



Doctor of Dental Surgery Program  
Revised Version, 2016 (2559)

Institution Name      Chulalongkorn University  
Faculty                      Faculty of Dentistry

**Chapter 1 General Information**

1. Name of Program

Thai                      :      Doctor of Dental Surgery Program  
English                 :      Doctor of Dental Surgery Program

2. Name of Degree and Field of Study

2.1 Name of Degree

Thai    : (full name)              Doctor of Dental Surgery  
          : (abbreviation)          D.D.S.  
English : (full name)              Doctor of Dental Surgery  
          : (abbreviation)          D.D.S.

2.2 Field of Study as specified in Transcript

Field of Study :                  Dentistry

3. Program Description and Categories

3.1 Program Description (Bachelor's Degree only)

6-year program

3.2 Categories of Program

Health science professional

4. Number of Credits through the Program

231 credits

Based on Management     Ordinary Program     International Program     English Program

Based on Revenue collected       Ordinary Program       Special Program

## 5 Form of Program

### 5.1 Form Bachelor's Degree

A 6-year program to obtain a Bachelor's Degree according to the standards of the Office of Higher Education Commission and the Thai Dental Council

### 5.2 Language used

Thai  English  ..... (specify)  Thai and ..... (specify)

### 5.3 Eligible Applicant

Thai students  International students  Both Groups

### 5.4 Cooperation with other Institutions (cooperation provided between faculties in the university and with other institutions outside the university)

5.4.1 Under this program, there are various cooperation with other faculties and departments in Chulalongkorn University i.e. the faculties which provide general education and elective subjects.

5.4.2 There are also cooperation with other institutions outside Chulalongkorn University

#### 1. Ministry of Public Health

The form of cooperation is to allow students to attend a training program at its affiliated hospitals.

#### 2. Bangkok Metropolitan Administration

The form of cooperation is to allow students to attend a training program at school, public health service center and its affiliated hospitals

#### 3. Ministry of Interior

The form of cooperation is to allow students to attend a training program at its affiliated hospitals

#### 4. Ministry of Education

The form of cooperation is to allow the students to attend a training program at schools.

### 5.5 Degree offered to graduates

Single Degree

Dual Degree provided together with ..... (insert name of University)

Two Degree provided together with ..... (insert name of University)

## 6 Status of Program and Approval Process

### 6.1 Status of Program

Revised Program

#### Course openings

Semester  First Semester  second semester of 2016 academic year

Trimester  Term 1  Term 2  Term 3 of ..... Academic year

## 6.2 Program Approval

6.2.1 Program was constructed and approved by the Program Standard Committee at its Meeting no. 7/2558 (2015) that was held on November 27, 2015 (2558)

6.2.2 Program was acknowledged and approved by the University Council at its Meeting no. 789 that was held on February 25, 2016 (2559)

6.2.3 Program was inspected by the University Academic Committee at its Meeting no. 3/2559 (2016) that was held on September 27, 2016 (2559)

6.2.4 Program was approved by the University Council at its Meeting no. 737 that was held on October 27, 2016 (2559)

## 7. Readiness to publicize the quality and standard program

The faculty is ready to publicize the quality and standard program, according to the TQF issued by the Office of Higher Education Commission, in 2019 (2562) Academic Year (3 years after program opening)

## 8. Career offered after completion of the program

-a dentist in the governmental healthcare sectors

-a lecturer in the university

-a dentist at the private hospital or clinic

- operating dental business

9. Academic staff in charge of the program

	Name and I.D.	Academic position	education	major	สำเร็จการศึกษา	
					Institution	Year graduated
1	Pornchai Jansisyanont 3-1008-00356-11-3	Assoc. Prof.	DDS	Dentistry	CU	2534
			(Honored)		U.of Maryland,	2544
			Cert.	Oral Maxillofacial	Baltimore	2544
			M.S.	Surgery, Oral		
			Thai Board	Maxillofacial		
Dip.	Pathology	TDC	2545			
Amer.Board	Oral Surgery	USA	2546			
2	Orawan Charatkulangkun 3-1009-02149-68-1	Assist. Prof.	DDS	ทันตแพทยศาสตร์	CU	2534
			MS	ปริทันตศาสตร์	CU	2537
			Cert. of	Periodontics	Indiana University,	2543
			Postdoctoral		USA	
			Fellowship in	Periodontics	TDC	2543
Thai Board	Periodontics					

10. Place of Teaching

- Faculty of Dentistry, Chulalongkorn University: The specific subjects are taught, and the clinic training will be provided at the Dental Hospital of the Faculty of Dentistry, Chulalongkorn University
- Outside the Faculty of Dentistry, Chulalongkorn University: The training will be provided as follows:

1) Ministry of Public Health

Training program will be provided at its affiliated hospitals.

2) Bangkok Metropolitan Administration (BMA)

Training program will be provided at schools, public health service centers and its affiliated hospitals.

3) Ministry of Interior

Training program will be provided at its affiliated hospitals.

4) Ministry of Education

Training program will be provided at schools.

## 11. External environment or development required to be considered for program planning

### 11.1 Environment and economic development

ASEAN Economics Community – AEC was established by the members of 10 countries and the free flow of trade in various services will be in effect in 2015 (2558) including health services. The free flow of trade will affect dentistry as one of the health services, e.g. in the form of patients or diseases that are different from the ones in Thailand or the influx of dentists from other countries that they are eager to come practice in Thailand, including the possibility of more establishment of clinics owned by foreign business owners. On the other hand, Thai dentists can go to other countries to work as well, including to set up their own business.

### 11.2 Environment, social and culture development

Rapid growth of information technology influences the current course management towards the era of “Education 4.0”, focusing on student self-directed learning, and the transmission of foreign culture without boundary and no control. Students need to be able to critically screen knowledge, technology and foreign culture, and consider whether to embrace and use them toward Thai society and cultures. Lack of optimal quality education shall cause graduates to lack essential professional morals and ethics. Human and social development guidelines, therefore, are focused on how to become good human, equipped with moral and good health, in order to be able to live with good quality of life under the balance of social diversity.

## 12. Effect of section 11.1 and 11.2 on the development of program and the relation to the mission of institution

### 12.1 Development of program

Based on the economic, social and cultural development together with the change of professional competencies of dental graduates result in the development of 2016 (2559) Doctor of Dental Surgery Program (focusing on the development of proper content and sequence of various topics regarding sciences basis to the profession) by coordinating with other related subjects, and by adjusting competencies of graduates to be more suitable and matched with the changing society. Moreover, teaching and learning are to be adjusted in order to enable graduates to gain knowledge and professional skills suitable to be dental service providers, starting from health promotion, disease prevention, treatment, rehabilitation and comprehensive dental health care. Moreover, with the status of economic, social and culture change resulted from ASEAN Economics Community in 2015 (2558), graduates of the 2016 revised program shall have the capability of a life-long learner, and be able to appropriately adjust himself toward the rapid change of knowledge of technology as well as society and culture. Besides, they shall have the capability of self-

development and internationally competitive, and have the long-term global perspective as well as to be able to live well in the society.

### 12.2 Mission of Institution

Based on the economic, social and cultural development or change toward the mission of Institution, teaching and learning is focused on producing graduates who will be the highest quality asset to the country and the world, resulting in giving the name Chulalongkorn University a world renown. Development of the current curriculum, therefore, focuses on adjustment of professional competencies to be corresponded to global changes. Subjects are designed to be focusing on morals and professional ethics as well as enhancement of self-directed and life-long learning ability. The program will enable students with immunity and ability to keep up with fast pacing changes of technology and incoming foreign cultures. Graduates will be able to self-sustain and live happily as a valued national and global citizen.

### 13. Relationship with other programs which are offered at other faculties/departments of the university

#### 13.1 Subjects from other programs which are used in this curriculum

General Educations

General Educations are subjects that aim to develop students to gain wider and more extensive knowledge as well as understanding nature of self, others, and society. These subjects provide ability to use English as needed in the profession, ability to apply knowledge to live decently and well in society. They reflect the philosophy and objectives of this curriculum.

Free Electives

Free Electives are subjects that provide opportunities for students to freely choose their own subjects of interest. Subjects are offered from all faculties in the university, in which there are rules and regulations enable them to be qualified as Free Electives.

#### 13.2 Subjects from this curriculum which are used in other curriculum

-none-

### 14. The curriculum which was used as a guideline for program development

14.1 The proposed curriculum are similar to other programs which are currently offered in Chulalongkorn University, which are.....none.....  
Which the similarities are (Mandatory subjects, Free electives etc.).....none....., however, the proposed course is different from the previously mentioned course on important topics, which are .....none..... .

14.2 This type of curriculum that is currently offered at various universities throughout the country, which includes

1. Faculty of Dentistry, Mahidol University

2. Faculty of Dentistry, Chiang Mai University
3. Faculty of Dentistry, Khon Kaen University
4. Faculty of Dentistry, Prince of Songkla University
5. Faculty of Dentistry, Thammasat University
6. Faculty of Dentistry, Srinakharinwirot University
7. Faculty of Dentistry, Naresuan University
8. Faculty of Dentistry, Rangsit University
9. Faculty of Dentistry, Mae Fah Luang University
10. Faculty of Dentistry, University of Phayao
11. Faculty of Dentistry, Western University
12. Faculty of Dentistry, Suranaree University of Technology

The proposed adjusted program has distinctive improvements and various differences from the previously mentioned course, which includes

1. Learning, teaching and assessments are developed based on competency standards set by the Faculty of Dentistry, Chulalongkorn University and the Thai Dental Council.
2. Professional morals and ethics as well as holistic care for patient have been emphasized throughout the program.
3. Interactive teaching and learning technics are emphasized to encourage interaction between students, and between academic staff and students in an active learning manner utilizing different means, including problem-based learning and case-based learning continuously to encourage students to engage in critical thinking as well as self-study ability.
4. Active learnings are different depending on year of study. 1<sup>st</sup> year to 3<sup>rd</sup> year of study mainly utilize problem-based learning. Clinical years are based on case-based learning.
5. The curriculum is more thoroughly integrated.
6. The curriculum includes more diverse mandatory subjects, therefore, students will be able to gain more knowledge in their interested fields before graduating.
7. Evaluation of accomplishment of graduates and curriculum are based on the competency of the TDC and the Faculty of Dentistry, and the desired characteristic of Chulalongkorn University.

#### **14.3 Foreign curriculum which was used to develop this program**

The 2016 improved curriculum has gathered data from:

1. Literature review in the international dental journals, such as Journal of Dental Education, European Journal of Dental Education etc.

2. Recommendation from various collaborated international organizations, including the American Dental Education Association, Thematic Network on European Dental Education, Council on Medical and Dental Education of Japan etc.
3. Consultation of dental education experts, which includes Assistant Professor Tod Watkins, Dental School East Carolina University, United States of America; Professor Joel Berg, Dean of the University of Washington, United States of America, Professor No-Hee Park, Dean of the University of California at Los Angeles, United States of America etc.
4. Participation in international dental education seminars, such as the American Dental Education Association and the European Association of Dental Education etc.

## **Chapter 2 Specific Information of the Curriculum**

### **1. Philosophy, importance, and objectives of the curriculum and desirable characteristics of graduates**

#### **1.1 Philosophy of curriculum**

Chulalongkorn University was established from the wisdom of King Vajiravudh and from the faith of Thai people as a memorial of King Chulalongkorn, who wished for all citizens to have equal education opportunity, and for eternal benefits to Thailand as a nation.

The primary objective of this university is to seek, to nurture and to transfer knowledge as well as strengthening the morality for the graduates to become fully fitted with intelligence and self-awareness. The most important knowledge includes knowledge for self and social developing, which are expertise in various professions that are beneficial to living a virtuous life. The duty of Chulalongkorn University is to embed self-awareness, enthusiasm, creativity, critical thinking, responsibility, foreseeing, morality and sacrifices for common benefits.

*The Faculty of Dentistry philosophy in management of Doctor of Dental Surgery program is focused on creating a dentist which is competent and ethical to serve the society effectively with quality.*

#### **1.2 Importance of curriculum**

Nowadays, global changes are dramatic in social, economic, political and traditional ways. Development of medical technologies as well as information technology are significant, leading us to the era education 3.0 which effectively enable new way of learning and teaching from integration of information technology as a tool for students to conduct self-directed learning. Furthermore, educational reform under the National



Education Act of 1999, specifically on Chapter 4 Section 22, stated guidelines for organizing courses that are student-centered and based on the fact that all students have the ability of self-directed learning and developing. It is pointed out that educational process should promote study methods which drives students toward ability to learn and to develop naturally and wholesomely. The policy of 2001 indicated that at least 12 credits of English language education at tertiary level are required. Chulalongkorn University policy of 2005 also encourages educational reform towards active learning. In addition, there are reformation of the health service system and increasing in expectations of the society towards dentists. These are all the factors that have direct impact on dental education. The Faculty of Dentistry, Chulalongkorn University has since noticed the necessity in reformation of curriculum in accordance with various situations and diverse changes especially in delivering ethical, and morally competent graduates with international standardized ability. Graduates should also have the appropriate characteristics for current situations involving skills in critical thinking, ability to learn and improve, and ability to work in an environment that is constantly changing, which will help them to be flexible and able to provide dental health education, disease prevention, and maintenance of good oral health to the people appropriately.

### **1.3 Curriculum Objective**

**1.3.1 Previous Curriculum Objectives (2014 Curriculum)** The objectives of the 2006 Curriculum were to emphasize professional competencies, thus, the objectives of the 2014 curriculum remain the same which are

1. Showing good professional attitude, and being ethically responsible to the society
2. Knowing basic knowledges required for simple clinical works, dental public health works, legal issues, research project and future self-directed learning
3. Performing holistic patient care utilizing basic knowledge required, involving diagnosis, health promotion, oral disease prevention, history taking, and treatment plan by considering relevant factors and scientific evidence
4. Showing the ability to work as a team with good management skills by considering the differences of the others in individual, family and community level
5. Sustaining self-developing and seeking of new knowledges constantly, as well as critical thinking during research and information management

### **1.3.2 Modified Curriculum Objective (2016 Curriculum)**

This is an improved curriculum created to emphasize on professional competencies, which will suit the current fast changing society with the objective of

1. Knowing all of the basic knowledges required for dental public health works, legal profession, research project and higher degree studies.
2. Performing holistic care involving diagnosing the patient, health promotion, oral disease prevention, history taking, data gathering, patient diagnosing and treatment plan by considering relevant factors and scientific evidence.
3. Showing the ability to work as a team with good management skills by considering the differences of the others in individual, family and community levels.
4. Maintaining self-developing and continuously seeking new knowledges, showing critical thinking capability during research and information management in the context of the current shifting society.
5. Exhibiting good attitude towards the profession, and being ethically responsible for the society.

### **1.4. Desired Characteristics for graduates**

Desired characteristics for graduates of Chulalongkorn University contain 9 components with 14 issues which are

1. Being knowledgeable (well-rounded and in-depth knowledge)
2. Having good morals (moral and ethical, and awareness of etiquette)
3. Having higher order of thinking skills (think critically, think creatively, and be skillful in problem solving)
4. Possessing essential capabilities (professional skills, communication skills, skills in information technology, mathematical and statistical skills, and management skills)
5. Having inquiring mind and know how to learn
6. Having leadership qualities
7. Maintaining well-being
8. Being community minded and socially responsible
9. Sustaining Thainess.

The outstanding characteristics of graduates from this curriculum include being able to translate knowledge and theory, from lecture classes, into clinical practice, knowing the basic knowledges supporting dental work including basic life science to basic health science that are related to dental standards. Moreover, students should be able to perform research and catch up with academic and technology advancement in order to provide proper dental health care for the people. Students should also possess research skills, being morally intelligent and responsible to the society, and behave appropriately to patients and co-workers.

Expected Learning Outcomes of the Bachelor Programme in Doctor of Dental Surgery of  
the Faculty of Dentistry, Chulalongkorn University  
(FDCU: DDS Programme's ELOs)

Upon completion of all courses of the DDS programme, the graduates will be able to demonstrate achievement of the following DDS Expected Learning Outcomes (ELOs).

1. Apply general and basic science knowledge in everyday life and dental practice.
2. Apply up-to-date biomedical, behavioral, medical, and dental knowledge into practice.
3. Display common moral and ethics in everyday life and professional practice.
4. Display ethical and professional behaviors according to Thai laws and dental professional ethics.
5. Evaluate general and dentistry-related information in a rational and holistic way.
6. Formulate ideas based on knowledge acquired.
7. Solve professional-related problems systematically based on knowledge and skills acquired.
8. Perform professional tasks in accordance with dental professional standards.
9. Communicate verbally and non-verbally in general and health professional contexts.
10. Use appropriate information technology in communication, research and dental professional practice.
11. Use basic and advanced mathematical and statistical skills in dental research.
12. Manage dental practice and work effectively in groups.
13. Acquire further general and dentistry-related knowledge from various sources.
14. Apply techniques and processes of learning for dental professional development.
15. Lead and/or participate within a healthcare team.
16. Exhibit physical and emotional well-being, resilience, and adaptation under pressure of all sorts.
17. Exhibit responsibilities towards society, environment and public.
18. Exhibit Thainess and establish equilibrium amongst cultural diversity.

## 2. Development Plan

Development Plan	Strategy	Evidence/ Indicator
<ul style="list-style-type: none"> <li>■ Continuously develop the curriculum every year by considering KPIs.</li> </ul>	<ul style="list-style-type: none"> <li>■ Regularly assess the curriculum</li> </ul>	<ul style="list-style-type: none"> <li>■ Report the result of curriculum evaluation</li> </ul>

Development Plan	Strategy	Evidence/ Indicator
<ul style="list-style-type: none"> <li>■ Improve the curriculum every 5 years conforming to the society and technology development, and according to the professional standards given by TDC and OHEC</li> </ul>	<ul style="list-style-type: none"> <li>■ subject and curriculum outcome verification</li> <li>■ Faculty seminar to improve contents, sequences and timelines</li> <li>■ Obtain feedbacks from all stakeholders</li> <li>■ Design desired characteristics of graduates based on needs of all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>■ Report of curriculum assessment</li> <li>■ Report of Faculty meetings</li> <li>■ Percentage of hiring opportunity of new graduates within 1 year</li> <li>■ Percentage of new graduates receiving standard salary</li> <li>■ Satisfaction score from feedbacks of employers and stakeholders</li> <li>■ Number of students who successfully pass the national license exam at the first attempt</li> </ul>
<ul style="list-style-type: none"> <li>■ Develop the dental education to achieve a higher quality of teaching and learning</li> </ul>	<ul style="list-style-type: none"> <li>■ Organize the dental education development project for academic staffs</li> <li>■ Organize seminars regarding teaching and learning technics</li> </ul>	<ul style="list-style-type: none"> <li>■ Report on Faculty seminars</li> <li>■ Students' satisfaction score (for academic staffs) higher than 3.51</li> </ul>

## Chapter 3 Education System, Operation, and Structure of Curriculum

### 1. Education System

#### 1.1 System

- |  |                                      |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Semester       | Each semester no less than 15 weeks  |
| <input type="checkbox"/> Semester (International)  | Each semester no less than 15 weeks  |
| <input type="checkbox"/> Trimester (International) | Each trimester no less than 15 weeks |

#### 1.2 Summer Courses

- Provided (1st Year - 4th Year)
- Not provided

### 1.3 Comparison of Credits in the Semester System

None

### 1.4 Registration

Bachelor Degree (Year Course: no more than 22 credits ; Summer Course: no more than 7 credits)

## 2. Curriculum Implementation

### 2.1 Operation time

Semester System

1 <sup>st</sup> Semester	: August - December
2 <sup>nd</sup> Semester	: January - May
Summer Course	: June - July

Semester System  
(International Curriculum)

1 <sup>st</sup> Semester	: August - December
2 <sup>nd</sup> Semester	: January - May
Summer Course	: June - July

Trimester

1 <sup>st</sup> Semester	: August - November
2 <sup>nd</sup> Semester	: December - March
3 <sup>rd</sup> Semester	: April - July

### 2.2 Requirements for Admission

Applicants must complete high school (12<sup>th</sup> Grade - Sci-Math Program) or of other comparable qualifications

#### Selection of Applicants

Following the admission criteria of Chulalongkorn University and announcement from the Thai University Central Admission System (TCAS)

### 2.3 Problems of 1<sup>st</sup> year student

- Students from different backgrounds may have difficulties adapting to new environments.
- Students must be diligent, disciplined and learn to manage their times and learning styles effectively.
- Students from different backgrounds contain differed knowledge foundations.
- Insufficient knowledge in English, science, and mathematics

## 2.4 Strategy for Solving Problems listed in 2.3

- Extra classes that provide basic knowledges to help calibrate students
- New students' orientation to coach with new life style, techniques for university survival skills and time management skills
- Assign advisors to provide advices and assistances in all aspects
- 1<sup>st</sup> year students and parents meet with their advisors, and plan together how to accommodate and support learning of students
- Give students information about the faculty and program before applying, i.e. open house, dent camp, to help with their decision making
- Self-directed learning of English language can be done in the library
- Extra study hours for those who have poor academic record and have trouble studying

## 2.5 Plans for Students Admission and Graduates

Number of Students	2559	2560	2561	2562	2563
1 <sup>st</sup> Year Students	100	100	100	100	100
2 <sup>nd</sup> Year Students	100	100	100	100	100
3 <sup>rd</sup> Year Students	138	100	100	100	100
4 <sup>th</sup> Year Students	135	138	100	100	100
5 <sup>th</sup> Year Students	129	135	138	100	100
6 <sup>th</sup> Year Students	134	129	135	138	100
Total Number of Students	736	702	673	637	600
Expected Number of Graduates	134	129	135	138	100

## 2.6 Budget

### 2.6.1 Estimated Income (Unit : Baht)

Details of Income	Budget Year				
	2557	2558	2559	2560	2561
Education Fee	-	-	-	-	
Registration Fee	30,856,382.67	31,000,000.00	31,000,000.00	31,000,000.00	31,000,000.00

Government Subsidies	-	-	-	-	
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### 2.6.2 Estimated Expenditure (Unit : Baht)

Money Categories	Budget Year				
	2557	2558	2559	2560	2561
Budget Procedure					
1. Staff Expense	94,656,890.90	95,000,000.00	94,585,430.82	95,000,000.00	95,000,000.00
2. Operation Expense (Not including 3)	294,011,798.18	300,000,000.00	300,638,207.00	300,500,000.00	300,500,650.00
3. Scholarship					
4. University Expense	78,221,350.00	80,000,000.00	80,515,976.04	80,000,000.00	75,310,650.00
Total	466,890,039.17	475,000,000.00	475,739,613.86	475,500,000.00	470,811,300.00
Budget Investment					
1.Appliance Expense	22,000,000.00	24,000,000.00	103,472,804.71	25,928,189.99	25,000,000.00
Total	22,000,000.00	24,000,000.00	103,472,804.71	25,928,189.99	25,000,000.00
Total	488,890,039.17	499,000,000	579,212,418.57	501,428,189.99	495,311,300.00
Number of Students	802	711	736	702	673
Expense Per Student	609,588.58	703,094.233	786,973.40	714,285.17	735,975.19

\* Note: Total number of students, including both old and new curriculums ; Expenses for each student= 600,000 Baht per year

### 2.7 Educational System

- In Class System
- Through Printing Media
- Through Videos
- E-learning
- Through the Internet
- Others.....

### 2.8 Credits, Subjects Transfer and Enrollment

Following the rules of Bachelor's Degree credits transferring of Chulalongkorn University

### 3. Courses and Instructors

#### 3.1 Course

3.1.1 Number of credits throughout program

**231 Credits**

Program duration: 6 years

### 3.1.2 Program Structure

General Educations	30	Credits
Social Science	3	Credits
Humanities	3	Credits
Science and Mathematics	3	Credits
Allied Science	3	Credits
Foreign Languages	12	Credits
Special Group of General Educations	6	Credits
Specific Subjects	195	Credits
Basic sciences	10	Credits
Sciences basis to and dental sciences	183	Credits
Professional electives	2	Credits
Free electives	6	Credits