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Appended Form 1

Specifications for Major Program

Name of School (Program) [School of Dentistry, Program of Oral Health Sciences]

Program name (Japanese)	<input type="checkbox"/>
(English)	Program of Oral Engineering
1 Degree to be obtained: Bachelor of Oral Health Sciences	
2 Overview The Program for Oral Health Science provides two courses (Course of Oral Science and Course of Oral Engineering) to educate students to become researchers, educators, or highly advanced medical staff in the area of oral health sciences while liaising with other areas such as medicine, engineering, and nursing in a manner based on scientific evidence. The Course of Oral Engineering aims to enable students to acquire knowledge, skills, and attitudes regarding medicine, dentistry, and engineering, from the basics to the cutting-edge, in order to be able to contribute to the fields of dental medicine and medical care with advanced techniques, knowledge, and rich humanity in line with changes in society and future development in the sciences. The educational program provided in this course educates medical staff in fields of highly advanced oral engineering, researchers in areas of oral health science, dental technicians, and educators.	
3 Diploma policy (policy for awarding degrees and goal of the program) Course of Oral Engineering educates students to be able to integrate knowledge and skills regarding dentistry, medicine, and engineering to work in the following positions in oral engineering: Dental medical staff, with the mindset of researchers, and business people, researchers, and educators with a clinical mindset; Oral engineers who can work in international fields; Educators and researchers who can pioneer fields of oral engineering and establish, systematize, and develop them to a highly specialized level; or Medical staff, educators, and researchers with a deep devotion to humanity, ethics, a deep human spirit, and a decisive sense of responsibility. Based on the aims above, this program will award the degree of bachelor of oral health sciences to students who have acquired the capabilities described below and earned the required credits for the educational course. (1) The ability to integrate and exercise knowledge and skills regarding liberal arts subjects, dental technology, basic dental medicine, clinical dental medicine, adjacent medicine, and related areas	

of engineering;

(2) The normative awareness and manner, together with the knowledge, skills, and communication abilities required for medical staff, and a capability for establishing good relationships with patients and staff, and contributing to patient-oriented team dental medicine; and

(3) The ability to take a leading role in research, education, and clinical fields related to oral engineering, based on state-of-the-art knowledge, advanced skills, information gathering skills, problem solving abilities, an inquiring scientific mind, research capabilities, logical thinking skills, and an ability for lifelong study.

4 Curriculum policy (policy for arranging and implementing the curriculum)

To enable students to achieve the targets that are defined for Course of Oral Engineering, the educational course is organized and implemented according to the following policies:

(1) In the first year, students study liberal arts subjects, together with students in other schools, in order to acquire a wide-ranging intelligence and establish the intellectual foundation required for dental medical staff. In addition to this, through PBL (Problem Based Learning) in the liberal arts seminars, students also acquire the basic attitude, skills, and knowledge required for self-disciplined study. Furthermore, they acquire fundamental knowledge regarding specialized areas in order to establish the foundation for enhancing professional knowledge and skills.

(2) From the second to the fourth year, students study specialized subjects to acquire expertise and specialized skills. The specialized subjects include not only those related to dental technicians but also those regarding basic sciences such as life science, dentistry, and adjacent medicine.

(3) In the third and fourth terms of the third year and in the fourth year, students take the subject "Clinical Practice in Oral Health Engineering" that is provided at the university hospital in order to practice the knowledge and skills that they have acquired up to this time. Students are expected, through this practice, to learn skills and knowledge regarding the tasks of an oral engineer, specialized dental medicine, general dental medicine, and team medicine at a university hospital, and to acquire communication abilities, the normative awareness and manner required for medical staff, social skills, a cooperative mindset, and sound judgment.

(4) In the third and fourth terms of the third year and in the fourth year, students take the subject "Special Study for Graduation" to acquire information gathering skills, problem solving abilities, research capabilities, logical thinking skills, and presentation skills, and to foster an inquiring scientific mind, positiveness, flexibility, creativity, and patience.

(5) This course provides a bio-dental education program and IPE that aims to educate students to foster their scientific inquiring mind and acquire advanced knowledge and medical techniques that make them capable of cooperating with experts in various professions.

Academic achievement is evaluated based on the grade scores for the subjects and the achievement level against the target defined for each educational program.

5 Start time and acceptance conditions

In the first year (when the student enters the university)

In the Program for Oral Health Science, the entrance examination is held for each course. This course is organized only for students who enter the Course of Oral Engineering in the Program for Oral Health Science in the School of Dentistry.

6 Obtainable qualifications

Qualification for the national examination for dental technicians (awarded when the student graduates.)

Students who have earned the credit specified separately are eligible to be awarded the degree in cell culture engineering certified by the Japanese Tissue Culture Association; and to obtain the Basic Grade 2 Certificate for Rehabilitation Make-up from Reiko Kazki Co., Ltd.

7 Class subjects and their contents

* For the class subjects, refer to the subject table in Attached Sheet 1.

* For the details of the class subjects, refer to the syllabus that is published for each academic year.

8 Academic achievement

The evaluation criteria are specified for each evaluation item for academic achievement, and the achievement level against the criteria is designated at the end of each semester.

The evaluation score for each evaluation item is converted to a numerical value (S = 4, A = 3, B = 2, and C = 1) and the evaluation standard for academic achievement, from when the student entered the university to the end of the last semester, is determined using these values while applying weightings. The evaluation standards consist of three levels, i.e. Excellent, Very Good, and Good.

Achievement evaluation	Numerical conversion
S (Excellent: 90 or more points)	4
A (Very good: 80 - 89 points)	3
B (Good: 70 - 79 points)	2
C (Passed: 60 - 69 points)	1

Academic achievement	Evaluation standard
Excellent	3.00 - 4.00
Very Good	2.00 - 2.99
Good	1.00 - 1.99

* Refer to the relationship between evaluation items and evaluation criteria described in Attached Sheet 2.

* Refer to the relationship between evaluation items and class subjects described in Attached Sheet 3.

* Refer to the curriculum map in Attached Sheet 4.

Study achievement in the course (specific knowledge, skills, and attitude that students can obtain)

Knowledge & understanding

1. Knowledge and understanding related to liberal arts such as human and natural sciences
2. Knowledge and understanding related to foreign languages and culture
3. Knowledge and understanding related to the principles of medicine
4. Knowledge and understanding related to the basic attitude required for dental medical staff (dental technicians)
5. Knowledge and understanding related to social dentistry
6. Knowledge and understanding related to life science
7. Knowledge and understanding related to dental materials and biomaterials
8. Knowledge and understanding related to the prevention, medical examination, medical testing, diagnosis, and treatment of disease in areas of dentistry and adjacent medicine
9. Knowledge and understanding related to the specialized fields of dental technicians (dental technology)
10. Knowledge and understanding related to engineering (information processing, CAD/CAM, ME (medical engineering), system engineering, and management science)

Abilities and skills

1. Communication skills required for dental medical staff (dental technician)
2. Abilities and skills related to life science, material science, and social dentistry
3. Abilities, skills, and attitudes related to prevention, medical examination, medical testing, diagnosis, and treatment of disease in the regions of the mouth, jaw, and face
4. Abilities, skills, and attitude required for practically applying techniques in the specialized fields

of dental technicians (dental technology) as a member of a dental medical team

5. Abilities and skills required for applying related engineering (information processing, CAD/CAM, ME (medical engineering), system engineering, management science, and bio-technology)

Comprehensive capability

1. Comprehensive capability and attitude for autonomously and positively studying for the whole of one's life as a member of dental medical staff (dental technician)

2. Comprehensive capability and attitude related to medical testing, diagnosis, treatment, and prevention of disease in the regions of the mouth, jaw, and face

3. Comprehensive capability and attitude required for practically applying techniques in the specialized fields of dental technicians (dental technology)

4. Comprehensive capability for gathering, selecting, logically organizing, and presenting information

5. Comprehensive capability required for problem identification, research planning and promotion, results analysis, and presentation of results in a field related to oral engineering

9. Graduation thesis (graduation research) (meaning, student allocation, timing, etc.)

Students are required to prepare their graduation theses.

Purpose

To enable students to establish a foundation of knowledge and techniques required for research, in order to allow them to make a smooth start in their research at a higher level when they enter the graduate school.

Overview

Students are allocated to one of the departments, i.e. Anatomy and Functional Restorations, Medical System Engineering, and Oral Biology and Engineering. The contents of research vary depending on the department. The details of each department are introduced in the guidance of "Special Study for Graduation." Students join cutting-edge research activities in which the faculty is engaged, or identify a problem regarding oral health sciences by themselves and conduct the research to solve it. They are expected to acquire information gathering skills, problem solving abilities, research capabilities, and logical thinking skills through this process.

Student allocation timing and method

Students are allocated to the department in the second semester of the third year. Although the allocation method is separately defined, a great deal of importance is attached to the wishes of the student.

10. Responsibility

The dental department headquarters council and the faculty council of the School of Dentistry are engaged in the planning and execution of this course. For the processes of evaluation and action for improvement, the dean of the School of Dentistry consults with the dental department headquarters council and the faculty council of the School of Dentistry, and carries out the required actions while taking the results of consultations into consideration.



