr>
<td>567 899</td>
<td>Thesis</td>
<td>6 credits</td>
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<tr>
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<td><strong>Total</strong></td>
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</tbody>
</table>

17.6 Course Description

17.6.1 Compulsory course

17.6.1.1 General compulsory course

<table>
<thead>
<tr>
<th>Subject code</th>
<th>Course</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>563 701</td>
<td>Oral Biology I</td>
<td>2(2-0-6)</td>
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</tbody>
</table>

Prerequisite: None

Structure and development of oral cavity, oral ecology, host defense mechanism, drug and diet effect on oral cavity, orofacial pain and oral physiology.

<table>
<thead>
<tr>
<th>Subject code</th>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>563 703</td>
<td>Biomedical Science</td>
<td>3(3-0-9)</td>
</tr>
</tbody>
</table>

Prerequisite: None

Cell function, plasma membrane, cell signalling and cell adhesion, physioanatomy of nervous, neuromuscular, respiratory, and cardiovascular systems, control of metabolism and body...
temperature, wound healing, pain control, characteristics of bacteria and viruses in oral cavity, and biology of cancer.

564 711 Research Methodology in Dentistry 2(2-0-6)
Prerequisite: None
Identifying of research problem, formulating of hypothesis. Variable and measurements, sampling techniques and sample size estimation, research designs, data analysis. research ethics, research protocol, critical analysis of dental literature and research presentation.

564 712 Biostatistics and Data Management 1(0-3-1)
Prerequisite : None
Statistic related to dental research, data collection and data analysis, and appropriate statistical usage.

564 713 Ethic in Medicine and Dentistry 1(1-0-3)
Prerequisite : None
Emphasis on theory and concept of ethic, human right, patient right, ethical issue in medicine and dental therapy, research in human as well as ethic in animal study and law issue.

17.6.1.2 Program compulsory course

551 704 Dental Photography 1(1-0-1)
Prerequisite : None
Manipulation of photographic equipments and accessories for dental photography, extraoral and intraoral photographic techniques, use of computer softwares to collect and present digital imagery in case reports and researches.

564 714 Behavioral Science for Dental Therapy 1(1-0-3)
Prerequisite: None
Developing a framework for delivering total health care and examine of the meaning and impact of effective communication skills, managing transitions, enhancing patient relations and managing stress and pain.
Advanced Hospital Dentistry 1 (1-0-3)
Prerequisite: None
Systemizing patient care in hospital involving multidisciplinary approach not only
dental discipline but also medical discipline. Various laboratory tests to verify pathological
concerns and ability to manage emergency care and complication during dental treatment shall be
instructed.

Prosthodontic Clinic I 3(0-9-9)
Prerequisite: None
Prosthodontic treatment and preclinical prosthodontic: techniques and theirs
calibration by practicing in the models.

Prosthodontic Clinic II 6(0-18-18)
Prerequisite: None
Prosthodontic treatment in edentulous cases those required special techniques.

Prosthodontic Clinic III 6(0-18-18)
Prerequisite: None
Prosthodontic treatment in partial edentulous cases those required combined
fixed and removable prosthodontics therapy.

Prosthodontic Clinic IV 4(0-12-12)
Prerequisite: None
Prosthodontic treatment in cases those required maxillo-facial and rehabilitation.

Prosthodontic Clinic V 4(0-12-12)
Prerequisite: None
Prosthodontic treatment in cases those required dental implant.

Prosthodontic Clinic VI 3(0-9-9)
Prerequisite: None

Prosthodontic treatment in complicated cases those required interdisciplinary treatment planning and consultation from other expertises and usage of special instruments.

567 831 Advanced Dental Occlusion 1 (1-0-3)

Prerequisite: None

Biological and mechanical aspects of the masticatory system, principle of mandibular movement to explain articulation and function of the system. Philosophy of occlusion, analysis and management of occlusal problem. Selecting of instruments for occlusal reconstruction and the uses of articulators and their accessories are also discussed. In addition, the diagnosis and treatment of patients with TMD and associated problems are included.

567 841 Fixed Prosthodontics 2 (2-0-6)

Prerequisite: None

Philosophy and technique related to various aspects of fixed prosthodontics principles and therapy. Specific clinical techniques to successfully accomplish complex fixed restorations are emphasized. Lecture series of the design of various partial coverage restorations and abutment retainers are included. Furthermore, the comprehensive program outlining procedures involved in full mouth oral reconstruction or complicated prosthodontic cases are discussed.

567 851 Gerontology and Geriatric Dentistry 1 (1-0-3)

Prerequisite: None

All aspects of aging, include the biological basis, psychological and behavioral, general medical aspects of aging pathology, prevention and the treatment of oral diseases in the aging individual consisting of the epidemiology of oral diseases in older adults. Restorative considerations in geriatric dentistry are discussed.

567 852 Removable Prosthodontics: Complete Denture 2(2-0-6)

Prerequisite: None

Philosophy, theory, technique and concept related to complete denture therapy. Emphasis given to complicated treatment modalities and handling of problem case such as immediate denture, single denture and overlay denture.
567 853  Removable Prosthodontics: Partial Denture  2 (2-0-6)
Prerequisite : None

Philosophy, theory and concept of treatment, design concept in removable partial denture, Focusing given to conventional and unusual case including clasp, precision and semi-precision attachment, Special emphasis on periodontal involvement case and severely worn dentition to preserve of remaining structure.

567 861  Maxillofacial Prosthetics  1(1-0-3)
Prerequisite : 567 852, 567 853

All aspects of the rehabilitation of patient with congenital and acquired maxillofacial defects by maxillofacial prosthetic approach.

567 871  Implantology for Dental Applications  1(1-0-3)
Prerequisite : 567 831

Comprehensive course covering philosophy, concept, technique, advantage, disadvantage, indication, contraindication in implant dentistry, encompasses tissue biocompatibility and biomechanics of implants, tissue biology, patient selection, diagnosis as well as treatment planning, Consideration of surgical, prosthodontic and periodontic treatment utilizing various implant systems.

568 881  Biomaterials for Prosthodontic Applications  2(2-0-6)
Prerequisite : None

Comprehensive didactic covering of all biomaterials related to the practice of prosthodontic dentistry. Contemporary review of the restorative dental materials, including polymer, ceramic as well as metal and alloy in dentistry, principle of composite material for dental application and theory of biocompatibility.

567 891  Prosthodontic Seminar I  2(2-0-6)
Prerequisite : None

Current and classic prosthodontic literature as a base for substantive discussion of concepts in therapy. Emphasis on conventional prosthodontic therapy, dental material,
maxillofacial prosthodontic, implant dentistry and related subject. With in-depth analysis of philosophy and concept for further prosthodontic therapy.

567 892  Prosthodontics Seminar II  2(2-0-6)
Prerequisite: 567 891

A seminar concentrating on oral rehabilitation of dental and oral structure and related maxillofacial organs. Integrating multidisciplinary approach in dental treatment in reconstruction, including with discussion and presentation philosophy of treatment, diagnosis, treatment planning and result of therapy.

567 893  Advanced Clinical Science Seminar  1(1-0-3)
Prerequisite: None

Combined treatment planning conferences involving the prosthodontic, oral surgery, orthodontics, endodontic and periodontic specialties. Advanced and update technology of each specialty which may involve the treatment of restorative dentistry will also be emphasized.

567 894  Special Problems in Prosthodontics  2(2-0-6)
Prerequisite: None

A seminar concentrating on problem associated with prosthodontic treatment that need modern or advance knowledge as well as alternative treatment, especially in advanced prosthodontics and future prosthodontics.

17.6.2 Elective course

566 702  Lasers in Dentistry  1(1-0-1)
Prerequisite: None
Basic physics of laser, clinical and histological changes of soft and hard tissues due to laser operation, application of laser including clinical seminars and review of current research on lasers in dental practice.

569 701 Advanced Radiology 1(1-0-1)
Prerequisite: None
Craniofacial radiology and imaging modalities in dental specialties, principles, techniques, interpretation and differential diagnosis. Effect of radiation on human body and radiotherapy.

17.6.3 Thesis
567 899 Thesis 12 (credits)
Prerequisite: None
Research investigation in the field of prosthodontics or its related preclinic and basic dental and medical science. Partially satisfied requirement for the degree of Master of Science.

18. Quality Assurance
Assessment will be followed as indicated by The Graduate School, Khon Kaen University