



**ASEAN
University
Network**

**Self Assessment Report: SAR-AUNQA
Academic Year 2019**

**Master of Science Program in
Oral and Maxillofacial Sciences
(Revised version year 2018)**

**Department of Oral Surgery and Oral Medicine
Faculty of Dentistry
Srinakharinwirot University, Bangkok, Thailand
Report: June 2019**

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Part I - Introduction to Master of Science Program in Oral and Maxillofacial Sciences

Executive Summary

Today, Thailand is facing challenges across various areas, but the age structure of the country's population demographic especially deserves mentioning. Due to the decreasing birth rate and a relatively low death rate, the population will begin a dramatic shift to an aging society within the next 20 years. Therefore, a stable health care system should be built for the benefit of both the population and the economy. It is essential for the nation to develop dentists to be able to provide treatments, prevent oral diseases, restore oral conditions, think critically, and continue to develop professionally.

Master of Science Program in Oral and Maxillofacial Science gives priority to provide good oral health to the public. Graduates are able to perform their health promotion based on the individual socio-cultural and economic environment. Our goal is to develop appropriate guidelines for patient care and encourage the general public to be able to maintain good oral health that will result in lasting health benefits.

Master of Science Program in Oral and Maxillofacial Science, Faculty of Dentistry, Srinakharinwirot University consists of 2 disciplines, including 1) Oral medicine and 2) Oral and Maxillofacial Surgery and Implantology. These two disciplines are related and support each other in order to create dentists who specialize in related fields and are able to continuously go out and contribute to organizations and the country.

Organization of the Self-assessment (PDCA of writing)

Self-assessment for quality assurance using the AUN- QA system was first introduced by the Quality Development (QD), Office of the President in 2015. The assessment process has been employed to implement the assessment as planned. The process begins with the introduction of the Outcome-Based Education (OBE) concept and Teaching and Learning (T&L) workshops to make sure that each program relates to the major concepts used in AUN- QA; such concepts are, for example, Expected Learning Outcomes (ELOs), Course Learning Outcomes (CLOs), T&L, and student assessments. Stakeholders and competency analyses are additionally organized for programs. The purpose is to reinforce the program and to understand the market and industry's needs in order to successfully produce students as needed. The purpose of the last workshop is to check how well programs

comprehend OBE development. The clinic provides educational tools with programs such as questionnaire, database analysis, competency methods, CLOs, and criteria wrap up. All staff of the program have been trained to understand the ELOs and OBE. Therefore, the ELOs are integrated into the CLOs and T&L methods. The self-assessment report is the responsibility of the Curriculum Committee, faculty members, and lecturers. The quality of learning outcomes is control by the Curriculum Committee.

The University selected its outstanding programs to prepare for AUN assessment. Academic staff of the program have been trained in AUN-QA writing and assessment. The SAR has been revised into the AUN-QA training. Criteria 1, 3, 4, and 5 have all been updated with new revisions at achieving the ELOs. Thus our writing team brought back to improve, for instance, improve the writing method about the procedure in criteria 1, 3, 4 and 5. Furthermore, the clinics were set to assist the programs by AUN experts and assessors. For the continuation of improvement, the committee has analyzed the implementation plan to fulfill the gaps of the program and achieve the ELOs. Therefore, the SAR and implementation plan was revised and followed up by the program committee meeting. The SAR was reported to the dean to hand in to university for two cycles.

About Srinakharinwirot

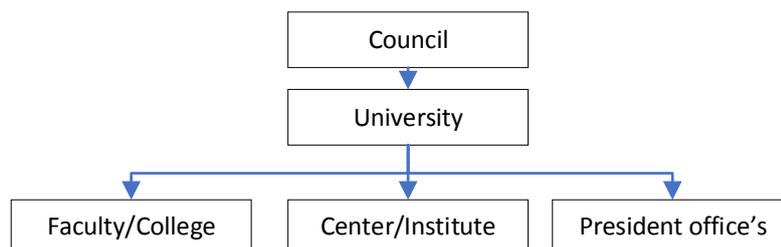
Srinakharinwirot University was initially the Advanced Teacher Training School, founded in 1949, then was changed to the College of Education in 1953, and was finally established as a university in 1974. Now the University consists of 21 faculties/colleges and 2 institutes supporting academics. In the 2017 academic year, Srinakharinwirot offered a total of 161 programs – 82 undergraduate programs and 79 graduate programs. There are 21,463 undergraduate students and 3,170 graduate students. 72.20 percent of graduates (4,935 total) are employed within a year of graduating (University Survey – Center Information). Srinakharinwirot is composed of 1,953 academic staff with 4,176 supporting staff.

Philosophy Education is Growth.

Vision Srinakharinwirot University is a leading institution for learning and research based on education, virtue, and social service while aiming to create global innovation.

- Missions
1. To generate and develop exceptional individuals for learning and integrity through learning processes applicable to society
 2. To produce outstanding research and innovation that is sustainably useful for the global society
 3. To provide excellent academic service, awareness, and social responsibility
 4. To study, analyze, and preserve art and culture
 5. To develop a magnificent administrative system with governance

University organization is showed below:



Self-assessment report according to AUN-QA criteria

AUN-QA Criterion 1: Expected Learning Outcomes

AUN-QA Criterion 1 – Checklist

1	Expected Learning Outcomes	1	2	3	4	5	6	7
1.1	The expected learning outcomes have been clearly formulated and aligned with the vision and mission of the university [1,2]							
1.2	The expected learning outcomes cover both subject specific and generic (i.e. transferable) learning outcomes [3]							
1.3	The expected learning outcomes clearly reflect the requirements of the stakeholders [4]							
	Overall opinion							

1.1 The expected learning outcomes have been clearly formulated and aligned with the vision and mission of the university [1,2]

In the 2017 academic year, the Curriculum Committee was appointed to consider the draft and criticize the graduate program of the department on the 8th of March, 2018. A meeting schedule was created once a month with the aim to establish goals to improve the curriculum in due course. The first generation students have been accepted in the 2015 academic year, in accordance with the guidelines Outcome-Based Education and Backward Design Curriculum (as shown in the curriculum development process in Figure 1).

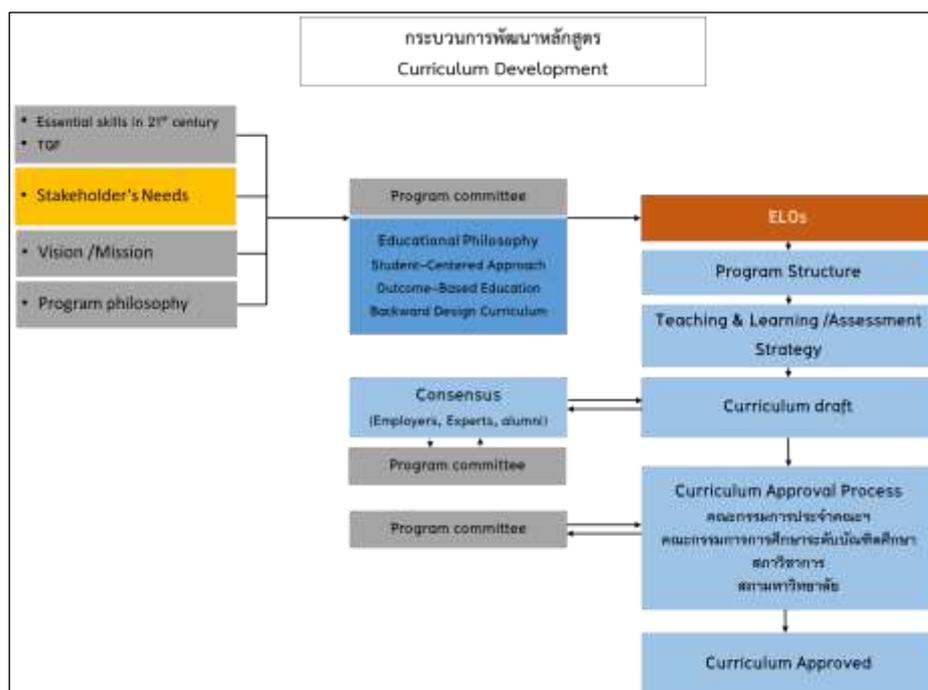


Figure 1. Curriculum Development Process

We designed the learning outcomes based on the needs of stakeholders. The detail is described below:

We assigned Asst. Prof. Dr. Marnisa Sricholpech and Asst. Prof. Dr. Aroonwan Lamubol to study the needs of 5 groups of stakeholders October through December 2018, by using structured interview and online surveys. The results from this process are important information for the design of expected learning outcomes (ELOs) of the curriculum, as well as providing a learning support system. The results were summarized in order to get a guideline that can be used for further develop of the curriculum to meet the stakeholder's needs.

The committee took the summary of the stakeholders' needs to develop a philosophical orientation of the curriculum by considering the National Higher Education Qualifications Framework (2009), the key skills of students in the 21st century, and the vision and mission of the University. In addition, results from previous quality assurance evaluation were used as information in designing the expected learning outcomes in order to achieve unique learning outcomes of the institutions that are in accordance with the needs of stakeholders and the world society. Detailed structure and the source of the details as follows.

**Master of Science Program in
Oral and Maxillofacial Sciences
(Oral medicine and Oral and Maxillofacial Surgery and Implant Dentistry)
Faculty of Dentistry, Srinakharinwirot University**

University Vision

Srinakharinwirot University is a leading organization in learning and research based on principled academics, envisioning global innovation.

University Mission

1. To generate and develop exceptional individuals for learning and integrity through learning processes applicable to society
2. To produce outstanding research and innovation that is sustainably useful for the global society
3. To provide excellent academic service, awareness, and social responsibility
4. To study, analyze, and preserve art and culture
5. To develop a magnificent administrative system with governance

Dental School Vision

Faculty of Dentistry Srinakharinwirot University is a leading institution of learning, research, and social services based on professional ethics.

Program Vision

An exceptional program aimed to develop dentists with knowledge in oral and maxillofacial sciences with universal quality.

Program Mission

1. Develop Oral and Maxillofacial science specialists with applicable knowledge to improve patient care and organizational development nationally.
2. Produce quality research in Oral and Maxillofacial science.

Program Goal

To develop Oral and Maxillofacial Science Master's degree graduates in the field of Oral Medicine and Oral Surgery and implantology with good morals and ethics to fulfill the needs of the country. The students should be able to conduct research, analyze, and synthesize knowledge in research especially in the field of Oral Medicine, Oral Surgery, and Implant Dentistry while publishing work at the national and international levels.

Program Objectives

To produce Master's Degree graduates with the following quality:

1. Combine knowledge and practical skills to provide effective treatments in oral surgery, implantology, and oral medicine.
2. Diagnose diseases or conditions in the oral cavity by determining disease-causing factors and establishing appropriate treatment plans and preventive measures for patients individually.
3. Communicate with patients and give them the appropriate treatment.
4. Develop innovative research plans as well as conducting and presenting the research efficiently.
5. Be a leader in oral health care with ethics and professionalism in accordance with the ethical standards of the dental profession.

ELO (Expected Learning Outcome)

Upon completion of the program, the master's degree graduates would be able to:

1. Analyze diseases or conditions in the oral cavity in order to provide appropriate treatments in oral surgery or medicine.
2. Plan complex treatments and provide appropriate preventive measures for each patient in the fields of oral surgery and oral medicine.
3. Provide appropriate oral surgery, dental implants, and oral medicine treatment with professional standards.
4. Communicate with patients to enhance their understanding and awareness of individual health problems, adjustments of behavior, and acceptance of standard dental treatments.
5. Create, develop, plan, and conduct research as well as present the research results appropriately according to the ethical framework.

The program director held a meeting to analyze and design the curriculum structure, teaching methods, measurement, and evaluation based on the expected learning outcomes and the needs of stakeholders as shown in Figure 2 and Figure 3:

Figure 2: Expected learning outcome

ELOs		vmv	PG/P EO	SMART				
				S	M	A	R	T
1	Analyze diseases and conditions in the oral cavity in order to provide appropriate treatments in oral surgery and oral medicine.	-Produce and develop quality individuals -Provide quality academic services	1	√	√	√	√	√
2	Plan complex treatments and provide appropriate preventive measures for each patient in the fields of oral surgery, and oral medicine.	-Produce and develop quality individuals -Provide quality academic services	2	√	√	√	√	√
3	Provide appropriate oral surgery, dental implant, and oral medicine treatment with professional standards.	-Produce and develop quality individuals -Provide quality	3	√	√	√	√	√

		academic services						
4	Communicate with patients to enhance their understanding and awareness of individual health problems, adjustments of their behavior, and acceptance of standard dental treatments.	- Communicat ion skills -Public Mind	4	√	√	√	√	√
5	Create, develop, plan, and conduct research as well as present the research results correctly according to the ethical framework.	-Research and innovation	5	√	√	√	√	√

ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
Analyze diseases or conditions in the oral cavity in order to provide appropriate treatments in oral surgery and and oral medicine.	Implant : Dental implant practice skills Oral Medicine: Practice in Oral Medicine	-Decision making -Reading skill (English proficiency) -IT skill - Communication skill	Implant: -Domains in implant dentistry -Advanced minor surgery for implant dentistry -Advanced dental radiographic

ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
			imaging and diagnosis -General and Medical consideration in patient complexity for implant procedures Oral Medicine -Advanced dental radiography -General and Medical consideration in patient complexity for oral lesion relation -Therapeutic measurement in oral medicine
Plan complex treatments and provide	Implant: Diagnosis and treatment	-Decision making	Implant: -Principle and fundamental in

ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
appropriate preventive measures for each patient in in the fields of oral surgery and oral medicine.	planning for dental Implant Oral Medicine: Diagnosis and treatment planning for oral medicine	-Reading skill (English proficiency) -IT skill Communication skill	implant dentistry -Advance minor surgery -Advance dental radiography -General and Medical consideration in patient complexity -Treatment planning seminar Oral Medicine -Advance dental radiography -General and Medical consideration in patient complexity -Therapeutic measurement in oral medicine

ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
			-Treatment planning seminar
Provide appropriate oral surgery and oral medicine treatment with professional standards.	<p>Implant: Diagnosis and treatment planning for dental Implant</p> <p>Oral Medicine: Diagnosis and treatment planning for oral medicine</p>	<p>-Decision making</p> <p>-Problem solving</p> <p>-Professional ethics</p>	<p>Implant:</p> <p>-Principle and fundamental in implant dentistry</p> <p>-Advance minor surgery</p> <p>-Advance dental radiography</p> <p>-General and Medical consideration in patient complexity</p> <p>-Clinical practice in implant/ oral surgery clinic</p> <p>Oral Medicine</p> <p>-Advance dental radiography</p> <p>-General and Medical consideration</p>

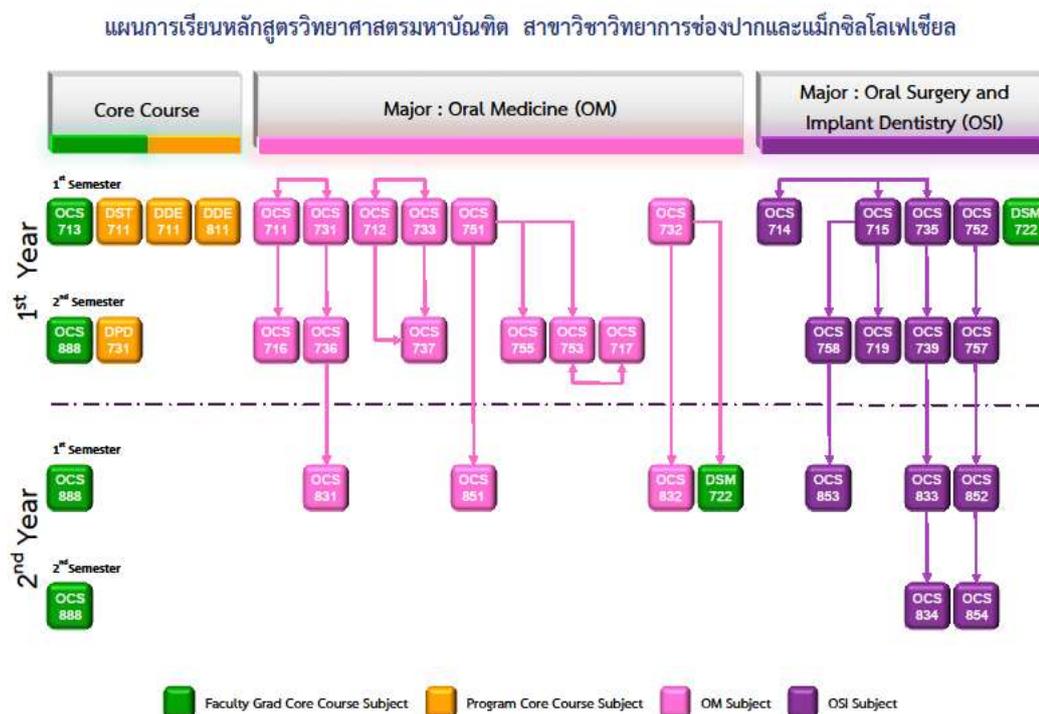
ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
			in patient complexity -Therapeutic measurement in oral medicine -Clinical practice in oral medicine clinic
Communicate with patients and related persons to enhance their understanding and awareness of individual health problems, adjustments of their behavior, and acceptance of standard dental treatment.	Implant: dental implant practice skills Patient approach Oral Medicine: -Practice in Oral Medicine -Patient approach	- Communication -Cultural awareness -Professional ethics -Working with the other -Service mind	Implant and Oral Medicine -Professionalism -Medical ethic -Psychology -Clinical practice in implant/ OM
Create, develop, plan and conduct research as well as present the research results	Implant: Research Methodology Oral medicine:	-Decision making -Reading skill (English proficiency)	Implant and Oral Medicine -Research ethics -Research methodology

ELO	Specific Skill Required	Generic Skill Required (Soft Skill/ Transferable Skill)	Knowledge Required
correctly according to the ethical framework.	Research Methodology	-IT skill	-Biostatistics -Oral biology -Research critical appraisal in implant and oral medicine -Research Instrumentation

Program director and committee organized a meeting to evaluate the Curriculum Curator by using a variety of methods, depending on the suitability target groups that provide information, including experts in the Oral Medicine field, Oral Diagnostic Science, the Department of Oral and Maxillofacial Surgery graduate users, alumni, and course instructors. The results of the analysis concluded that the committee agreed with all ELOs that were designed because they corresponded with the philosophy of the University. Additionally, the committee members gave suggestions that will be used to improve the learning management process in both courses, such as:

- Learning management should focus on clinical seminars in both branches of the curriculum, including dental implant and oral medicine, in order to share knowledge and create strengths in both fields.
- Encourage students to study, visit, or participate in national and international academic conferences.
- Encourage students to disseminate knowledge at the national and international level.

Figure 3. The learning structure of the curriculum of Master of Science degree in Oral and Maxillofacial Sciences



After, the Curriculum Committee will revise and prepare the new version of curriculum to be evaluated by the committee at various levels. The curriculum was approved by the committee. The results from the review showed that all committees had no objection regarding the compliance of the mission and vision of the Faculty of Dentistry and Srinakharinwirot University. Following are timeline of the approval process:

1. Received approval from the Faculty of Dentistry Committee in monthly faculty meeting in July, 2019, No. X / 2562 on July 24, 2019
2. Received approval from the Graduate Studies Committee at the X / 2562 meeting on X September 2019. The committee members also gave the following important suggestions:
 - Suggest adjusting the structure of the curriculum, including study plans in sub-disciplines to be consistent and compatible to the needs of the country as well as related and complement each other.
3. Received approval from the Academic Council at the X meeting / 2562 on X November 2019, without any additional suggestions.
4. Received approval from the University Council at the meeting on ..

5. In the process of waiting to attend the meeting in December of 2019, the curriculum is ready to disseminate quality and standards in accordance with the National Higher Education Qualifications Framework in the 2020 academic year.
6. In addition to the University's publicized vision and mission through the website and various social media, the program also disseminates the vision and mission of the university and faculty through ELOs, faculty websites and web pages of the department (Dent OMsci) and the student's manual.

General information of the Program

1. Program Name: Master of Science Program in Oral and Maxillofacial Sciences

2. Program Degree: Master of Science (Oral and Maxillofacial Sciences)
: M.Sc. (Oral and Maxillofacial Sciences)

3. Disciplines:

1. Oral Surgery and Implantology
2. Oral Medicine

4. Credits: No less than 42

5. Program Profile

5.1 Pattern

Master of Science Program, full time for 2 years

5.2 Language:

Thai

5.3 Applicant Qualification:

Thai dentists or oversea dentists who are capable of speaking Thai and passing the entrance examination

5.4 Program Structure:

Subjects	Credits
1. Core subjects	10 credits
2. Major subjects: (1) Oral surgery and Implantology and (2) Oral medicine	19 credits and 22 credits
3. Electives (not less than)	1 credits
4. Thesis	12 credits
Total: No less than	42 credits

Program Committee

Number	Name- Last name	Degree and academic year	Institute	Id
1	Assoc. Prof. Dr.Sorasun Rungsiyanont	DDS year 1996 MS (Oral biology) year 2002 Thai Board in Oral Diagnostic Sciences year 2007 Ph.D. (Oral Implantology and Regenerative Dental Medicine,Japan) Year 2012	Chiangmai University Chulalongkorn University Dental Council of Thailand Tokyo Medical and Dental University, Japan	xxxxx
2	Asst.Prof.Marnisa Sricholpetch	DDS year 1996 High Grad Dip in Oral and maxillofacial Surgery year 2001 Residency training in Oral and Maxillofacial Surgery, year 2004 Ph.D. (Oral Biology) year 2010	Mahidol University Mahidol University Dental Council of Thailand University of North Carolina at Chapel Hill, USA	xxxxx
3	Asst.Prof.Dr.Patrayu Taebunpakul	DDS year 2000 MS (Oral Medicine) year 2002 Ph.D.(Molecular Oncology) year 2012	Mahidol University Chulalongkorn University King's College London, United Kingdom	xxxxx

Program Major Committe: Major in Oral Surgery and Implantology

Number	Name- Last name	Degree and academic year	Institute	Id
1	Assoc. Prof. Dr.Sorasun Rungsiyanont	DDS year 1996 MS (Oral biology) year 2002 Thai Board in Oral Diagnostic Sciences year 2007 Ph.D. (Oral Implantology and Regenerative Dental Medicine,Japan) Year 2012	Chiangmai University Chulalongkorn University Dental Council of Thailand Tokyo Medical and Dental University, Japan	xxxxx
2	Asst.Prof.Dr.Chanchai Wongchuensoontorn	DDS year 1993 MD tear 2002 Dr.Med.(Germany) year 2007 German Board of Oral and Maxillofacial Surgery year 2008	Chulalongkorn University Srinakharinwirot University Albert-Ludwig University, Frei burg, Germany Germany	xxxxx
3	Asst.Prof.Marnisa Sricholpetch	DDS year 1996 High Grad Dip in Oral and maxillofacial Surgery year 2001 Residency training in Oral and Maxillofacial Surgery, year 2004 Ph.D. (Oral Biology) year 2010	Mahidol University Mahidol University Dental Council of Thailand University of North Carolina at Chapel Hill, USA	xxxxx

Program Major Committe: Major in Oral Medicine

Number	Name- Last name	Degree and academic year	Institute	Id
1	Asst.Prof.Dr.Patrayu Taebunpakul	DDS year 2000 MS (Oral Medicine) year 2002 Ph.D.(Molecular Oncology) year 2012	Mahidol University Chulalongkorn University King's College London, United Kingdom	xxxxx
2	Asst.Prof.Dr.Aroonwan Lam-ubol	DDS year2000 Ph.D. in Oral Sciences, year 2008 Thai Board in Oral Diagnostic Sciences year 2010	Chulalongkorn University University of Iowa,USA Dental Council of Thailand	xxxxx
3	Dr.Sineepat Talungchit	DDS 2006 High Grad Dip in Oral Medicine, year 2010 PhD in Oral Biology, year 2016	Mahidol University Mahidol University Mahidol University	xxxxxx

1.2 The expected learning outcomes cover both subject specific and generic (i.e. transferable) learning outcomes [3]

The Curriculum Committee used the principles of Outcome-based Education in the design of ELOs (as shown in Figure 1 and 2). In addition, SMART of each ELOs was evaluated about clarity, measurable, reliable, agreement with the vision and mission of the Faculty of Dentistry and ability to be accomplished within the specified period. Additionally, the ELOs should cover both specific and generic skills in learning outcomes. In the course critique meeting, all experts and stakeholders agreed that ELOs were appropriate and clear.

1.3 The expected learning outcomes clearly reflect the requirements of the stakeholders [4]

We assigned Asst. Prof. Dr. Marnisa Sricholpech and Asst. Prof. Dr. Aroonwan Lam-ubol to study the needs of 5 groups of stakeholders October through December 2018, by using structured interview and online surveys. The results were summarized and presented to the experts and stakeholders so that they could acknowledge and provide feedback for the designed ELOs. This process is the first step to ensure that the designed ELOs reflect and respond to the needs of real stakeholders. The results of this meeting are considered important prerequisites to show that the ELOs defined here are consistent with the needs of the stakeholders.

Nevertheless, the committee plans to conduct a review and revise the ELOs with the stakeholders periodically so that our ELOs will be up-to-date and bring the improved learning management which will help our students achieve ELOs in accordance with stakeholder needs (As shown in Figure 4).

- Academic staff: Evaluated for the satisfaction of the program management through online questionnaires and monthly department meetings.
- Current students: Evaluated during the study period by the curriculum committee, which includes instructors and thesis advisors. The evaluated results will be considered at the meeting of the Executive Committee for Curriculum and Verification of Achievement in every semester. Their satisfaction of the program would be evaluated through online questionnaires.
- Alumni: Their satisfaction of the the program would be evaluated through online questionnaires.
- Graduate users: Interviewed during the annual curriculum quality evaluation process. In addition, graduate users will be evaluated for their satisfaction through online questionnaires generated by the Quality Assessment Center of Srinakharinwirot University.
- Supporting staff (including office staff, department laboratory staff and dental assistants): Evaluted in the assessment of the course management system by using online questionnaire. Also, physical environment and patient management system will be considered as a supporting structures to support study and treatment environment.

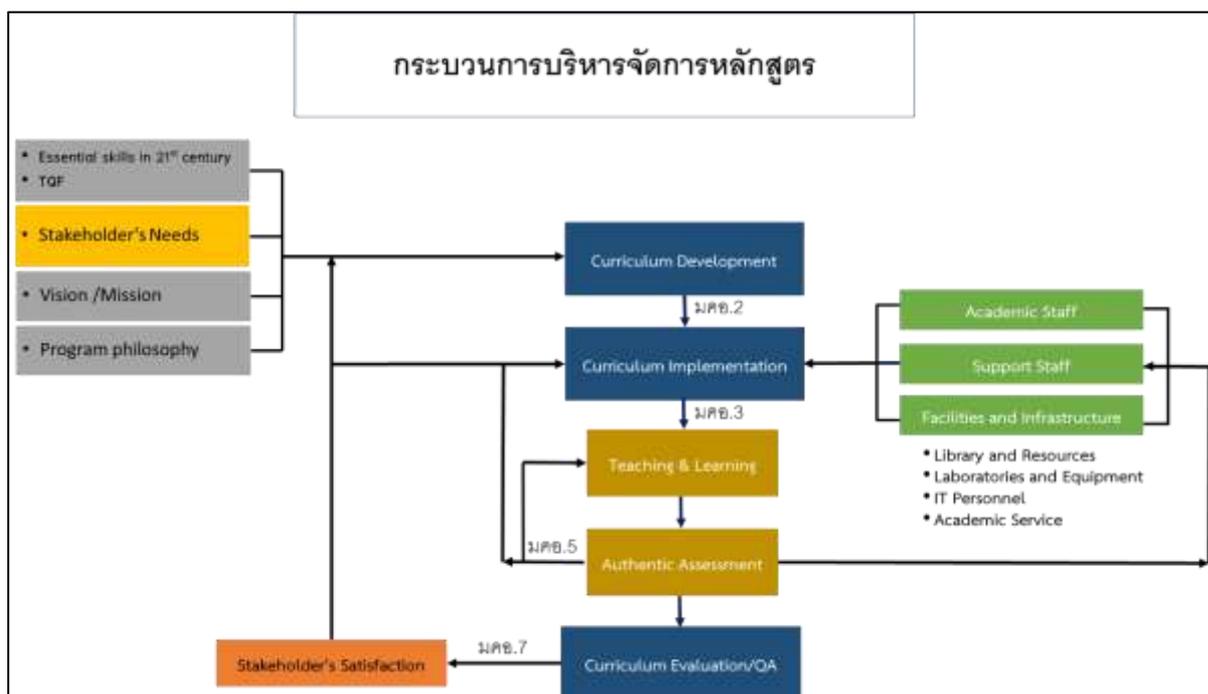


Figure 4 The course management process

AUN-QA Criterion 2: Program Specification

AUN-QA Criterion 2 – Checklist

2	Programme Specification	1	2	3	4	5	6	7
2.1	The information in the programme specification is comprehensive and up-to-date [1, 2]							r
2.2	The information in the course specification is comprehensive and up-to-date [1, 2]							
2.3	The programme and course specifications are communicated and made available to the stakeholders [1, 2]							
	Overall Opinion							

2.1 The information in the program specification is comprehensive and up-to-date [1, 2]

The Program Director along with the Curriculum Drafting Committee have developed the Program Specification for the Master's Degree Program in Oral and Maxillofacial Science based on the essential and updated knowledge required to become specialists in the field of oral surgery and implantology and oral medicine. The program curriculum would be assessed and criticized by experts in each particular specialty and further approved by the Srinakharinwirot University Council and the Office of the Higher Education Commission of the Ministry of Higher Education, Science, Research and Innovation. Following the approval, the program would be periodically revised and updated.

Education Management System

1. System

The education system is a two-semester system which means there are two regular semesters in an academic year. There are at least 15 weeks in a regular semester.

Summer Semester Education Management

The summer semester might be held, depending on the curriculum committee's discretion and Srinakharinwirot University's Regulation of Graduate Study 2011.

2. Comparison of Credit in the Two-semester System

The comparison of credit follows Srinakharinwirot University's Regulation of Graduate Study 2016 (appendix A).

1. Curriculum Structure

1.1 Study Schedule

The study is held on the government date and time.

First semester: August-December

Second semester: January-May

1.2 Student Qualifications

General Qualification

The student's general qualification follows Srinakharinwirot University's Regulation of Graduate Study 2016.

Specific Qualifications

Group 1: The Regular Study Group (4 subject groups)

2.2.1 Student must graduate with a Doctor of Dental Surgery degree or an equal degree from a school accredited by the Ministry of Education. A minimum GPA of 2.75.

Student has registered and is allowed to work as a dentist or has registered and holding a dental license or

2.2.2 Student must graduate with a graduate certificate or diploma in a dental subject field from a school accredited by the Ministry of Education. A minimum GPA of 3.25. Forty percent of the equal credits can be transferred.

2.2.3 Student has an experience as a dentist for at least a year until the first day of study.

2.2.4 Student has never been sentenced or punished by the committee of the Dental Council regarding the charge of any ethic issues of the dentist occupation.

2.2.5 Student qualifications other than the ones listed above are the curriculum committee's discretion.

a. Common Problems for New Students

2.3.1 Student lacks knowledge and skills to search for the electronic information and to use the reference system in his or her work, report, and thesis for publication.

2.3.2 Student lacks knowledge and skills regarding the foundation and format of the research method during research.

2.4 Strategy for Solving Students' Problems or Limitation in 2.3

2.4.1 Providing training programs for training student's skills of searching electronic information, including using the reference system in his or her work for publication. This is held in the first period of the study in the program.

2.4.2 Providing a study class for strengthening students' knowledge and skills conducting research. Also, there is a tracking system which is used to track students' work progress for helping students throughout their years of study and research.

2.5 Five-year Plan of Student Enrollment and Graduation

2.5.1 Five-year Plan of General Student Enrollment and Graduation

Number of Students	Number of Students in Each Academic Year				
	2019	2020	2021	2022	2023
Year 1	5	5	5	5	5
Year 2	-	5	5	5	5
Total	5	10	10	10	10
Expected Graduates	-	5	5	5	5

2.2 The information in the course specification is comprehensive and up-to-date [1, 2]

The Curriculum Committee assigns the responsible person to take the Backward Design principle in the design and development of the course details. We used the expected learning outcomes of the course as a starting point to design the course – learning evaluation process, and learning methods – as well as various media and supporting structures.

If it is a course that has been taught in the previous semester or academic year, the Course Director will use previous evaluation results and comments to improve the curriculum. We organized a meeting every semester before the semester started in order to consider and provide recommendations on the consistency of CLOs with ELOs. Furthermore, we evaluated whether or not the learning management and learning evaluation were consistent with curriculum management and student development, in order to achieve the expected up-to-date learning outcomes of the curriculum. After that, the course director will revise the course and announced to the stakeholders and current students via the websites (<http://tqf.swu.ac.th> and <https://www.facebook.com/OMSci>).

Development and Improvement Plan Corresponding to ELOs and Program Specification

Plans	Strategies	Indicators
1. Curriculum Development Plan: English Language Proficiency 1) Developing English Language by Presenting Reports in English 2) Developing English Language by Writing Reports in English 3) Developing English Language by Writing a Thesis in English 2. Developing English Conversations with Patients	1.1 Students present their case reports or give seminars in English. - Year 1: 25% - Year 2: 50% 1.2 Students write their reports in English. 1.3 Students write their theses in English. 2.1 Teaching students English conversation skills for use with patients 2.2 Making English conversation with patients during oral examination and dental treatments	1.1 An easy to understand case report presentation or seminar in English per semester. 1.2 Accurate English use in their reports 1.3 Accurate English use in their theses 2.1 Understandable English conversations with patients 2.2 Recorded videos of English conversation with patients during oral examination and dental treatments.

Plans	Strategies	Indicators
2. Curriculum Development Plan: Professional Ethics of Dentistry	2.1 Evaluating and developing curriculum regarding professional ethics of dentistry 2.2 Academic staff are good models regarding professional ethics of dentistry 2.3 Developing an ethical teaching model in professional dentistry	2.1 Students' curriculum evaluation result regarding professional ethics of dentistry 2.2 Number of academic staff who attend professional ethics of dentistry seminar 2.3 Number of subjects that teach professional ethics of dentistry
3. Development and Improvement Plan: Up-to-date Clinical Skills in Advanced Technology	3.1 Developing academic staff who teach clinical subjects to have skills in modern technology 3.2 Providing activities that use modern equipment and instruments to improve and train students' clinical skills	3.1 Number of academic staff who attend an up-to-date treatment technology workshop. 3.2 Number of training projects/ workshops that train students with the up-to-date technology 3.3 Number of students who attend improving and training clinical skill activities
4. Improve the Curriculum Every 5 Years to correspond with the society and technology that will continue to change	4.1 Analyzing the curriculum by graduate students and others 4.2 Periodic survey of graduate students' attributes that are desired by employers	4.1 The curriculum's progress results 4.2 The graduate students' satisfaction of the curriculum 4.3 The employers' satisfaction of the curriculum

2.3 The program and course specifications are communicated and made available to the stakeholders [1, 2]

The Curriculum Committee has designated ways to disseminate specific course information to the stakeholders. The following were assigned for this task:

Dr. Kitwat Kittrueangphatchara and Assist. Prof. Dr. Marnisa Sricholpech were responsible to analyze and create content for public relations regarding the activities of the program. The content contains important information, which stakeholders can access. For example:

- For prospective students and stakeholders, we have created a Facebook Page of our program (<https://www.facebook.com/OMSci>) which included details of our

curriculum/course structure, goals and expected learning outcomes of the course, and program admission schedule and process. In addition, this page has been a channel for communication between prospective students and the program.

- For current students and alumni, we have created a closed discussion group containing program staff, current students, and alumni. The aim of this group is to provide informations regarding important academic requirements, announcements, and schedules for current students. In addition, updated clinical and scientific knowledge, advanced dental technologies and announcements of national and international academic conferences are shared among the members of the groups as well. Interesting clinical cases can be shared and discussed among the members of the group which greatly enhance the learning.
- Public relations and dissemination channels (As shown in Figure 5-7) include:
 - Program website [http:// facebook / Omsci](http://facebook/Omsci)
 - Faculty of Dentistry website <http://dent.swu.ac.th>
 - Graduate website <http://grad.swu.ac.th>
 - New student admission website <http://admission.swu.ac.th>
 - Curriculum brochure and poster
 - Student Manual

The Curriculum Committee plan, monitor, evaluate, and improve the public relations process based on numbers of visitors and numbers of interested people who inquire or express opinions. The results were evaluated through joint meeting between the curriculum committee and assigned students. In addition, an online survey and interview were utilized to assess opinion of prospective students, current students, and alumni about the frequency and benefits of our public relation methods.



Figure 5 Publicity of course information via program Facebook page





Figure 6 Publicity of course information through the website of the Faculty of Dentistry



Figure 7 Publicity of course information through the University website

AUN-QA Criterion 3: Program Structure and Content

AUN-QA Criterion 3 – Checklist

3	Programme Structure and Content	1	2	3	4	5	6	7
3.1	The curriculum is designed based on constructive alignment with the expected learning outcomes [1]							
3.2	The contribution made by each course to achieve the expected learning outcomes is clear [2]							
3.3	The curriculum is logically structured, sequenced, integrated, and up-to-date [3, 4, 5, 6]							
	Overall opinion							

3.1 The curriculum is designed based on constructive alignment with the expected learning outcomes [1]

In the 2018 academic year, the curriculum drafting committee organized a weekly meeting to design courses to be consistent and relevant to the learning outcomes during the period from March to June by using the backward design principle as an important process in curriculum design. In other words, we started from the expected learning outcomes of the curriculum to design learning management and evaluation methods. When the committee conducted a review and agreed with the consistency of the curriculum structure and expected learning outcomes, they approved the curriculum.

Curriculum

Number of Credits

The curriculum is of the Master Degree Program, type A2, which has at least 30 subject credits and 12 credits of thesis. Minimum total credits of 42.

Subjects	Credits
5. Core subjects	10 credits
6. Major subjects: (1) Oral surgery and Implantology and (3) Oral medicine	19 credits and 22 credits
7. Electives (not less than)	1 credits
8. Thesis	12 credits
Total: not less than	42 credits

Subjects

Core subjects

DDE 711	Research Methodology and Biostatistics in Dentistry	2 (2-0-4)
DDE 712	Proposal Development in Dentistry	1 (1-0-2)
DST 711	Applied Oral Biology	2 (2-0-4)
DPD 731	Psychology and Ethics for Dentists	2 (2-0-4)
OMS 711	Applied Clinical Medicine and Anesthesia	2 (2-0-4)
OMS 853	Clinical Seminar in Oral and Maxillofacial Sciences	1 (0-1-2)

3.1.3.2 Major Subjects

Students choose to study one of the groups of major subjects.

3.1.3.2.1 Oral Surgery and Implantology Group(19 credits)

OMS 715	Advanced Oral and Maxillofacial Surgery	1 (1-0-2)
OMS 716	Oral Implantology 1	1 (1-0-2)
OMS 719	Basic Prosthodontics for Implant Dentistry	1 (1-0-2)
OMS 720	Oral Implantology 2	2 (2-0-4)
OMS 734	Oral Surgery and Oral Implantology Clinic 1	3 (0-9-0)
OMS 737	Oral Surgery and Oral Implantology Clinic 2	3 (0-9-0)
OMS 833	Oral Surgery and Oral Implantology Clinic 3	3 (0-9-0)
OMS 834	Oral Surgery and Oral Implantology Clinic 4	2 (0-6-0)
OMS 751	Seminar in Oral and Maxillofacial Surgery	1 (0-1-2)
OMS 754	Seminar in Oral Implantology 1	1 (0-1-2)
OMS 852	Seminar in Oral Implantology 2	1 (0-1-2)

3.1.3.2.2 Oral Medicine Group (22 credits)

OMS 712	Advanced Oral Medicine 1	2 (2-0-4)
OMS 713	Advanced Oral Pathology	1 (1-0-2)
OMS 714	Surgical techniques for oral medicine	1 (1-0-2)
OMS 717	Advanced Oral Medicine 2	2 (2-0-4)
OMS 718	Advanced Diagnostic Science	1 (1-0-2)
OMS 731	Advanced Oral Medicine Clinic 1	2 (0-6-0)
OMS 732	Oral and Maxillofacial Radiology Clinic 1	1 (0-3-0)
OMS 733	Advanced Oral Pathology Laboratory	1 (0-3-0)
OMS 735	Advanced Oral Medicine Clinic 2	3 (0-9-0)
OMS 736	Oral Surgery Clinic	1 (0-3-0)
OMS 831	Advanced Oral Medicine Clinic 3	3 (0-9-0)
OMS 832	Oral and Maxillofacial Radiology Clinic 2	1 (0-3-0)
OMS 752	Seminar in Oral Medicine 1	1 (0-1-2)
OMS 753	Seminar in Advanced Diagnostic Science	1 (0-1-2)
OMS 851	Seminar in Oral Medicine 2	1 (0-1-2)

3.1.3.3 Elective subjects not less than 1 credit

CD 725	Soft Tissue Management for Minor Oral Surgery	1 (1-0-2)
DSM722	Diagnostic Radiology	1 (1-0-2)
DST 713	Molecular Biology of the Cell	2 (2-0-4)
DST 714	Instrumentation for Dental Research Laboratory	1 (0-2-1)
DST 721	Function and Dysfunction of Masticatory System	1 (1-0-2)
OMS 721	Photography and Presentation in Dentistry	1 (1-0-2)

Students can choose other elective subjects, which are not listed above, that are provided for Master Degree students in Srinakharinwirot University.

3.1.3.4 Thesis 12 credits

GRT 691 Master's Thesis

12 credits

3.2 The contribution made by each course to achieve the expected learning outcomes is clear [2]

The Curriculum Drafting Committee have planned the curriculum design by distributing the expected learning outcomes to be taught by each course in the curriculum. We also review and examine the possibility that such courses encourage the students to achieve the required learning outcomes.

Curriculum Mapping of Courses and ELOs

	Code	Name of Course	Credits	LO1	LO2	LO3	LO4	LO5
1. Core/Elective Subjects								
1	DDE 711	Research Methodology and Biostatistics in Dentistry	2					x
2	DDE 712	Proposal Development in Dentistry	1					x
3	DST 711	Applied Oral Biology	2					x
4	DPD 731	Psychology and Ethics for Dentists	2		x	x	x	x
5	CLD 726	Soft tissue Management for Minor Oral Surgery	2	x	x	x	x	
6	DSM 722	Diagnostic Radiology	1	x	x		x	
7	DST 713	Molecular Biology of the Cell	2					x
8	DST 714	Instrumentation for Dental Research Laboratory	1					x
9	DST 721	Function and Dysfunction of Masticatory System	1	x	x	x	x	
10	OMS 721	Photography and Presentation in Dentistry	1				x	x
11	GRT 691	Master's Thesis	12					x
2. Oral Medicine								
1	OMS 711	Applied Clinical Medicine and Anesthesia	2	x	x	x	x	x
2	OMS 712	Advanced Oral Medicine 1	2	x	x	x	x	
3	OMS 713	Advanced Oral Pathology	1	x	x	x	x	
4	OMS 714	Surgical Techniques for Oral Medicine	1	x	x	x	x	

Curriculum Mapping of Courses and ELOs

	Code	Name of Course	Credits	LO1	LO2	LO3	LO4	LO5
5	OMS 717	Advanced Oral Medicine 2	2	x	x	x	x	
6	OMS 718	Advanced Diagnostic Sciences	1	x	x	x	x	x
7	OMS 731	Advanced Oral Medicine Clinic 1	2	x	x	x	x	
8	OMS 732	Oral and Maxillofacial Radiology Clinic 1	1	x	x	x	x	
9	OMS 733	Advanced Oral Pathology Laboratory	1	x	x	x	x	
10	OMS 735	Advanced Oral Medicine Clinic 2	3	x	x	x	x	
11	OMS 736	Oral Surgery Clinic	1	x	x	x	x	
12	OMS 831	Advanced Oral Medicine Clinic 3	3	x	x	x	x	
13	OMS 832	Oral and Maxillofacial Radiology Clinic 2	1	x	x	x	x	
14	OMS 752	Seminar in Oral Medicine 1	1	x	x	x	x	
15	OMS 753	Seminar in Advanced Diagnostic Sciences	1	x	x	x	x	x
16	OMS 851	Seminar in Oral Medicine 2	1	x	x	x	x	x
17	OMS 853	Clinical Seminar in Oral and Maxillofacial Sciences	1	x	x	x	x	x
3. Oral Maxillofacial and Implantology								
1	OMS 711	Applied Clinical Medicine and Anesthesia	2	x	x	x	x	
2	OMS 715	Advanced Oral and Maxillofacial Surgery	1	x	x	x	x	

	Code	Name of Course	Credits	LO1	LO2	LO3	LO4	LO5
3	OMS 716	Oral Implantology 1	1	x	x	x	x	
4	OMS 719	Basic Prosthodontics for Implant Dentistry	1	x	x	x	x	
5	OMS 720	Oral Implantology 2	2	x	x	x	x	
6	OMS 734	Oral Surgery and Oral Implantology Clinic 1	3	x	x	x	x	
7	OMS 737	Oral Surgery and Oral Implantology Clinic 2	3	x	x	x	x	
8	OMS 833	Oral Surgery and Oral Implantology Clinic 3	3	x	x	x	x	
9	OMS 834	Oral Surgery and Oral Implantology Clinic 4	2	x	x	x	x	
10	OMS 751	Seminar in Oral and Maxillofacial Surgery	1	x	x	x	x	x
11	OMS 754	Seminar In Oral Implantology 1	1	x	x	x	x	x
12	OMS 852	Seminar In Oral Implantology 2	1	x	x	x	x	x
13	OMS 853	Clinical Seminar in Oral and Maxillofacial Sciences	1	x	x	x	x	x

ELO	Knowledge Required	Specific Skill Required	Generic Skill Required (Soft Skill/Transferable Skill)
<p>ELO1 Analyze diseases or conditions in the oral cavity to provide appropriate treatments in oral surgery and oral medicine.</p>	<p>Oral Maxillofacial and Implantology K1 Principle and fundamental in implant dentistry K2 Advance minor surgery K3 Advance dental radiography K4 General and Medical consideration in patient complexity K5 Treatment planning seminar</p> <p>Oral Medicine K3 Advance dental radiography K4 General and Medical consideration in patient complexity K5 Treatment planning seminar K6 Therapeutic measurement in oral medicine</p>	<p>Oral Maxillofacial and Implantology : Diagnosis and Treatment plan for oral maxillofacial and implantology</p> <p>Oral Medicine : Diagnosis and treatment plan for oral medicine</p>	<ol style="list-style-type: none"> 1. Decision making 2. Reading skill (English proficiency) 3. IT skill 4. Communication skill
<p>ELO2 Plan complex treatments and provide appropriate preventive measures for each patient in the fields of oral surgery</p>	<p>Oral Maxillofacial and Implantology K1 Principle and fundamental in implant dentistry K2 Advance minor surgery K3 Advance dental radiography K4 General and Medical consideration in patient complexity K7 Clinical practice in implant/ oral surgery clinic</p>	<p>Oral Maxillofacial and Implantology : Diagnosis and Treatment plan for oral maxillofacial and implantology</p>	<ol style="list-style-type: none"> 1. Decision making 2. Problem solving 3. professional ethics

ELO	Knowledge Required	Specific Skill Required	Generic Skill Required (Soft Skill/Transferable Skill)
<p>enhance their understanding and awareness of individual health problems, adjustments of their behavior, and acceptance of standard dental treatment.</p>	<p>K 7 Clinical practice in implant K 8 Clinical practice in oral medicine</p>	<p>Patient approach</p> <p>Oral Medicine: Clinical skill and practice for oral medicine and patient approach</p>	
<p>ELO5 Create, develop, plan, and conduct research as well as present the research results correctly according to the ethical framework.</p>	<p>Oral Maxillofacial and Implantology and Oral Medicine K15 Research ethics K16 Research methodology K 17 Biostatistics K18 Oral biology K19 Research critical appraisal in implant and oral medicine K20 Research Instrumentation</p>	<p>Oral Maxillofacial and Implantology : Research methodology</p> <p>Oral Medicine: Research methodology</p>	<ol style="list-style-type: none"> 1. Decision making 2. Reading skill (English proficiency) 3. IT skill

Curriculum Mapping shows the distribution of responsibility in the standard learning outcomes from the curriculum to each subject.

● Major Responsibility ○ Minor Responsibility

Standard Learning Outcomes Subjects	Moral and Ethics			Knowledge			Cognitive Skill				Relationship and Responsibility Skills		Numerical Analysis, Communication, and Information Technology Usage Skills			Skill Range	
	1	2	3	1	2	3	1	2	3	4	1	2	1	2	3	1	
<u>Core Subjects</u>																	
DDE 711 Research Methodology and Biostatistics in Dentistry			○	○	●		●	○		●	○	●	●	○	●		
DDE 712 Proposal Development in Dentistry			○	○	●	●	●	○		●	○	●	●	○	●		
DST 711 Applied Oral Biology			○	●	●		●	●		●		●					
DPD 731 Psychology and Ethics for Dentists	●	●	●		○		●			●	○	●	●				
<u>Major Subjects</u> <u>Oral Medicine Group</u>																	
OMS 712 Advanced Oral Medicine 1			○	○	●		●	●			●	○	●	○			
OMS 713 Advanced Oral Pathology			○	○	●		●	●			●	○	●	○			
OMS 711 Applied Clinical Medicine and Anesthesia			○	○	●		●	●			●	○	●	○			
OMS 714 Surgical Techniques for Oral Medicine	●	●	●	○	●		●	●	○	○	●	●	○	●			●

Standard Learning Outcomes Subjects	Moral and Ethics			Knowledge			Cognitive Skill				Relationship and Responsibility Skills		Numerical Analysis, Communication, and Information Technology Usage Skills			Skill Range
	1	2	3	1	2	3	1	2	3	4	1	2	1	2	3	1
OMS 717 Advanced Oral Medicine 2			○	○	●		●	●			●	○	○	○		
OMS 718 Advanced Diagnostic Sciences			○	○	●		●	●			●	○	○	○		
OMS 731 Advanced Oral Medicine Clinic 1	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 732 Oral and Maxillofacial Radiology Clinic 1	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 733 Advanced Oral Pathology Laboratory			○	○	●	●	●	○		●	●	○	●	○		
OMS 735 Advanced Oral Medicine Clinic 2	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 736 Oral Surgery Clinic	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 831 Advanced Oral Medicine Clinic 3	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 832 Oral and Maxillofacial Radiology Clinic 2	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 752 Seminar in Oral Medicine 1			○	●	●	●	●	○		○	●	○	●	○	●	
OMS 753 Seminar in Advanced Diagnostic Sciences			○	●	●	●	●	○		○	●	○	●	○	●	
OMS 851 Seminar in Oral Medicine 2			○	●	●	●	●	○		○	●	○	●	○	●	

Standard Learning Outcomes Subjects	Moral and Ethics			Knowledge			Cognitive Skill				Relationship and Responsibility Skills		Numerical Analysis, Communication, and Information Technology Usage Skills			Skill Range
	1	2	3	1	2	3	1	2	3	4	1	2	1	2	3	1
OMS 853 Clinical Seminar in Oral and Maxillofacial Sciences			○	●	●	●	●	○		○	●	○	●	○	●	
สาขาศึกษาระดับบัณฑิตยศาสตร์																
OMS 711 Applied Clinical Medicine and Anesthesia	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 715 Advanced Oral and Maxillofacial Surgery			○	○	●		●	●			●	○	○	○		
OMS 716 Oral Implantology 1			○	○	●		●	●			●	○	○	○		
OMS 720 Oral Implantology 2			○	○	●		●	●			●	○	○	○		
OMS 719 Basic Prosthodontics for Implant Dentistry			○	○	●		●	●			●	○	○	○		
OMS 734 Oral Surgery and Oral Implantology Clinic 1	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 737 Oral Surgery and Oral Implantology Clinic 2	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 833 Oral Surgery and Oral Implantology Clinic 3	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 834 Oral Surgery and Oral Implantology Clinic 4	●	●	●	○	●		●	●	○	○	●	●	○	●		●
OMS 751 Seminar in Oral and Maxillofacial Surgery			○	●	●	●	●	○		○	●	○	●	○	●	

Standard Learning Outcomes Subjects	Moral and Ethics			Knowledge			Cognitive Skill				Relationship and Responsibility Skills		Numerical Analysis, Communication, and Information Technology Usage Skills			Skill Range
	1	2	3	1	2	3	1	2	3	4	1	2	1	2	3	1
OMS 754 Seminar in Oral Implantology 1			○	●	●	●	●	○		○	●	○	●	○	●	
OMS 852 Seminar in Oral Implantology 2			○	●	●	●	●	○		○	●	○	●	○	●	
OMS 853 Clinical Seminar in Oral and Maxillofacial Sciences			○	○	●	●	●	●	○	○	●	○	●	○		
<u>Electives</u>																
CLD 726 Soft tissue Management for Minor Oral Surgery			○	●	●		●	○		○	●	○	○	○		
DSM 722 Diagnostic Radiology			○	●	●		●	○		○	●	○	○	○		
DST 714 Instrumentation for Dental Research Laboratory		○	○	●	●		●	●		○	●	○	●	○		
DST 721 Function and Dysfunction of Masticatory System			○	●	●		●	○		○	●	○	○	○		
<u>Thesis</u>																
GRT 691 Master's Thesis			○	○	●		●	○		●	●	●	●	○	●	

3.3 The curriculum is logically structured, sequenced, integrated, and up-to-date [3, 4, 5, 6]

The Program Drafting Committee has planned and designed a curriculum structure that demonstrates the relationship of the core, specific, and elective courses which allow the students to have the opportunity to learn according to their interests and in relation to their use for research. Additionally, if students need specialized knowledge in advanced dental technology related to Dental Implantology or Oral Medicine, students can choose to attend short courses that the Department provides to increase their clinical knowledge (e.g. Hands-on workshop courses: various implant systems, advanced ridge augmentation, sinus lift, etc.)

The curriculum committee has reviewed and evaluated the curriculum periodically to ensure that the curriculum is modern and brings the process of improving learning management to help students achieve the ELOs set forth as follows:

- Provide an assessment of the expected learning outcome of the course by the instructor and by student satisfaction towards teaching and learning management at the end of the semester.
- Arrange the meeting of the Curriculum Committee every semester in order to evaluate the learning outcomes of the students or follow up the progress of the students in the course by academic staff of different roles (i.e. course instructors, instructors in other courses, mentor and/or thesis advisors). The results will be applied in order to improve the teaching and learning process before the new semester starts.
- Provide satisfactory surveys of graduate users and alumni through interviews during the annual curriculum quality evaluation process. Assessment of graduates' satisfaction would be performed through online questionnaires at the end of each academic year.
- Evaluate prospective student's satisfaction during the application process through the interview every academic year.

OMSci PROGRAM METRICS

	Code	Name of Course	Credits	ELO1	ELO2	ELO3	ELO4	ELO5
4. Core/Elective Subjects								
1	DDE 711	Research Methodology and Biostatistics in Dentistry	2	1	1	1	1	5
2	DDE 712	Proposal Development in Dentistry	1	2	1	1	1	5
3	DST 711	Applied Oral Biology	2	2	3	3	1	5
4	DPD 731	Psychology and Ethics for Dentists	2	3	4	5	5	1
5	CLD 726	Soft tissue Management for Minor Oral Surgery	2	3	3	2	2	1
6	DSM 722	Diagnostic Radiology	1	5	5	5	2	1
7	DST 713	Molecular Biology of the Cell	2	2	3	3	1	5
8	DST 714	Instrumentation for Dental Research Laboratory	1	2	1	1	1	5
9	DST 721	Function and Dysfunction of Masticatory System	1	4	4	4	2	1
10	OMS 721	Photography and Presentation in Dentistry	1	3	2	2	4	4
11	GRT 691	Master's Thesis	12	1	1	1	1	5
5. Oral Medicine								
1	OMS 711	Applied Clinical Medicine and Anesthesia	2	5	5	5	5	1
2	OMS 712	Advanced Oral Medicine 1	2	5	4	4	4	1
3	OMS 713	Advanced Oral Pathology	1	5	5	5	4	1

	Code	Name of Course	Credits	ELO1	ELO2	ELO3	ELO4	ELO5
4	OMS 714	Surgical Techniques for Oral Medicine	1	5	5	5	4	1
5	OMS 717	Advanced Oral Medicine 2	2	5	5	5	5	1
6	OMS 718	Advanced Diagnostic Sciences	1	5	5	5	4	1
7	OMS 731	Advanced Oral Medicine Clinic 1	2	5	3	3	4	1
8	OMS 732	Oral and Maxillofacial Radiology Clinic 1	1	5	3	3	4	1
9	OMS 733	Advanced Oral Pathology Laboratory	1	5	5	5	3	1
10	OMS 735	Advanced Oral Medicine Clinic 2	3	5	4	4	4	1
11	OMS 736	Oral Surgery Clinic	1	5	5	5	5	1
12	OMS 831	Advanced Oral Medicine Clinic 3	3	5	5	5	5	1
13	OMS 832	Oral and Maxillofacial Radiology Clinic 2	1	5	5	5	4	1
14	OMS 752	Seminar in Oral Medicine 1	1	5	4	4	5	1
15	OMS 753	Seminar in Advanced Diagnostic Sciences	1	5	5	5	3	1
16	OMS 851	Seminar in Oral Medicine 2	1	5	5	5	5	1
17	OMS 853	Clinical Seminar in Oral and Maxillofacial Sciences	1	5	5	5	3	1

	Code	Name of Course	Credits	LO1	LO2	LO3	LO4	LO5
6. Oral Maxillofacial and Implantology								
1	OMS 711	Applied Clinical Medicine and Anesthesia	2	5	5	5	4	1
2	OMS 715	Advanced Oral and Maxillofacial Surgery	1	5	5	5	5	1
3	OMS 716	Oral Implantology 1	1	5	5	3	3	1
4	OMS 719	Basic Prosthodontics for Implant Dentistry	1	3	3	3	3	1
5	OMS 720	Oral Implantology 2	2	5	5	5	5	1
6	OMS 734	Oral Surgery and Oral Implantology Clinic 1	3	5	4	3	5	1
7	OMS 737	Oral Surgery and Oral Implantology Clinic 2	3	5	4	3	5	1
8	OMS 833	Oral Surgery and Oral Implantology Clinic 3	3	5	5	5	5	1
9	OMS 834	Oral Surgery and Oral Implantology Clinic 4	2	5	5	5	5	1
10	OMS 751	Seminar in Oral and Maxillofacial Surgery	1	5	5	5	4	1
11	OMS 754	Seminar In Oral Implantology 1	1	5	5	3	4	1
12	OMS 852	Seminar In Oral Implantology 2	1	5	5	5	4	1
13	OMS 853	Clinical Seminar in Oral and Maxillofacial Sciences	1	5	5	5	4	1

Table 1. The use of the program metrics for linking courses and course content with ELOs and CLOs. (1) Not directly related to ELO (2) Quite related to ELO (3) Related to ELO (4) Closely related to ELO (5) Specifically related to ELO.

Course Syllabus for Master of Science in Oral and Maxillofacial Sciences

Major in Oral Maxillofacial and Implantology

First year – 1st and 2nd Semester

First Semester				Second Semester			
Code	Sec	Subject	Credit	Code	Sec	Subject	Credit
DST711	M01	Applied Oral Biology	2(2-0-4)	DPD731	M01	Psychology and Ethics for Dentists	2(2-0-4)
DDE711	M01	Research Methodology and Biostatistics in D	2(2-0-4)	OCS719	M01	Oral Implantology II	2(2-0-4)
DDE811	M01	Proposal Development in Dentistry	1(0-2-1)	OCS739	M01	Oral Surgery and Oral Implantology Clinic I	3(0-9-0)
OCS713	M01	Applied Clinical Medicine and Anesthesia	2(2-0-4)	OCS757	M01	Seminar in Oral Implantology I	1(1-0-2)
OCS714	M01	Advanced Oral and Maxillofacial Surgery I	1(1-0-2)	OCS758	M01	Oral Implant Case Analysis I	1(1-0-2)
OCS715	M01	Oral Implantology I	1(1-0-2)	OCS888	M01	Thesis	1(0-3-0)
OCS735	M01	Oral Surgery and Oral Implantology Clinic I	3(0-9-0)				
OCS752	M01	Seminar in Oral and Maxillofacial Surgery I	1(0-2-1)				
DSM722	M01	Diagnostic Radiology	1(1-0-2)				
		Total 14 Credits				Total 10 Credits	

Major in Oral Maxillofacial and Implantology

Second year – 1st and 2nd Semester

First Semester				Second Semester			
Code	Sec	Subject	Credit	Code	Sec	Subject	Credit
OCS833	M01	Oral Surgery and Oral Implantology Clinic II	2(0-6-0)	OCS834	M01	Oral Surgery and Oral Implantology Clinic IV	2(0-6-0)
OCS852	M01	Seminar in Oral Implantology II	1(1-0-2)	OCS852	M01	Seminar in Oral Implantology III	1(1-0-2)
OCS853	M01	Oral Implant Case Analysis II	1(1-0-2)	OCS888	M01	Thesis	6(0-18-0)
OCS888	M01	Thesis	5(0-15-0)				
		Total 9 Credits				Total 9 Credits	

Major in Oral Medicine**First year – 1st and 2nd Semester**

First Semester				Second Semester			
Code	Sec	Subject	Credit	Code	Sec	Subject	Credit
DST711	M01	Applied Oral Biology	2(2-0-4)	DPD731	M01	Psychology and Ethics for Dentists	2(2-0-4)
DDE711	M01	Research Methodology and Biostatistics in D	2(2-0-4)	OCS716	M01	Advanced Oral Medicine II	1(1-0-2)
DDE811	M01	Proposal Development in Dentistry	1(0-2-1)	OCS736	M01	Advanced Oral Medicine Clinic II	3(0-9-0)
OCS711	M01	Advanced Oral Medicine I	2(2-0-4)	OCS737	M01	Advanced Oral Pathology Laboratory II	1(0-3-0)
OCS731	M01	Advanced Oral Medicine Clinic I	2(0-6-0)	OCS717	M01	Advanced Diagnostic Science	1(1-0-2)
OCS751	M01	Seminar in Oral Medicine I	1(1-0-2)	OCS753	M01	Seminar in Advanced Diagnostic Science	1(1-0-2)
OCS712	M01	Advanced Oral Pathology	1(1-0-2)	OCS755	M01	Clinical Seminar in Oral and Maxillofacial Sciences	1(0-2-1)
OCS733	M01	Advanced Oral Pathology Laboratory I	1(0-3-0)	OCS888	M01	Thesis	2(0-6-0)
OCS732	M01	Oral and Maxillofacial Radiology Clinic I	1(0-3-0)				
OCS713	M01	Applied Clinical Medicine and Anesthesia	2(2-0-4)				
Total 15 Credits				Total 12 Credits			

Major in Oral Medicine**Second year – 1st and 2nd Semester**

First Semester				Second Semester			
Code	Sec	Subject	Credit	Code	Sec	Subject	Credit
OCS831	M01	Advanced Oral Medicine Clinic III	2(0-4-2)	OCS888	M01	Thesis	6(0-18-0)
OCS832	M01	Oral and Maxillofacial Radiology Clinic II	1(0-3-0)				
OCS851	M01	Seminar in Oral Medicine II	1(1-0-2)				
OCS888	M01	Thesis	4(0-12-0)				
DSM722	M01	Diagnostic Radiology	1(1-0-2)				
Total 8 Credits				Total 11 Credits			

AUN-QA Criterion 4 – Teaching and Learning Approach**AUN-QA Criterion 4 – Checklist**

4	Teaching and Learning Approach	1	2	3	4	5	6	7
4.1	The educational philosophy is well articulated and communicated to all stakeholders [1]							
4.2	Teaching and learning activities are constructively aligned to the standard of the expected learning outcomes [2, 3, 4, 5]							
4.3	Teaching and learning activities enhance life-long learning [6]							
	Overall opinion							

4.1 The educational philosophy is well articulated and communicated to all stakeholders [1]

Based on the Theory of Constructionism, the Curriculum Committee uses this theory as the philosophy of education management for this curriculum. The theory expresses that all learners can obtain knowledge and understanding by linking new experiences with previous experiences, in which the learner can accomplish independently. By providing the appropriate learning materials to students, it can support them in seeking further knowledge, develop critical thinking skills, and be able to implement the knowledge to clinical practice and research. Furthermore, the departmental environment and supporting structures provided are intended to promote learning interaction between instructors, friends, and family. The socialization between each other will encourage students to obtain knowledge through experience. This learning management, therefore, focuses on giving students the freedom to work or create projects based on their own interest.

With such educational philosophy, the Program Drafting Committee designed the learning methods that emphasize students to practice and connect the knowledge or previous experience with what is being learned. The committee provides opportunities for students to initiate projects or conduct research based on their own interests. They can use computers as an important tool for seeking, creating, and disseminating knowledge or delivering oral and writing skills. To encourage the learning atmosphere and accepting different ideas and works from the others, the committee also promotes joint education activities by offsite learning and practicing experiences locally and abroad (Figure 9). The instructors encourage students to obtain such knowledge by self-learning and achieving self-defined learning outcomes throughout their lives. Lastly, the committee has stated the educational philosophy that is used as the basis for designing the learning methods in the curriculum for the stakeholders on the website and boards of the department.

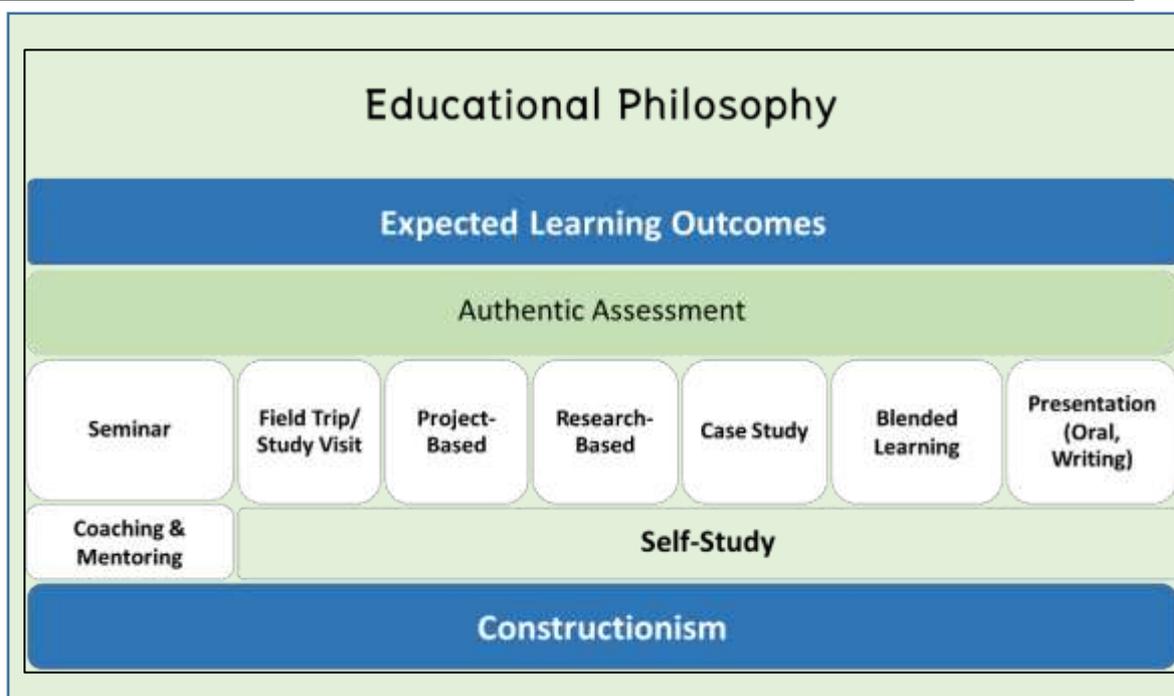


Figure 9. Educational philosophy used in the design of learning methods

4.2 Teaching and learning activities are constructively aligned to the achievement of the expected learning outcomes [2, 3, 4, 5]

The Curriculum Committee has used the educational philosophy as mentioned in Section 4.1 to define a joint operation of the course instructor. Using this philosophy, the course instructor can design the learning management methods that emphasize students to create knowledge independently and participate in their learning through a variety of learning methods for both individuals and groups. These methods are adjusted for differences among students, which resulting in a relaxed and flexible learning atmosphere. Additionally, the announcements about the learning structure, determining methods, and time periods for evaluating will help students to set their goals and do activities with the others more effectively.

Table 4.1 shows the relationship framework between expected learning outcomes and method of learning and evaluation.

Expected Learning Outcomes	Time	Work or Indicate Behavior	Learning Method	Method of Measurement and Evaluation
ELO1 Analyze diseases or conditions in the oral cavity, pathogenic and other related factors in order to provide appropriate treatments in oral surgery and dental implant treatment and oral medicine.	End of work	- Presentation - Communication skill - Team Work - Decision making	Seminar Case study Field Trip Case- based Hospital Visit	1. Behavioral assessment with observation using Rubric criteria 2. Presentation patient case report
	Course assessment	- Project/Report paper - Plagiarism		Rubric assessment
	QE	- Apply knowledge		Examination with Rubric criteria
	Seminar paper	- Apply & analyzed knowledge - Report paper		
	Case and Scenario	- Create knowledge - Presentation - Communication skill - System thinking - Plagiarism	Self-study Coaching & Mentoring	Evaluated with Rubric criteria
ELO2 Plan complex treatments and provide appropriate	End of work	- Presentation - Communication skill - Team work - System thinking - Creativity	Seminar Blended-learning Case study Case- based	1. Behavioral assessment with observation using Rubric criteria 2. Patient report Presentation

Expected Learning Outcomes	Time	Work or Indicate Behavior	Learning Method	Method of Measurement and Evaluation
preventive measures for each patient in in the fields of oral surgery, dental implants and oral medicine.	Course assessment	- Report - Plagiarism		Evaluate the report with Rubric criteria
	QE	- Apply knowledge		Examination with Rubric criteria
	Case seminar paper	- Apply & analyzed knowledge - Report Paper		Rubric assessment
	Patient Secenario	- Analyzed & evaluated knowledge - Presentation - Communication skill	Self-study Coaching & mentoring	Rubric assessment
ELO3 Provide appropriate oral surgery, dental implant and oral medicine treatment with professional standards.	End of work	- Presentation - Communication skill - System thinking - Creativity	Seminar Blended-learning case- based Research- case-based	1. Behavioral assessment with observation using Rubric criteria 2. Patient report Presentation
	Course assessment	- Report Paper - Plagiarism		Rubric assessment
	QE	- Apply knowledge		Rubric assessment

Expected Learning Outcomes	Time	Work or Indicate Behavior	Learning Method	Method of Measurement and Evaluation
ELO4 Communicate with patients and related persons to enhance their understanding and awareness of individual health problems, adjustments of their behavior, and acceptance of standard dental treatment.	Concept paper	- Report paper		Rubric assessment
	Publication	- Research Paper		Rubric assessment
	End of work	- Presentation - Communication skill	Seminar Case study Hospital site visit Case- based Research- case-based	1. Observation with observation and record form 2. Behavior assessment with Rubric criteria 3. Patient report Presentation
ELO5 Create, develop, plan and conduct research as	Concept paper Research Proposal Dissertation	- Create knowledge - Presentation - Communication skill - System thinking - Plagiarism	Self-study Blended-learning Coaching & Mentoring	1. Thesis proposal Evaluation according to Rubric criteria 2. Thesis oral examination

Expected Learning Outcomes	Time	Work or Indicate Behavior	Learning Method	Method of Measurement and Evaluation
well as present the research results correctly according to the ethical framework.				according to Rubric criteria 3.Rubric assesment

4.3 Teaching and learning activities enhance lifelong learning [6]

The Curriculum Committee use Rubric criteria, an educational philosophy, for designing learning methods. The Rubric criteria focus on the development of lifelong learning skills, by providing self study and participation in a variety of learning activities such as research-based case study and dental hospital visitations. Using Blended learning, this method will train the responsibility of self-learning through a variety of modern learning resources, including the use of information and communication technology in systematic search such as Endnote, including studying various topics for seminar.

To promote lifelong learning, the curriculum is planned to carry out activities which will help develop student's potential and enhancing learning skills. The field of the program is interdisciplinary and provides professional expertise. In order to ensure that the learning process is in accordance with the learning standards of the 21st century, the Department has activities to promote the issues into various parts.

- Focusing on skills in the 21st century to enable students to have knowledge and expertise.

Activity plan: Organize learning and assessment systems to emphasize the modern knowledge which the student can use and apply for patient's treatment in a realistic situation in the clinic.

- Developing comprehension between core subjects and 21st century interdisciplinary model.

Activity plan: There are academic courses, seminars, and clinical seminars that allow students to participate in problem setting. Additionally, there are courses and seminars between fields of Oral Medicine and Dental Implants.

- Emphasizing and understanding a profound knowledge

Activity plan: Organizing a learning content step-by-step, by developing the knowledge that is more difficult in the hierarchy. In the first year, the content will focus on the basic principles and basic courses and the setting will be more difficult with more integrated subjects each year.

- The students can use the information, tools, and technology to participate with the experts while having the opportunity to work and solve problems.

Activity plan: Planning and managing materials by using technology in research. Making teaching materials and medical devices that combine modern technology with patient treatment plans guided by the expert instructors. This technique will allow students to solve problems and see results of treatment from the beginning.

- Focus on project work

Activity plan: Planning and discussion with advisors about the research. The research topic must be able to be used or applied for clinical management after graduating from these programs.

Additionally, the courses also focus on the skills of research, lifelong learning, including English skills. By assignment for students to review literature and conducting seminars, the students can conduct research and present it to their supervisor and other lecturers who are interested in the seminar event. (Seminar course of the Department of Oral Medicine and Oral Surgery and Implant Dentistry)

AUN-QA Criterion 5: Student Assessment**AUN-QA Criterion 5 – Checklist**

5	Student Assessment	1	2	3	4	5	6	7
5.1	The student assessment is constructively aligned to the achievement of the expected learning outcomes [1, 2]							
5.2	The student assessments including timelines, methods, regulations, weight distribution, rubrics and grading are explicit and communicated to students [4, 5]							
5.3	Methods including assessment rubrics and marking schemes are used to ensure validity, reliability and fairness of student assessment [6, 7]							
5.4	Feedback of student assessment is timely and helps to improve learning [3]							
5.5	Students have ready access to appeal procedure [8]							
	Overall opinion							

5.1 The student assessment is constructively aligned to the achievement of the expected learning outcomes [1, 2]**➤ Student Acceptance**

Before the course launch, the Curriculum Committee has a discussion to analyze the students' market as well as the educational gap to determine the potential of faculty and participants for this course. There are also analyses of the strengths and weaknesses of the organization before planning a potential course. After the analysis, course planning and learning framework are placed. The direction of student development and acceptance, including research to support the opening of curriculum, also are been managed. The important issues are as follow:

1. The Department is a multidisciplinary group that consists of Oral Medicine, Oral Pathology, Oral Radiology, and Oral Surgery all of which are appropriate structures for working together in both learning and patient treatment.

2. The Department has a group of subjects including Oral Medicine, Oral Pathology, and Oral Radiology which are combined under the field of Oral Diagnosis. This combination allows all specialty in diagnostic science field to work together and is considered a strength of the courses in oral medicine. The students will gain knowledge from interdisciplinary experts.

3. The Department has instructors with expertise in Oral and Maxillofacial Surgery, especially in Implant Dentistry. In addition, there are supporting structures to work with other fields, especially the field of Prosthodontics, which is a branch that must work continuously with Implant Surgery. Therefore, it is a strong point of the courses that are different and competitive in the educational market, especially in the field of Dental Implants, where the Department can organize the learning system from the beginning to the destination of treatment planning.

The curriculum is publicized and announced on the website of the Graduate School. When the applicants apply for the application in accordance with the regulations and has complete qualifications according to the conditions, the Graduate School will announce the names of those who can have examination and interview. The applicants must pass the English examination, written examination, and interview by a representative from the Curriculum Committee of Oral and Maxillofacial Science Master Program. After that, the list of the qualified candidates will be announced on the website of the Graduate School.

Currently in Thailand, with a decreasing birth rate and a relatively low death rate, society is aging society. The Ministry of Public Health, the Dental Council of Thailand, and the Royal College have urged the importance of this matter and planned to further stimulate the education system in fields related to the dentistry. Oral Medicine is a branch that is relevant. The dentists under the Ministry of Public Health, with support from the ministry, and the other dentists, who are interested in the Oral Medicine field have the opportunity to study in this field. The Department has planned to create a course at the post-graduate level according to the policy of the Ministry of Public Health. In addition, a 4-month short-term training course for oral medicine is also opened as for publicizing the courses and institutions and for the sustainability of oral medicine. In the course improvement cycle, which will take place in 2019, the department has also accepted the Ministry of Public Health's policy for the production of dental personnel to support the aging society. By adding a program plan in the field of Oral Medicine from regular 'sit it classes'

to a distance education. A distance education will focus on research which is based on problems of the community as a starting point.

Activities Conducted to Follow ELOs	Support
<p>Master of Science Program Oral and Maxillofacial Science has announcements of admissions regulations on the website of the Graduate School, Srinakharinwirot University. Graduate School and the faculty / Department define the qualifications of eligible applicants and the number of admissions (P).</p>	<p>Admission regulations for the examination can download from the Graduate School website.</p>
<p>Master of Science Program: Oral and Maxillofacial Science has announced to recruit students continuously every year with the following process:</p> <ol style="list-style-type: none"> 1. Procedure for checking evidence and written examination: The Graduate School is the operator. 2. Examination process results Step 1 (written): Faculty / Department confirm the number of interviewers and the Graduate School will announce the list of eligible candidates for the interview. 3. Interview procedure: Representatives from the Curriculum committee and course instructors are interviewers and will send the results to the Graduate School. 4. After announcement, the candidates report to the Faculty / Department. The Faculty / Department can check the list on the Supreme system, whether the student has reported full of quota or not, if not full or Faculty / Department can request for the next two rounds (D). 	<p>Announcement of the procedure for considering applicants' qualifications</p> <p>Schedule of written examination and interview</p>
<p>There is a Curriculum Committee meeting at the end of each academic year, to discuss public relations for more people interested in studying in the curriculum. The Oral and Maxillofacial science courses consist</p>	<ol style="list-style-type: none"> 1. The Curriculum Committee meeting reports 2. www.facebook.com/omsci

Activities Conducted to Follow ELOs	Support
of 2 fields: Oral Medicine (currently there are 1 student) and Oral and Implant Surgery (currently, there are 4 students). The public relations strategies to interested people in this course including, departmental facebook page and also public relations with academic conferences, and dental organizations, with the expectation that there will be more people interested in the Department's curriculum.	3. Short-term 4-month training program for oral medicine and project publicity signs

Additionally, the course also plans for preparation for the students before studying.

- At the university level: There is an orientation for students, organized by the Graduate School. Students will know the details of the course, registration, withdrawal, submission of graduation, studying calendar and also the agencies that can contact for various matters. Also, there is an introduction to the information systems for educational research and Central Library Service.
- At the faculty level and course level: The Faculty of Dentistry organizes an orientation by the academic department and the course instructor to clarify the details of each course, the system of counseling about learning and thesis and introduce various places for teaching and learning support in the Faculty of Dentistry.

Activities conducted to follow ELOs	Supports
At the university level: There is an orientation for students, organized by the Graduate School. Students will know the details of the course, registration, withdrawal, and submission of graduation, studying calendar and also the agencies that can be contacted for various matters. In addition, there is an introduction to the information systems for educational research and Central Library Service (P, D).	Student Orientation Schedule by the Graduate School, Academic Year 2017-
At the faculty level and course level: The Faculty of Dentistry organizes an orientation by the academic department and the course instructor to clarify the details of each course. The system of counseling about learning and	Schedule of orientation for graduate students by academic department,

Activities conducted to follow ELOs	Supports
thesis introduces various places for teaching and learning for support in the Faculty of Dentistry (P, D).	Dental Hospital, Faculty of Dentistry
After orientation, the advisors discuss with students the attitudes and preferences towards the style and knowledge. If there is a case that the advisor is unable to clarify to the students, the advisor has to discuss with the Curriculum Committee for the conclusions needed to clarify to the students as soon as possible (C, A).	The Curriculum Committee Meeting Reports
The Curriculum Committee dicusses concerns or incomprehensibility with the student to find ways to improve the orientation in order to prepare students before the course starts (A).	The Curriculum Committee Meeting Reports

The Curriculum Committee uses the methods and criteria for evaluating theses from the Graduate Program standards, including the announcement of the Higher Education Commission on criteria for considering academic journals for the dissemination of academic work. The Curriculum Committee also uses Rubric assessment criteria to evaluate all expected learning outcomes.

5.2 The student assessments including timelines, methods, regulations, weight distribution, rubrics and grading are explicit and communicated to students [4, 5]

The Curriculum Committee has published and communicated the principles, timing, methods, and assessment tools (As shown in Table 1 and Figure 4) for course instructors and current students to ensure proper acknowledgement and understanding. In addition, the instructors are required to notify the students of the CLOs (which students can search via the department's website page and www.tqf.swu.ac.th).

5.3 Methods including assessment rubrics and marking schemes are used to ensure validity, reliability and fairness of student assessment [6, 7]

The Curriculum Committee stipulates that the rules and methods for measuring and evaluating are known by everyone. Every semester, the course instructor must provide opportunities for students to understand and agree with the methods and criteria as well as the proportion of the score in the appropriate assessment. At the end of every semester, in order to provide effective and up-to-date methods and assessment tools, the Curriculum Committee arranges the meetings to verify expected learning outcomes in order to confirm the accuracy and confidence in evaluating learning outcomes and also check the accuracy and confidence of the measuring instruments through the use of joint measurement tools.

The Curriculum Committee has created an assessment form that is accurate and consistent with ELOs so that it can be used together in each subject, such as communication skills and assessment form.

Examples: Communication skills assessment criteria (Writing and presenting academic articles for clinical seminars and other agenda, such as the presentation of the research outline)

Performance Level	Description of Performance and Characteristics
Good	There are complete components of research report outline; complete reference writing, correct format and bibliography (100 percent), using technology in presenting the complete research outline report. * There are complete 5 presentation elements. **
Moderate	There are complete components of research outline; the reference writing is in correct format but corresponds to some bibliography (more than 50 percent), using technology elements to present at least 2 to 3 research outline reports * with presentation elements 3 -4 elements **.
Improved	There are some elements of writing the research report outline; the reference writing is in correct format but corresponds to some bibliography (less than 50 percent), using technology elements to present at least 1 research outline reports * or none. There are 1 - 2 composition presentation elements **.

* 1) Easy reading characters 2) Suitable background 3) Clear meaning visual 4) Proper screen composition

** 1) Appropriate personality 2) Appropriate tone of voice 3) Reasonable presentation sequence 4) Answer questions with academic principles that are relevant to the point 5) Use of presentation time as specified

5.4 Feedback of student assessment is timely and helps to improve learning [3]

From the implementation of past courses, each course assessed students' academic performance both from examination scores and performance assessment scores. This assessment is mostly evaluation at the end of the course, together with the results during the semester. In every assessment round, course instructors present the results to the Curriculum Committee for advice or assistance (for students in the event of that the student is experiencing problems and hurdles in learning).

5.5 Students have ready access to appeal procedure [8]

The University requires access channels for evaluation results and for students to file complaints online at the department's website <http://facebook.com/Omsci.ac.th>

The Curriculum Committee plans to handle complaints from the following process:

1) If students have problems or complaints or suggestions, send a complaint to (via any channel)

- Instructors
- Master's thesis advisor
- Program director: e-mail: peted2000@hotmail.com
- Department's e-mail: sarin@gmail.com

2) Complaints or suggestions from all 4 channels will be considered at the Curriculum Committee meeting.

3) The Curriculum Committee finds ways to handle the complaints of students or set up a fact board which may consist of representatives of the Curriculum Committee and representatives of the Faculty of Dentistry.

4) The advisors follow the guidelines for handling complaints from the meeting and report the results to students.

AUN-QA Criterion 6 – Academic Staff Quality**AUN-QA Criterion 6 – Checklist**

6	Academic Staff Quality	1	2	3	4	5	6	7
6.1	Academic staff planning (considering succession, promotion, re-deployment, termination, and retirement) is carried out to fulfil the needs for education, research and service [1]							
6.2	Staff-to-student ratio and workload are measured and monitored to improve the quality of education, research and service [2]							
6.3	Recruitment and selection criteria including ethics and academic freedom for appointment, deployment and promotion are determined and communicated [4, 5, 6, 7]							
6.4	Competences of academic staff are identified and evaluated [3]							
6.5	Training and developmental needs of academic staff are identified and activities are implemented to fulfil them [8]							
6.6	Performance management including rewards and recognition is implemented to motivate and support education, research and service [9]							
6.7	The types and quantity of research activities by academic staff are established, monitored and benchmarked for improvement [10]							
	Overall opinion							

6.1 Academic staff planning (considering succession, promotion, re-deployment, termination, and retirement) is carried out to fulfil the needs for education, research and service [1]

The curriculum has a policy to manage numbers of course instructors in order to meet the standards of the Office of the Higher Education Commission and respond to the needs of teaching, research and related services. By analyzing the manpower rate in the 1

year and 5 years for the human resource management, we reached the expected numbers of academic personnel as follows

Table 6.1 shows the number of academic personnel of the department.

Types	Male	Female	Total		Percentage of PhD graduates or equivalent
			Numbers	FTEs	
Professor	-	-	-		
Assoc. Prof. / Assist. Prof.	2	3	5		100
Full-time Lecturers	3	6	9		80
Part-time Lecturers	3	3	6		80
Visiting Professors/Lecturers	-	-	-		
Total	8	12	20	5.0	86.7

* Number of academic personnel as of May 14, 2018

The course utilized the FTES as the analysis base to plan the personnel recruitment and selection, personnel development, career advancement and replacement of retirement positions. We analyzed the FTES which showed that there were enough personnels in the curriculum and had no retirement position yet. However, we concerned about the issue of numbers of instructors with doctorate degree. Therefore, the department has sent two persons who have not yet received a Doctorate Degree to further study. They have been approved to study in Doctorate degree in the field of Oral Radiology at Tokyo Medical and Dental University and Osaka University for 4 years, starting from September 2019. We expect that the percentage of Doctorate degree will reach 100 when they return.

Meanwhile the curriculum has encouraged the course instructors to apply for more academic positions. We tried to make sure that course instructors had expertise and quality that meet the criteria of the graduate program standard by encouraging all course instructors to attend the training “Graduate system development program to become a professional graduate faculty” organized by the Graduate School.

Additionally, the course has brought FTES analysis to plan progress for higher academic positions by specifying the expected numbers of assistant professor and associate

professor positions each year. The course instructors will, therefore, prepare a work development plan in order to appoint his or her own academic position. The course supports the course instructors by allowing all of them to be trained regarding academic placement through the academic personnel development program held by the University. Furthermore, the courses ask the course instructors to report their own progress at the Curriculum Committee meeting.

6.2 Staff-to-student ratio and workload are measured and monitored to improve the quality of education, research and service [2]

Curriculum Committee has analyzed the ratio of personnel to students. The details are as follows:

Table 6.2 Staff-to-student Ratio

Semester	FTEs Value of Academic Personnel	FTEs Value of Students	Staff-to-Student Ratio
2561	5.6	112	1:3.57

* Staff-to-student Ratio

FTEs Calculation

$$\begin{aligned} \text{FTEs value of students} &= \text{Credits} * \text{Number of students actually registered} \\ \text{FTEs value of academic personnels} &= \text{FTEs value of students} / 12 \\ \text{Staff-to-student ratio} &= \text{FTEs value of academic personnels} \\ &\quad / \text{numbers of faculty member} \end{aligned}$$

6.3 Recruitment and selection criteria including ethics and academic freedom for appointment, deployment and promotion are determined and communicated [4, 5, 6, 7]

The Curriculum Committee participates in planning, setting up systems to recruit new instructors, and appoint instructors for the course as follows

1. The Curriculum Committee prepares the academic personnel development plan.
2. The Curriculum Committee proposes a framework for the academic personnel to the faculty.
3. The Curriculum Committee allocates a framework for the curriculum.

4. The Curriculum Committee carries out initial qualification and determines the qualifications of the course instructors, according to the rules and procedures of the university as follows.

Basic Features

According to a general qualification of the Regulations of Srinakharinwirot University on Personnel Management year 2016, Article 9, those who will be considered as university staff must be admirers of Royalty with the King as Head of State, at least eighteen years old, but no older than sixty years old. Also the applicant must be competent and does not display physically or mentally inappropriate behavior to perform the duties.

Specific Features

1. Graduated with a doctorate degree from Department of Educational Technology or related fields.
2. Graduated with a Master's Degree and is studying at the Doctorate Degree from Department of Educational Technology or related fields, and must graduate within 5 years from the date of starting.
3. Applicants for academic personnel faculty position must show proof of English language test that is not older than 2 years as follows:

- 3.1 TOEFL scores (Paper-based Test: PBT) equal or more than 500
- or
- 3.2 TOEFL scores (Internet-based Test: IBT) equal or more than 60
- or
- 3.3 TOEFL scores (Computer-based Test: CBT) equal or more than 173
- or
- 3.4 IELTS scores equal or more than 5.5
- or
- 3.5 SWU-SET scores equal or more than 65
- or
- 3.6 CU-TEP scores equal or more than 60
- or
- 3.7 TU-GET scores equal or more than 500

4. The selection of instructors is performed by interviewing, written examination scores, and portfolio evaluation, which includes a good attitude, morality, and professional ethics. The appointed committee members include the dean, representative of the faculty committee, and course instructors. The grading criteria includes qualification, ability, academic experience, personality, ethics, and morality.

5. Perform the recruitment process and announce the results according to the University procedures.

6. Curriculum Committee members appoint course instructors according to the criteria of Office of the Higher Education Commission that the instructors must complete a Doctoral Degree in the field related to the course. Additionally, Graduate School requires instructors to have Postdoctoral research results in order to be appointed as graduate instructors through the Graduate School Committee.

If there is a change of course instructor, the Curriculum Committee will convene to consider and propose to the Board of Directors meeting Committee of the Academic Council of the University. The changes will be reported to the Office of the Higher Education Commission.

7. The Curriculum Committee meeting determines the role, duties and responsibilities of the course instructors clearly by assigning duties and responsibilities according to qualifications, knowledge, ability, and experience.

1.4 Competences of academic staff are identified and evaluated [3]

Academic personnel in every course must be assessed for the competencies of academic personnel. The evaluation will be performed by using the evaluation form prepared by Faculty of Dentistry under the competency framework of the university, including KPI of academic personnel according to the workload and mission of higher education institutions, namely, student production, research, academic services and cultural preservation. The evaluation was performed in two aspects, including 1) evaluation of work achievement and 2) assessing behavior in public service or performance. The detail is as follows.

1. Assessment of the achievement of the work consists of

- 1) Students teaching and development
- 2) Research and academic services
- 3) Cultural and cultural preservation
- 4) Project management / activities assigned by the organizations

- 5) Assessment of overall operational success
2. Assessment of performance behavior consists of

Core competencies

- 1) Achievement motivation
- 2) Service Orientation
- 3) Expertise
- 4) Integrity
- 5) Teamwork

Specific performance according to job characteristics

- 1) Analytical thinking
- 2) Information acquiring
- 3) Motivational communication

Administrative performance (Only administrative positions)

- 1) Leadership
- 2) Vision
- 3) Strategic plan
- 4) Work training and assignments

In addition, there is an evaluation of instructors by the students according to quality of teaching and supporting elements for all courses. The evaluation will be conducted every semester via supreme system, access at: <http://supreme.swu.ac.th/register/index.php>. The evaluation results will be submitted to the Head of the Department, who will inform the course director and course instructor. The results will help improve teaching and learning support in the next semester.

6.5 Training and developmental needs of academic staff are identified and activities are implemented to fulfil them [8]

For self-development of academic personnel, both university and the program have implemented as follows

The University has a plan to develop academic personnel by involving many agencies such as Graduate School, Institute of Intellectual and Strategic Research.

Instructors can apply to participate in activities according to their needs and

interests. In addition, they also support budgets for presenting research grants to support self-development in all courses.

Faculty of Dentistry has a plan for personnel development and academic development by allocating budget for attending academic meeting for 4,000 baht per fiscal year. Also, Faculty of Dentistry organizes academic seminars with the goal of developing teaching and research skills for instructors in all courses.

The Curriculum Committee has sent course directors and instructors to join several academic meetings with short and long term training both at national and international levels.

The Curriculum Committee has a plan to develop the course instructor by specifying in the department's plan. In the 2018 academic year, activities were organized to develop instructors as follows:

1. Orientation preparation for instructors in the curriculum, including special instructors, to have a better understanding of the curriculum. The information provided included guidelines for teaching and learning, program facilities, operations personnel as well as the policy of the faculty, departments, and other related organization.

2. Academic and professional development in other areas to keep pace with academic progress and economic and social changes:

- 1) Encourage instructors to bring students to study dental work in hospitals.

- 2) Support and promote group research in order to make new discoveries or solve current issues.

- 3) Promote academic personnel to be a part of the committee, club, and professional association or to participate in organizing national and international academic conferences.

At the end of various activities or project aimed to develop oneself, we will summarize what we learned from the activities and present them at the Curriculum Committee meeting. Also, we propose guidelines used to improve the efficiency and quality of work.

In addition, the Curriculum Committee encourages instructors to develop academic performance and encourage them to publish academic works in the quality journal base, such as TCI (Thai-Journal Citation Index Center) or presenting research at the national or international level.

6.6 Performance management including rewards and recognition is implemented to motivate and support education, research and service [9]

The Faculty of Dentistry conducted a review of instructor's performance for every course. The results will be sent to the head of the department who will inform the program director and every course instructor. The information will be used as a guideline for good practices in teaching and understanding the curriculum.

6.7 The types and quantity of research activities by academic staff are established, monitored and benchmarked for improvement [10]

The program always updates academic work of course instructors. By constantly updating the academic work data, all instructors must submit their own academic information so that the secretary can create a database. By evaluating the database, the program director and the instructor can plan the preparation of academic works to meet the standards of the graduate level curriculum.

The trend of the quantity of research activities increase, international, and scopus ranking. The program committee has supported staff to publish articles and to present their research at international conferences.

Table 6.7 - Types and Number of Research Publications

Academic Year	Types of Publication				Total	No. of Publications per Academic Staff
	In-house/ Institutional	National	Regional	International		
2019		3		3	6	1.20 (5 staff)
2018		2		3	5	1.00 (5 staff)
2017		2		3	5	1.00 (5 staff)
2016		2		2	4	0.90 (5 staff)

Academic Year	Types of Publication				Total	No. of Publications per Academic Staff
	In-house/ Institutional	National	Regional	International		
2015		2		3	5	1.00 (5 staff)

Table 6.4.1 Curriculum committee

No.	Name	Qualifications
1	Assoc. Prof. Dr. Sorasun Rungsiyanont	DDS. 1996, MS. (Oral Biology) 2002, Ph.D.(Dental Science) 2012
2	Asst. Prof. Dr. Chanchai Wongchuensoontorn	DDS. 1993, MD. 2002, Dr.MD. (Oral and Maxillofacial Surgery) 2008
3	Asst. Prof. Dr. Marnisa Sricholpech	DDS. 1997, Higher Grad. Dip. (Oral and Maxillofacial Surgery) 2001, Ph.D. (Oral Biology) 2010
4	Asst. Prof. Dr. Patrayu Taebunpakul	DDS. 2000, MSc. (Oral Medicine) 2002, Ph.D. (Molecular Oncology) 2012
5	Asst. Prof. Dr. Aroonwan Lam-ubol	D.D.S. 2000, Ph.D. (Oral Science) 2008

Research publications of curriculum committee in the past 5 years (2015 to Jun2019)**Assoc. Prof. Dr. Sorasun Rungsiyanont**

1. Songwattana S, Sricholpech M and **Rungsiyanont S**. Histopathological comparison of collagen fibers in pericoronal tissue of impacted mandibular third molar and odontogenic tumors or cysts using Picrosirius Red Staining and Polarized light microscopy. Swu Dent J: 2015.p 12-26.

2. Vacharotayangul P , **Rungsiyanont S**, Lam-ubol A, Pankam T, Rodbamrung P, Naorungroj S, and Nittaya P. Higher prevalence of oral human papillomavirus infection in HIV-positive than HIV-negative Thai men and women. *Cancer Epidemiology* 2015. p.917-22
3. Krongthip P, Sappayatosok K, **Rungsiyanont S** and Boonsakan P. Extranodal Non-Hodgkin's Lymphoma in HIV infected patient. A case report. *J Prevent med Assoc Thai* 2016.p.188-195
4. **Rungsiyanont S**, Pibooniyom S, Talungjit S and Vacharotayangkul P. A comparative study of the effectiveness of clinical adjunctive techniques on the diagnosis of potentially malignant disorders and oral cancers. *Swu Dent J* 2015.p.42-51.
5. **Rungsiyanont S**, Kittrongsiri P, Kriyawong P, Lumduan A and Antachai K. Relationship between physiological stress and geographic tongue among Srinakharinwirot dental students. *Swu Dent J* 2017.
6. **Rungsiyanont S**, Choeywattana C, Panai N, Chalitangkul T, Prayoonwong V and Saengsakul A. Mental Index and Panoramic Mandibular Index for Clinical Osteoporosis Evaluation: A 10 year retrospective preliminary study in Faculty of Dentistry, Srinakharinwirot University dental patients. *Swu Dent J* 2015.
7. Sricholpech M, Lam-Ubol A, Wongchuensoontorn C and **Rungsiyanont S**. Sialadenoma Papilliferum of the Palate: A Case Report. *J Dent Assoc Thai* 2018. P.99-106.
8. Worasuttayangkurn W, Khovidhunkit PS and **Rungsiyanont S**. Comparative Study onThe Efficetiveness of Velscope and Toluidine Blue for Oral Premalignant Lesion Screening. *Swu Dent J* 2018.
9. Trakiattikul N, Dhanesuan N, Luckanagul JA and **Rungsiyanont S**. The effect of mannitol used as a drug diluent on hydrogels properties for the development of injectable drug delivery plantform.*SWU Dent J* 2019.
10. Worasuttayangkurn W, Khovidhunkit PS and **Rungsiyanont S**. Comparative Study on the Efficetiveness of Velscope and Toluidine Blue for Oral Premalignant Lesion Screening. *Swu Dent J* 2018.
11. Hirunwidchayarat W, Champa K, Tientad N, Atthimung T, **Rungsiyanont S**. Correlation of knowledge and behaviors on general health and oral health care among Srinakharinwirot University Students. *Swu Dent J* 2019;11(2); 81-94.

12. Lamubol A, **Rungsiyanont S**, vachatotayangul P, Sappayatosok K and Chankanka O. Oral manifestations, salivary flow rates and Candida species in Thai HIV-infected patients J Clin Exp Dent 2019.

Asst. Prof.Dr. Chanchai Wongchuensoontorn

1. Luangchana P, Pornpasertsuk SP, Kitisukanchana J and **Wongchuensoontorn C**. The retromolar canal and its variations: Classification using cone beam computed tomography. Quintessence Int 2018.
2. Sricholpech M, Lam-Ubol A, **Wongchuensoontorn C** and Rungsiyanont S. Sialadenoma Papilliferum of the Palate: A Case Report. J Dent Assoc Thai 2018. P.99-106.
3. Suk-arj P, **Wongchuensoontorn C** and Taebunpakul P. Evaluation of bone formation following the osteotome sinus floor elevation technique without grafting using cone beam computed tomography: A retrospective study. International Journal of Implant Dentistry 2019.

Asst. Prof. Dr. Marnisa Sricholpech

1. Songwattana S, Rungsiyanont S. **Sricholpech M**. Histopathological comparison of collagen fibers in pericoronal tissue of impacted third molar and odontogenic tumor or cyst using Picrosirius Red Staining and Polarized Microscopy. Srinakharinwirot University Dental Journal 2015; 8: 12-25
2. **Sricholpech M**, Srisuparb D. Royal jelly promotes the viability and proliferation of periodontal ligament fibroblasts in an in vitro tooth avulsion simulation. Mahidol Dental Journal 2015; 35: 47-56
3. Terajima M, Perdivara I, **Sricholpech M**, Deguchi Y, Pleshko N, Tomer KB, Yamauchi M. Glycosylation and Crosslinking in Bone Type I Collagen. J Biol Chem. 2014 Aug 15; 289 (33):22636-47.
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5. Sinprechanon P, Boonzong U, **Sricholpech M**. Comparative evaluation of periodontal ligament fibroblasts stored in different types of milk: effects on viability and biosynthesis of collagen. European journal of Oral Sciences.

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Asst. Prof. Dr. Patrayu Taebunpakul

1. Vacharotayangul P, **Taebunpakul P**, Klawsiriroj S. Serological profiles of hepatitis B virus infection among pre-clinical dental students at a university in Thailand. *J Dent Assoc Thai* 2016, 66: 60- 69.
2. **Taebunpakul P**, Vacharotayangul P, Klawsiriroj S. Hepatitis B virus serological profiles among dental healthcare workers and students in Thai dental school. *J Dent Assoc Thai*. 2015, 65: 181-188.
3. **Taebunpakul P** and Vacharotayangul P. Hand-foot-and-mouth disease. *SWU Dent J* 2017.
4. Suk-arj P, Wongchuensoontorn C and **Taebunpakul P**. Evaluation of bone formation following the osteotome sinus floor elevation technique without grafting using cone beam computed tomography: A retrospective study. *International Journal of Implant Dentistry* 2019.
5. Lam-ubol A and **Taebunpakul P**. Sensitivity, specificity and profile of direct immunofluorescence in oral lichen planus. *JDAT* 69 :(4):2019.

Asst. Prof. Dr. Aroonwan Lam-ubol

1. Trachootham D, Songkaew W, Hongsachum B, Wattana C, Changklungdee N, Karapoch J, Thirduittirongnapumi S, Meennuch E, Klaitong C, Sinthusek T, **Lam-Ubol A**. Nutri-jelly may improve quality of life and decrease tube feeding demand in head and neck cancer patients. *Support Care Cancer* 2015 May; 23(5):1421-30.
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4. Dalodom S, **Lam-ubol A**, Jeanmaneechotechai S, Takamfoo L, Intachai W, Duangchada K, Hongsachum B, Kanjanatiwat P, Vacharotayangul P and

- Trachootham D. Influence of oral moisturizing jelly as a saliva substitute for the relief of xerostomia in elderly patients with hypertension and diabetes mellitus. *Geriatric Nursing* 2016 March-April; 37(2): 101-109.
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 7. **Lam-Ubol A**, Fitzgerald AL, Ritdej A, Phonyiam T, Zhang H, Myers JN, Huang P, and Trachootham D. Sensory acceptable equivalent doses of β -phenylethyl isothiocyanate (PEITC) induce cell cycle arrest and retard the growth of p53 mutated oral cancer in vitro and in vivo. *Food Funct*. 2018 Jul 17; 9(7):3640-3656.
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 11. **Lam-ubol A** and Taebunpakul P. Sensitivity, specificity and profile of direct immunofluorescence in oral lichen planus. *JDAT* 69 :(4):2019.

AUN-QA Criterion 7 Support Staff Quality**AUN-QA Criterion 7 – Checklist**

7	Support Staff Quality	1	2	3	4	5	6	7
7.1	Support staff planning (at the library, laboratory, IT facility and student services) is carried out to fulfil the needs for education, research and service [1]							
7.2	Recruitment and selection criteria for appointment, deployment and promotion are determined and communicated [2]							
7.3	Competences of support staff are identified and evaluated [3]							
7.4	Training and developmental needs of support staff are identified and activities are implemented to fulfil them [4]							
7.5	Performance management including rewards and recognition is implemented to motivate and support education, research and service [5]							
	Overall opinion							

7.1 Support staff planning (at the library, laboratory, and IT facility and student services) is carried out to fulfil the needs for education, research and service [1]

This program planned to support students, including the following:

1) The Faculty of Dentistry and the Department provide 2 staff – one from the faculty and one from the department. The staff's roles are to coordinate and provide correspondence, documents, and appointments. The staff also provide audio visual equipment and laboratory services for students in the Department.

2) The Department provides theses of former students for current students to use as reference. Also, the University's library provides documents, textbooks, articles, and research databases for research assistance. The library has the searching system called *SWUDiscovery* for searching data from numerous databases in both Thai and other

languages. *SWU Lib* application publicizes information, news, resources, and the up-to-date databases. Students are able to check their library status at any time through this program.

3) The University provides an information system for education to support students. This includes the registration system, the online learning system, the training booking system (train.swu.ac.th), the ‘i-thesis’ system, and the ‘Ethics’ system. The goal is to accommodate students to use the information service, participate in activities, deliver documents, and communicate via the information system. This system is designed to minimize communication response time through maximizing coordination.

4) The University provides beneficial training for students to be used in education and for their thesis. For example, the goal is to assist students by providing both English classes and computer programs such as *asi-thesis* and *Endnote*.

5) The University’s new thesis evaluation system motivates students by grading their theses in different levels. The levels are pass, good, and excellent. There are also scholarships for supporting graduate theses, presentations, and research publication in Thailand and abroad.

7.2 Recruitment and selection criteria for appointment, deployment and promotion are determined and communicated [2]

The Faculty of Dentistry’s staff recruitment and selection criteria include the following:

- 1) A system for recruiting supporting staff through the university that has employment obligations.
- 2) Basic knowledge for a general examination and a successful interview.
- 3) A satisfactory evaluation, which occurs twice a year.

7.3 Competences of support staff are identified and evaluated [3]

The Faculty of Dentistry supports staff and evaluates them twice a year. Advice is offered to staff for improving their work. A work agreement will be made, then staff will be informed of the evaluation. (Personal KPI)

7.4 Training and developmental needs of support staff are identified and activities are implemented to fulfil them [4]

The Faculty of Dentistry encourages staff to participate in training to improve their work ethic through various training systems such as index training and laboratory safety training.

7.5 Performance management including rewards and recognition is implemented to motivate and support education, research and service [5]

The Faculty of Dentistry provides funds for supporting staff to participate in training. There is also potential of an annual pay raise depending on the results of the evaluation.

AUN-QA Criterion 8 – Student Quality and Support

AUN-QA Criterion 8 – Checklist

8	Student Quality and Support	1	2	3	4	5	6	7
8.1	The student intake policy and admission criteria are defined, communicated, published, and up-todate [1]							
8.2	The methods and criteria for the selection of students are determined and evaluated [2]							
8.3	There is an adequate monitoring system for student progress, academic performance, and workload [3]							
8.4	Academic advice, co-curricular activities, student competition, and other student support services are available to improve learning and employability [4]							
8.5	The physical, social and psychological environment is conducive for education and research as well as personal well-being [5]							
	Overall opinion							

8.1 The student intake policy and admission criteria are defined, communicated, published, and up-todate [1]

The process students enter at the Oral and Maxillofacial Sciences program was planned and also revised every year based on the application numbers, also has been considerably

mentioned to the stakeholder and the program committees to decide the intake selection number, criteria and admission examination. The actual accepted number is also flexible, because there are 2 different disciplines in the program. The current trend of interests for specialties selection among applicants are also implemented. Therefore, the student intake policy and admission criteria are communicated to stakeholders via official website of university, social media of SWU and CCI (facebook, instagram). The information shown in website or media have been updated periodically (www.facebook.com/Omsci dent).

8.2 The methods and criteria for the selection of students are determined and evaluated [2]

The number of applicants for each academic year shows in the table 8.2. The program was first accepted 1st year student since year 2015. The oral medicine specialty was the first discipline that accepted the first student of the program. In year 2016, the Oral and Maxillofacial and implantology accepted the first year student. The program has followed the study results, trend of interests and attitude of students recruited from each academic year. The current number of students (table 8.3) and remaining percentage of student (table 8.4) are important information to improve the intake strategies and the teaching and learning methods which are opted to students' background. In consequence the program committee has planned to develop promotion of admission channel to the target group students.

Table 8.2 Intake of First-Year Students (last 5 academic years)

Academic Year	Applicant		
	No. Applied	No. Offered	No. Admitted/Enrolled
2015	2	2	1
2016	38	6	4
2017	17	6	4
2018	31	6	5
2019	33	6	4

Table 8.3 Total Number of Students (last 5 academic years)

Academic Year	No. of current students			
	1 st yr	2 nd yr	3 rd yr	Total
2015	1			1
2016	4	1		5
2017	4	4	3	11
2018	5	4	4	13
2019	4	5		9

Table 8.4 Percentage of remain students (last 5 academic years)

Academic year	Intake students	1 st yr	%	2 nd yr	%	3 rd yr	%
2015	1	1	100				
2016	5	4	80	1	20		
2017	11	4	36.36	4	36.36	3	27.27
2018	13	5	38.46	4	30.76	4	30.76
2019	9	4	44.44	5	55.55		

8.3 There is an adequate monitoring system for student progress, academic performance, and workload [3]

The program establishes a system to monitor students' academic progress:

Preparation before study

For the University, there is a primary orientation for students provided by the Graduate School. Students will acknowledge the details of the program, the registration, the class withdrawal, the graduation request, and the academic calendar. Departments where students can get information will be introduced to students. Students will also be informed how to use the information system and the central library service.

For the Faculty and the program, the Faculty of Dentistry will provide an orientation by the division of academic affairs and the program instructors. They will also explain and introduce details for each class. An education advice system will be introduced to students. The Faculty's educational facilities will also be located for students.

Additionally, the program provides study preparation for students by the program committee. Before the semester starts, students will participate in an annual short-term training program provided by the Thai Association of Oral and Maxillofacial Surgery. This training is necessary for dentists and provided to students who study for their certification, their Master degree, and their diploma or other residency. There is also an English admission criteria considered as preparation for students. Students who qualify for this criterion are ready to study at the graduate level.

Orientation for New Students

The Faculty of Dentistry, the Dental Hospital of the Faculty of Dentistry, and the program are determined to provide an orientation for new students so that they understand the program and the educational system. Educational facilities are provided by the program

in order to assist students and promote their quality of education. Additionally, students receive a student guidebook and have access to a graduate student common room. Introduction to the library, computer laboratory, studio, and study equipment are also included as a part of their welcoming experience.

Management of Complaints for Graduate Students

The program has a graduate student's complaint management system. If a student has any problems or complaints during their studies, the following are the procedural steps for students to report a complaint on the complaint management system:

- 1) 3 options:
 - A. Report to the program director.
 - B. Report to their thesis advisor
 - C. Report via an e-mail to 'sarin@gmail.com' or report to the website at 'http://facebook.com/Omsci.ac.th'



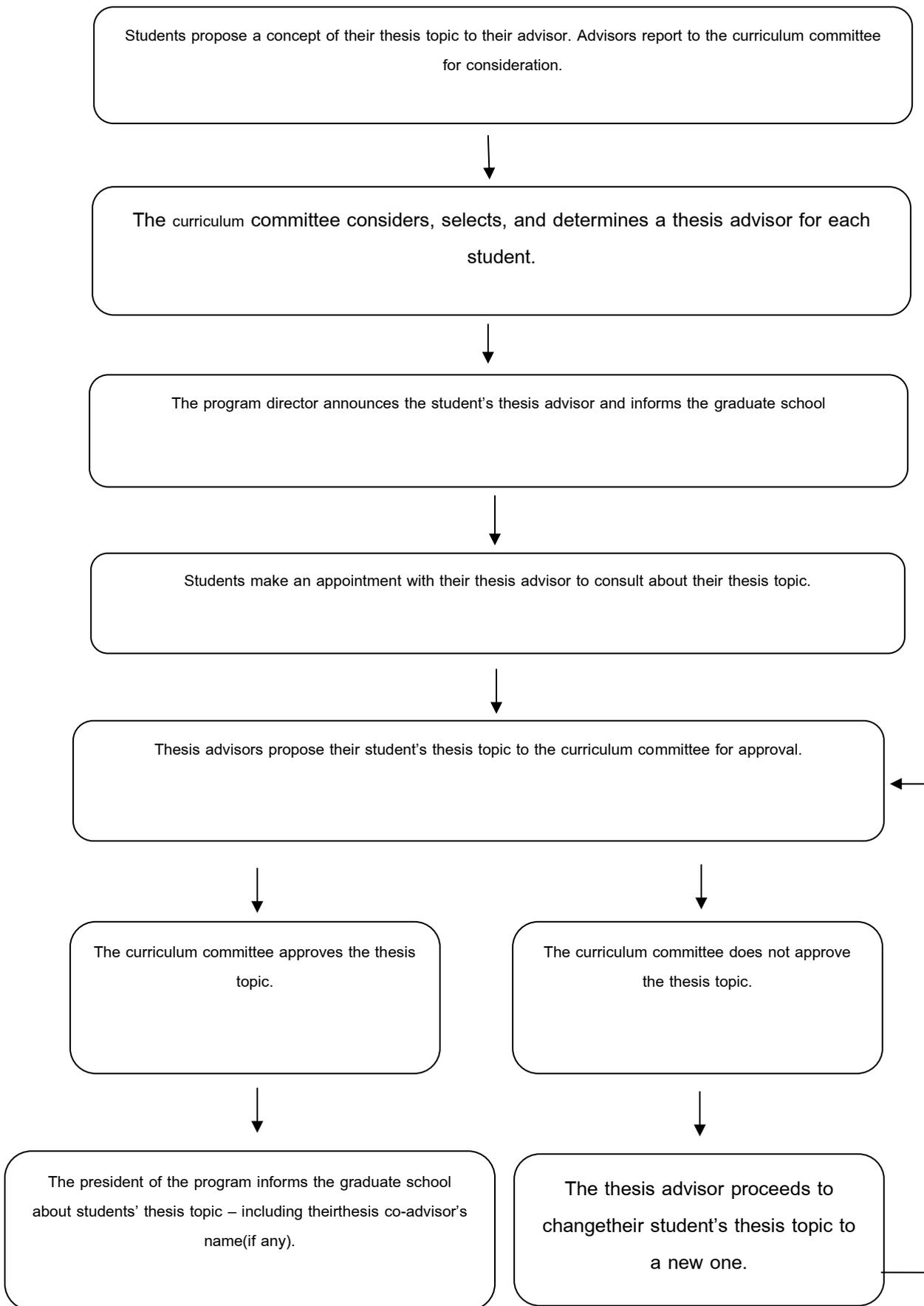
Figure 8.1 The Complaint Receiving System via the website

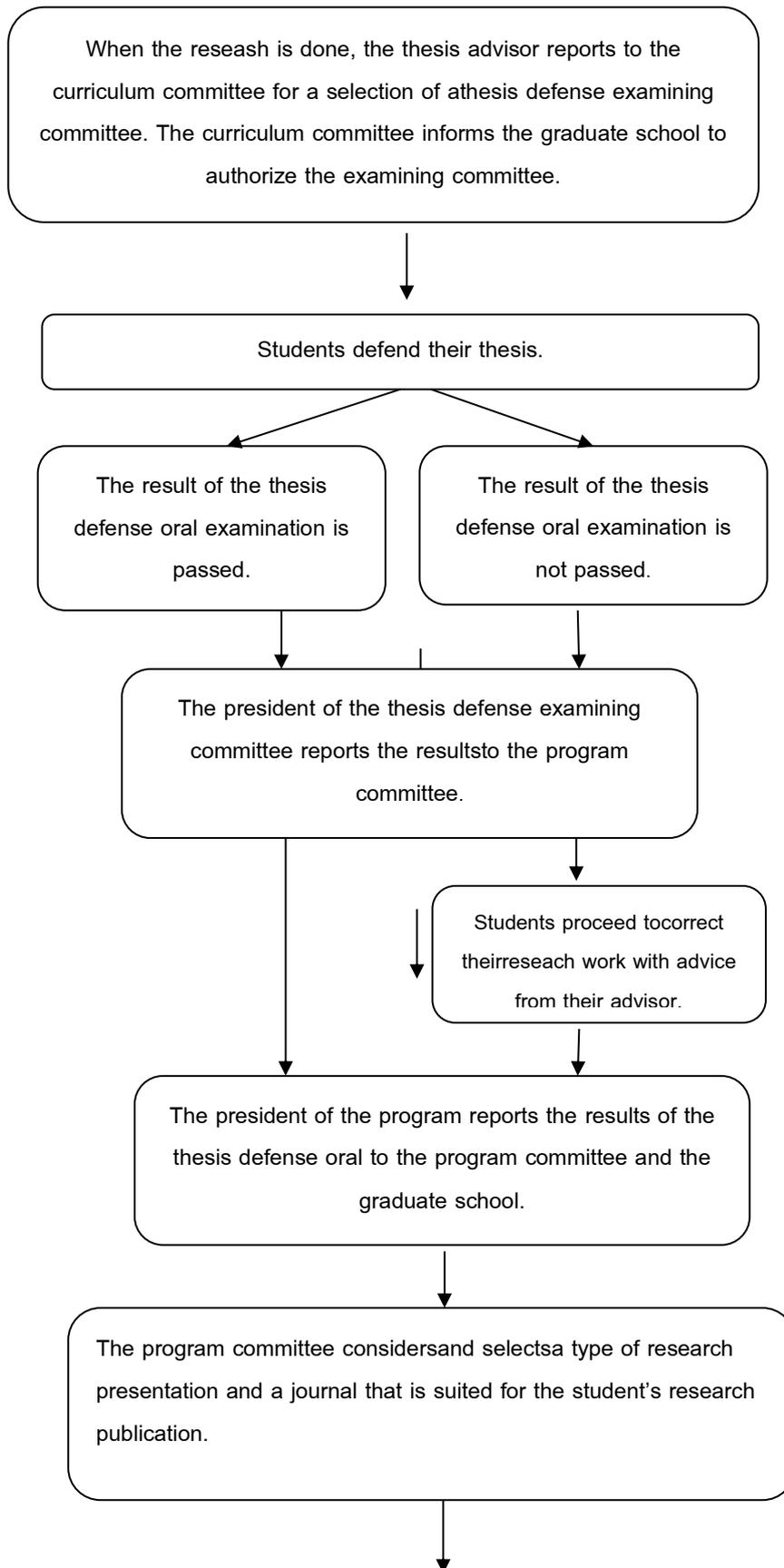
- 2) The complaint receiver reports the complaint to the curriculum committee for consideration.
- 3) The Curriculum Committee meets to manage the complaint and potentially authorizes an investigation board to investigate the complaint.
- 4) The student's advisor informs the student about the management of the complaint by the Committee.

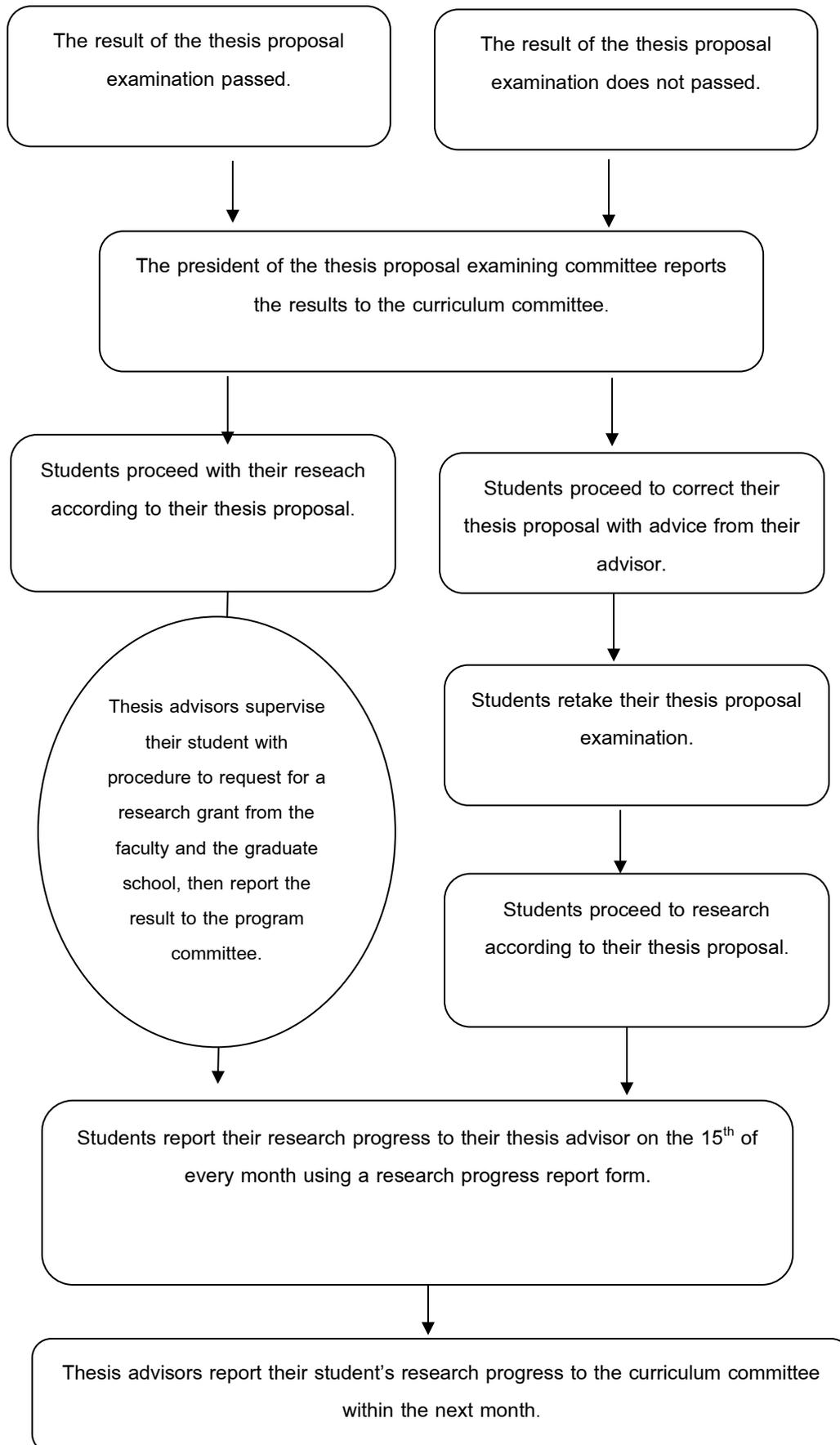
Thesis Supervision for Graduate Students

The program has a useful process for guiding students to choose their thesis topic. The course instructors, who are qualified to be a thesis advisor, discuss individually with each student their readiness and the direction of their research. Before the program starts, there will be an orientation for qualified thesis advisors to present their research, their research funding source, and their cooperation with other researchers or other researcher teams from different institutions. The objectives are for students to acknowledge and consider what they are interested in. Students will have opportunities to meet and discuss with advisors before they make a decision about the direction of their research. Students have the opportunity to make the final decision on their specific research focus. After students make the decision, the program director will report their thesis advisor's name to the graduate school, which follows the administration program procedure.

The Curriculum Committee, including the course directors and instructors, have a meeting about thesis supervision for graduate students every few months. At the beginning of the first semester of the second year, students start to present their research work or pilot experiment to instructors and their classmates continuously every 2 months. The objective is to motivate students. Students will be aware of their remaining work related to their time schedule. Students can also use their presentations in their thesis. The thesis supervision mechanism system is as following:







Students proceed to prepare their research article for publication under the supervision of their advisor.



After students' research has been accepted for publication, the thesis advisor reports to the program committee.

8.4 Academic advice, co-curricular activities, student competition, and other student support services are available to improve learning and employability [4]

The program prepares students for learning by providing several kinds of activities both in and out of class. The objective is to improve their knowledge and ability for use in daily life. The procedure is as following:

The Curriculum Committee consider students' problems and needs. The objective is to proceed management according to students' needs and their learning results. After that, the Curriculum Committee determines different types, durations, and the budget of activities. Examples of activities include an academic seminar about the development of graduate research, a study visit at the leading academic organization, and a lecture from a special instructor who is expert in a related topic. The Curriculum Committee also supports graduate students to attend activities that the faculty and the graduate school provided such as a thesis management program website (iThesis) training, an English improvement project (for master degree), and a national academic conference.

8.5 The physical, social and psychological environment is conducive for education and research as well as personal well-being [5]

The Department has classrooms with learning equipment and internet – including sufficient workplaces for students. A student consulting system is provided. Students can make an appointment for a consultation according to a schedule that instructors and students determine. The Department provides a resting area for students at lunch break, or after study,

with tables, chairs, outlets, and internet access. There is also a supporting laboratory for students who want to practice individually or in a group.

AUN-QA Criterion 9 – Student Quality and Support

AUN-QA Criterion 9 – Checklist

9	Student Quality and Support	1	2	3	4	5	6	7
9.1	The teaching and learning facilities and equipment (lecture halls , classroom, project room, etc.) are adequate and updated to support education and research [1]							
9.2	The library and its resources are adequate and updated to support education and research [3,4]							
9.3	The laboratories and equipment are adequate and updated to support education and research [1,2]							
9.4	The IT facilities including e-learning infrastructure are adequate and updated to support education and research [1,5,6]							
9.5	The standards for environment, health and safety; and access for people with special needs are defined and implemented [7]							
	Overall opinion							

9.1 The teaching and learning facilities and equipment (lecture halls, classroom, project room, etc.) are adequate and updated to support education and research [1]

The Department provides adequate lecture halls, classrooms, project rooms, private rooms, and laboratories for graduate students. Additionally, the Department collaborates with the media and educational technology section in order to provide high-quality audiovisual equipment used in the academic activities of the program.

9.2 The library and its resources are adequate and updated to support education and research [3,4]

Srinakharinwirot University has a modern central library with space for reading, learning, and group meeting. There are books, journals, and domestic and international forms of electronic resources that cover both science and social sciences in the library. The library always updates the database and provides up-to-date knowledge resources for students. Additionally, there is a system for accessing information from library partners around the world.

9.3 The laboratories and equipment are adequate and updated to support education and research [1, 2]

The Faculty of Dentistry has the policy for supporting the research and provides adequate and modern equipment such as portable computers, tablets, broadcast equipment (Wi-fi launcher) in order to facilitate learning. Apart from the dental clinics for treatment learning, the faculty also provides laboratories with high-quality basic research equipment which allow students to have a space to conduct research in cell biology, oral pathology, and molecular biology.

9.4 The IT facilities including e-learning infrastructure are adequate and updated to support education and research [1, 5,6]

The University has an e-learning system that provides services in a variety of platforms, including *moodle.swu.ac.th*, *A-TUTOR*, and *iTunesU*. The University also has the office of computer services for students who have computer and network problems.

9.5 The standard of the environment, health and safety, and access for people with special needs are defined and implemented [7]

The University provides group health insurance and group accident insurance for all students. There is a medical clinic with nurses and medical staff for students who have health emergencies or health problems. The clinic also provides facilities for students with special needs such as a sloping path, audio books, and Braille books. The Faculty of Dentistry also has a clinical emergency guideline for the faculty's dental hospital in order to deal with a health emergency or an accident while providing treatment for patient.

AUN-QA Criterion 10: Quality Enhancement**AUN-QA Criterion 10 – Checklist**

10	Quality Enhancement	1	2	3	4	5	6	7
10.1	Stakeholders needs and feedback serve as input to curriculum design and development. [1]							
10.2	The curriculum design and development process is established and subjected to evaluation and enhancement. [2]							
10.3	The teaching and learning processes, and student assessment are continuously reviewed and evaluated to ensure their relevance and alignment. [3]							
10.4	Research output is used to enhance teaching and learning. [4]							
10.5	Quality of support services and facilities (at the library, laboratory, IT facility and student services) is subject to evaluation and enhancement [5]							
10.6	The stakeholder’s feedback mechanism is systematic and subjected to evaluation and enhancement. [6]							

10.1 Stakeholders needs and feedback serve as input to curriculum design and development. [1]

The Curriculum Committee has adopted the needs of stakeholders, the needs of key skills in the 21st century, Thailand Qualification Framework (TQF), the vision and mission of the University and the faculty’s educational philosophy to be used as important basic information in the program improvement process. The acquired information is applied to the expert’s recommendations in the course criticism activity which lead to the curriculum development.

10.2 The curriculum design and development process is established and subjected to evaluation and enhancement. [2]

Regarding curriculum improvement, the Curriculum Committee has updated the curriculum according to the University procedures to allow the University committee to consider and approve it within the timeframe set by the University. The information about each step of the process is mentioned at the beginning of this report.

Additionally, in the program management, the committee has planned assessment procedures and periods, both during and after studying, periodically in order to deal with any situation that will affect student's learning. Consequently, the assessment results are used to improve the quality and efficiency of teaching and learning in the next round program.

10.3 The teaching and learning processes, and student assessment are continuously reviewed and evaluated to ensure their relevance and alignment [3]

The Curriculum Committee has set up procedures to evaluate learning results. By the end of each semester, the committee will organize a meeting to evaluate the student's learning results. The instructors have to analyze and present the results of teaching and learning in each subject to the program director in order to conduct further improvement of the program in the next semester.

10.4 Research output is used to enhance teaching and learning. [4]

The course instructors have conducted and published research every year. The process of conducting research is used as an example for students to learn. The Curriculum Committee also allows students to participate in conducting research so that they will have experience before making their own dissertation. There is also the proposal development of a subject involved in the course.

10.5 Quality of support services and facilities (at the library, laboratory, IT facility and student services) is subjected to evaluation and enhancement [5]

The university has designed support services and facilities evaluation form which students should evaluate at the end of the semester. The development division has organized the cooperation among the program concerning bodies of university which are program responsible, educational support and service office, student affairs office, physical

development office, central library, computer center and center of educational media and technology. These were the stage for program to reflect needs of students and program to the concerning bodies for evaluation and enhancement. For example, the program has developed the online teaching channel which could make the course available for students to study anytime (application development, online course via i-Tune program). In addition, central library has presented the channel to access library's database online and the student access to library statistic. Therefore, the program has enhanced the lifelong learning skill by design approach for students to access more the database and books of central library (statistic and link database of central library).

10.6 The stakeholder's feedback mechanisms are systematic and subjected to evaluation and enhancement [6]

The program committee have systematically collected feedback from stakeholders in several ways. For example, by online survey which will go directly to stakeholders and the annual conferences of Thai Association of Dental Implant (TADI) or Thai Dental Councils academic annual meeting where entrepreneurs, stakeholders and alumni will join and always evaluated the quality of students (core competency).

AUN QA Criterion 11 – Output

AUN-QA Criterion 11 – Checklist

11	Output	1	2	3	4	5	6	7
11.1	The pass rates and dropout rates are established, monitored and benchmarked for improvement [1]							
11.2	The average time to graduate is established, monitored and benchmarked for improvement [1]							
11.3	Employability of graduates is established, monitored and benchmarked for improvement [1]							
11.4	The types and quantity of research activities by students are established, monitored and benchmarked for improvement [2]							

11	Output	1	2	3	4	5	6	7
11.5	The satisfaction levels of stakeholders are established, monitored and benchmarked for improvement [3]							
	Overall opinion							

11.1 The pass rates and dropout rates are established, monitored and benchmarked for improvement [1]

Explain

The Program is opened for graduate students in 2015, beginning with students entering in the field of Oral Medicine. After, in 2016, the program also opened for students in the Oral Surgery and Implant Dentistry field. The total number of students in the Program is 6. There are the details below:

Oral Medicine field

An Oral Medicine field student, Ms. Wimolrat Worasuthayangkun, passed the thesis defense and graduated in the summer semester of the academic year 2017.

Oral Surgery and Implant Dentistry field

- The First Generation

The first generation students in Oral Surgery and Implant Dentistry field have passed the thesis defense in the first semester of the second year and all of them have finished the second semester of the second year according to the time frame set by the graduate school. There is one student, Dr. Noppanant Trakiattikul (Code 1/2559), who passed the thesis defense and submitted the graduation application to the graduate school during the 2017 summer semester (the deadline for request for graduation of the academic year 2017 is on July 28th, 2018). Another three students are in the process of the research results conclusion and might be applying for graduation within the deadline of the semester 1/2018.

- The Second Generation

Second generation students in the Oral and Dental Implant Surgery field (Code 1/2017) have just finished the second semester of the first year and are planning for the thesis proposal defense within the semester 1/2018 of the second year.

Observation of the research progress and research publication

Oral Medicine field

According to the requirements for graduation of students, there is publication of research for the student in the field of Oral Medicine who has submitted the graduation application; the research topic is “Comparative Study on The Effectiveness of Velscope and Toluidine Blue for Oral Premalignant Lesion Screening”, published in Srinakharinwirot University Dental Journal (SWU Dent J), Year 11, Issue 1 (January-June), 2018 (document attached).

Oral Surgery and Implant Dentistry field

The research of one student who has already passed the thesis defense is waiting for acceptance of publication in the International Journal of Pharmaceutics 2018 – the effect of mannitol used as a drug diluent on MeHA hydrogels for the development of an injectable drug delivery platform (document attached).

Table 11.1 Shows the graduation rate and the resignation of students in each academic year.

Number of Graduates

Admission Year	Number of Admission Students	Number of Graduates a Year (Person / Percentage)		
		2017	2018	2019
2016	1	1		
2017	4		1	3
2018	4			1

List of reference: graduation reports to the graduate school

From the table, it can be seen that there is a delay in graduation of some students since they could not graduate within the 2-year program. There are many factors that affect the student's graduation. However, the Curriculum Committee has discussed and analyzed

the causes of this problem and conducted the plan to solve it. As a result, there are the improvements of the student guidance system using the Expected Learning Outcome (ELO) as a framework for observation and evaluation learning results of students.

11.2 The average time to graduate is established, monitored and benchmarked for improvement [1]

Explain

The table 11.1 shows that the students are unable to graduate in time. The causes and factors of this problem are analyzed.

Factors that Affect Student's Graduation

There are two students who submitted the graduation application to the Graduate school in the summer semester of the 2017 academic year (the final date is July 28th, 2018 according to the graduate school calendar), namely one Oral Medicine field student (Code 1/2558) and one Oral Surgery and Implant Dentistry field student (Code 1/2559). Another three first generation students of Oral Surgery and Implant Dentistry field (Code 1/2559) are in the process of the research result conclusion and might apply for graduation before the deadline of the semester 1/2018.

The using of Expected Learning Outcome (ELO) helps improve an effective framework for observation, control, and evaluation of the learning results of students.

11.3 Employability of graduates is established, monitored and benchmarked for improvement [1]

Explain

The Program does not have obstacles and problems in the employment of the graduates because all the students are dentists who have agencies at both the government and private offices. It can be assumed that the employment rate of graduates in this program is 100 percent.

11.4 The types and quantity of research activities by students are established, monitored, and benchmarked for improvement [2]

Explain

Table 11.3 List of Published Articles of Master's Degree Students

Order	Name – Surname of Students	Articles that have been Published (Written in Reference Form)	Quality Level
1	Dr. Wimolrat Worrasuttayangkurn	Worasuttayangkurn W, Khovidhunkit PS and Rungsiyanont S. Comparative Study on The Efficacy of Velscope and Toluidine Blue for Oral Premalignant Lesion Screening. Swu Dent J 2018.	TCI 1
2	Dr. Noppanan Trakiattikul	Trakiattikul N, Dhanesuan N, Luckanagul JA and Rungsiyanont S. The effect of mannitol used as a drug diluent on hydrogels properties for the development of injectable drug delivery platform. SWU Dent J 2019.	TCI 1
3	Dr. Phuttikarn Sinpreechanon	Sinpreechanon P, Boonzong U, Sricholpech M. Comparative evaluation of periodontal ligament fibroblasts stored in different types of milk: effects on viability and biosynthesis of collagen. European journal of Oral Sciences. https://doi.org/10.1111/eos.12621 .	Scimago index Quartile 1

4	Dr. Panapohn Suk-arj	Suk-arj P, Wongchuensoontorn C and Taebunpakul P. Evaluation of bone formation following the osteotome sinus floor elevation technique without grafting using cone beam computed tomography: A retrospective study. International Journal of Implant Dentistry (submitted).	Pubmed and Web of Science
5	Dr. Supanat Tarapan	Tarapan S, Matangkasombut O, Trachootham D, Sattabanasuk V, Talungchit S, Paemuang W, Phonyiam T, Chokchaitam O, Mungkung O, Lam-ubol A. Oral <i>Candida</i> colonization in xerostomic post-radiotherapy head and neck cancer patients Oral Disease (Submitted)	Scimago index Quartile 1

Supervision of Thesis for Graduate Students

The course has procedures that guide the students about choosing their own thesis topics. First, there is a meeting that the instructors, who have qualifications to be the thesis advisors, present their research field, their past research topics, their possible research fund sources, and their collaborations with other researchers in the faculty or other institutes. Second, the students are allowed to meet the advisors so they can consult and discuss their research interest. One student has to match with one thesis advisor and select their research field. After choosing the advisors, the program director will send the name lists of all the student's advisors to the Graduate School.

The instructors of The Master of Science Program in Oral and Maxillofacial Sciences have a meeting every 3 months in order to update and improve their supervision of their research students. The instructors also allow students to present their research progress or pilot experiments in class in order to give motivation and help them evaluate themselves every 2 months, beginning the first semester of the second year. The goal of all the procedures is to help students carry research and have chances to present and publish their research both in national and international fields.

11.5 The satisfaction levels of stakeholders are established, monitored and benchmarked for improvement [3]

Explain

In the past, the Program has been using the course evaluation system from the University to evaluate the performance and quality of the program, but during the 2018 academic year, the Curriculum Committee established a policy to benchmark the strengths of similar courses to ours from other institutions in Thailand. The Oral Surgery and Implantology program has been increasingly well-known among dentists seeking to further their studies in this field. (From increasing application rate every year). Therefore, the Program Management Committee has created an evaluation form of the curriculum in order to assess the satisfaction of the students in the registered course and the other stakeholders (see the appendix).

