

# Fresher's Research Training Program

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring	
Subject	Required	Mehods	Lesson	Total time	16	Credits	1	
Responsible Instructor	SETA YUUJI							
Instructor(s)	SETA YUUJI,ARIYOSHI WATARU,TAKEUCHI HIROSHI,MORIMOTO YASUHIRO,NAKASHIMA KEISUKE,KOKABU SYOUITIROU,KAKUDATE NAOKI,MORISHITA MASAKI,NAKAMURA TAIJI,NAGIRA TAKAMASA							

## Course Description

【Language】 English and Japanese In order to start the research in graduate school, to understand the actual and the theory of the basic knowledge you need to know.

## Attainment Objectives

1. You can think about future career path through the research activities in graduate school.
2. You can understand the laws and regulations and various guidelines for scientific research can respond
3. You can learn how use of the library, and practice the data retrieval methods using the planning and PubMed of research plan based on EBM
4. You can learn a minimum of knowledge of radiation exposure needed to use the X-ray imaging apparatus in animal research center and practice them. You can also explain about typical infection of the experimental animals in detail, particularly about the "zoonotic disease"
5. You can determine whether the reagents you use are non-medical of deleterious substances or poisons. You can explain the safety measures in the laboratory
6. You can explain the critical medical ethics as medical professionals
7. You can understand the standard infection prevention required in p

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report and/or quizzes	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Career Path Take the e-learning of Ethics in scientific research. Learn an overview of the laws, regulations and various guidelines for epidemiological studies and clinical research.	Lecture and e-learning	瀬田 祐司	Complete the e-learning	コンピューター演習室

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Responsible Instructor	SETA YUUJI							
Instructor(s)	SETA YUUJI,ARIYOSHI WATARU,TAKEUCHI HIROSHI,MORIMOTO YASUHIRO,NAKASHIMA KEISUKE,KOKABU SYOUITIROU,KAKUDATE NAOKI,MORISHITA MASAKI,NAKAMURA TAIJI,NAGIRA TAKAMASA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Animal experiments and genetic recombination Learn about infectious diseases of experimental animals, radiation exposure in animal research center, and gene recombination.	Lecture and e-learning	古株 彰一郎 竹内 弘 森本 泰宏 有吉 涉 瀬田 祐司	Review of lecture	301 講義室
3	Industry-university cooperation Learn about industry-university cooperation in order to take advantage of the research at the university in the industry.	Lecture and e-learning	(非)柳楽 隆昌	Review of lecture	301 講義室
4	Infection control in medical care activities Learn a nosocomial infection control and medical accident measures that are required in medical care activities	Lecture and e-learning	中村 太志	Review of lecture	301 講義室
5	Ethics in scientific research	Lecture and e-learning	守下 昌輝	Review of lecture	301 講義室
6	Handling of poisonous and deleterious substances, management of the laboratory Learn about safety measures in the laboratory on the handling of poisonous and deleterious substances used in the experiments.	Lecture and e-learning	竹内 弘	Check the storage and usage of reagents in the laboratory after the lecture	301 講義室
7	Evidence-Based Dentistry Learn basic concepts of EBM/EBD and the steps for implementation	Lecture and e-learning	角館 直樹	Review of lecture	301 講義室
8	Literature search and use of library Learn how to use the library, and practice the data retrieval methods using PubMed. Bioethics Learn about problems of bioethics and medical ethics.	Lecture and e-learning	中島 啓介 瀬田 祐司	Read the textbook prior or post lecture	

# Seminar in Biomaterials (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Course Description

【Language】 English and Japanese In this course, you will learn basic knowledge, handling and experimental test method of dental materials in order to research organic material, metal material and inorganic material. For this purpose, we will teach you the knowledge and skills with regards of denture base resin, composite resin, gold alloy, titanium alloy, porcelain, and fine ceramics in response to your research theme.

## Attainment Objectives

You should achieve following assignments; Knowledge and handling of organic material |Casting of dental alloys, especially gold alloys Knowledge and handling of dental porcelain and fine ceramics Material test methods Preparation of test piece and practice of three point loading test Preparation of test piece and practice of shear test Preparation of test piece and practice of bonding test Using casting machine in response to dental alloy Knowledge and handling of component analysis

## Core Curriculum Item

Core Curriculum	Contents
B	歯科材料と歯科医療機器/歯科用材料と歯科用機器に必要な知識を修得し、医療の提供や発展に必要な考え方を身に付ける。
B-1-1	材料(生体組織を含む)の物理的(光学的、機械的性質を含む)性質を理解している。
B-1-2	材料の化学的性質を理解している。
B-1-3	材料の生物学的性質(生体活性、安全性)を理解している。
B-2-1	成形修復・歯冠修復用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-2	義歯用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-3	接着用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-4	歯科矯正用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-5	歯内療法用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-6	口腔インプラント、口腔外科、歯周治療用材料の種類、成分、特性、用途及び操作方法を理解している。
B-3-1	歯科用材料の成形、加工(切削、焼結、重合、鋳造、溶着等)の原理を理解している。
B-3-2	歯科用機器の種類、構成、原理、特性及び使用方法を理解している。
B-3-3	歯科用検査装置の種類、構成、原理、特性及び使用方法を理解している。
B-3-4	成形・加工用機器(デジタル成形加工を含む)の種類、構成、原理、特性及び使用方法を理解している。

## Reference Books

Title	Author	Publisher
Related text books		

# Seminar in Biomaterials (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI, NAGAMATSU YUKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
contents or the research report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	lecture	池田 弘 永松 有紀	Review of lecture	その他
2	Impression material	lecture	池田 弘 永松 有紀	Review of lecture	その他
3	Denture base resin	lecture	池田 弘 永松 有紀	Review of lecture	その他
4	Composite resin	lecture	池田 弘 永松 有紀	Review of lecture	その他
5	Dental noble metal alloy	lecture	池田 弘 永松 有紀	Review of lecture	その他
6	Dental base metal alloy	lecture	池田 弘 永松 有紀	Review of lecture	その他
7	Dental porcelain	lecture	池田 弘 永松 有紀	Review of lecture	その他
8	Dental fine ceramics	lecture	池田 弘 永松 有紀	Review of lecture	その他
9	Elastic and permanent strain of impression materials	Practice	池田 弘 永松 有紀	Review of lecture	その他
10	Transverse strength of dental resins	Practice	池田 弘 永松 有紀	Review of lecture	その他
11	Bond strength of composite resins	Practice	池田 弘 永松 有紀	Review of lecture	その他
12	Fabrication of wax pattern for gold alloy and casting using centrifugal casting machine	Practice	池田 弘 永松 有紀	Review of lecture	その他
13	Fabrication of wax pattern for titanium alloy and casting using argon arc casting machine	Practice	池田 弘 永松 有紀	Review of lecture	その他
14	Shear strength test of dental porcelain and fine ceramics	Practice	池田 弘 永松 有紀	Review of lecture	その他



2024年度

subject code:211011

# Seminar in Biomaterials (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15	Research report meeting	Practice	池田 弘 永松 有紀	Preparation of presentation	その他

# Seminar in Biomaterials (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI, NAGAMATSU YUKI						

## Course Description

【Language】 English and Japanese The dimensional accuracy and surface property of the working cast significantly affect the fitness of denture base or restorations. In the present course, you will study the effect of how to use hydrocolloid impression material on the various properties of the working cast.

## Attainment Objectives

You should achieve following assignments; Gathering of information of various types of impression material and cast material Learning the principles and using of the method of measurement equipment that is required for the analysis Fabrication of test specimens and operating measurement equipment in the preliminary experiment Calculation of the data obtained in the experiment and graphing and presentation

## Core Curriculum Item

Core Curriculum	Contents
B	歯科材料と歯科医療機器/歯科用材料と歯科用機器に必要な知識を修得し、医療の提供や発展に必要な考え方を身に付ける。
B-1-1	材料(生体組織を含む)の物理的(光学的、機械的性質を含む)性質を理解している。
B-1-2	材料の化学的性質を理解している。
B-1-3	材料の生物学的性質(生体活性、安全性)を理解している。
B-2-1	成形修復・歯冠修復用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-2	義歯用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-3	接着用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-4	歯科矯正用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-5	歯内療法用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-6	口腔インプラント、口腔外科、歯周治療用材料の種類、成分、特性、用途及び操作方法を理解している。
B-3-1	歯科用材料の成形、加工(切削、焼結、重合、鋳造、溶着等)の原理を理解している。
B-3-2	歯科用機器の種類、構成、原理、特性及び使用方法を理解している。
B-3-3	歯科用検査装置の種類、構成、原理、特性及び使用方法を理解している。
B-3-4	成形・加工用機器(デジタル成形加工を含む)の種類、構成、原理、特性及び使用方法を理解している。

## Reference Books

Title	Author	Publisher
Related text books and papers.		

# Seminar in Biomaterials (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI, NAGAMATSU YUKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
contents of the research report meeting	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Fabrication of test specimens I Immediately after taking impression	Practice	池田 弘 永松 有紀	Review of lecture	その他
2	Fabrication of test specimens II After disinfection of the impression	Practice	池田 弘 永松 有紀	Review of lecture	その他
3	Fabrication of test specimens III Under a variety of conditions Fabrication of test specimens IV after leaving impression	Practice	池田 弘 永松 有紀	Review of lecture	その他
4	Fabrication of test specimens IV Under a variety of conditions	Practice	池田 弘 永松 有紀	Review of lecture	その他
5,6	Measurement of the dimensional precision of cast specimens	Practice	池田 弘 永松 有紀	Review of lecture	その他
7~9	Measurement of the surface roughness of cast specimens	Practice	池田 弘 永松 有紀	Review of lecture	その他
10	Measurement of the shape of cast specimens	Practice	池田 弘 永松 有紀	Review of lecture	その他
11,12	Statistical analysis and graphs of all data	Practice	池田 弘 永松 有紀	Review of lecture	その他
13,14	Creating a presentation	Practice	池田 弘 永松 有紀	Review of lecture	その他
15	Research report meeting	Practice	池田 弘 永松 有紀	Preparation of presentation	その他

# Dental Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Course Description

Presentation, reading, introduction, and discussion using research papers for biomaterials or dental materials.

## Attainment Objectives

1. Learn scientific English and understand the differences between Japanese and English expressions.
2. Learn and practice research methods and experimental methods for biomaterials.
3. Learn and practice the latest trends in dental materials from a clinical standpoint.

## Core Curriculum Item

Core Curriculum	Contents
B	歯科材料と歯科医療機器/歯科用材料と歯科用機器に必要な知識を修得し、医療の提供や発展に必要な考え方を身に付ける。
B-1-1	材料(生体組織を含む)の物理的(光学的、機械的性質を含む)性質を理解している。
B-1-2	材料の化学的性質を理解している。
B-1-3	材料の生物学的性質(生体活性、安全性)を理解している。
B-2-1	成形修復・歯冠修復用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-2	義歯用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-3	接着用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-4	歯科矯正用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-5	歯内療法用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-6	口腔インプラント、口腔外科、歯周治療用材料の種類、成分、特性、用途及び操作方法を理解している。
B-3-1	歯科用材料の成形、加工(切削、焼結、重合、鋳造、溶着等)の原理を理解している。
B-3-2	歯科用機器の種類、構成、原理、特性及び使用方法を理解している。
B-3-3	歯科用検査装置の種類、構成、原理、特性及び使用方法を理解している。
B-3-4	成形・加工用機器(デジタル成形加工を含む)の種類、構成、原理、特性及び使用方法を理解している。

## Textbooks

Title	Author	Publisher
Biomaterials, Dental Materials, etc.		online journals

2024年度

subject code:211013

# Dental Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
contents of the presentations	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Gathering information from the English research papers Training of English thinking of clinical trends in the dental materials	Practice	池田 弘 永松 有紀	Review of lecture	その他

# Advanced Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Course Description

Select one of the research themes below.

1 Adhesion 2 Composites 3 Ceramics 4 Biomimics 5 CAD/CAM 6 Antibacterial dental materials 7 Functional water 8 Biocompatibility

Search and read the literature related to that topic. Understand the research background and the current state of the field, summarize what you have learned, and present. Receive advice from professors on the topic. A research plan is constructed based on the advice.

## Attainment Objectives

You should achieve the following assignments; 1 Reading English literature. 2 Explaining the history and current status of the topic. 3 Critical evaluation of literature. 4 Writing an introduction. 5 Drawing your own research plan with references.

## Core Curriculum Item

Core Curriculum	Contents
B	歯科材料と歯科医療機器/歯科用材料と歯科用機器に必要な知識を修得し、医療の提供や発展に必要な考え方を身に付ける。
B-1-1	材料(生体組織を含む)の物理的(光学的、機械的性質を含む)性質を理解している。
B-1-2	材料の化学的性質を理解している。
B-1-3	材料の生物学的性質(生体活性、安全性)を理解している。
B-2-1	成形修復・歯冠修復用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-2	義歯用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-3	接着用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-4	歯科矯正用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-5	歯内療法用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-6	口腔インプラント、口腔外科、歯周治療用材料の種類、成分、特性、用途及び操作方法を理解している。
B-3-1	歯科用材料の成形、加工(切削、焼結、重合、鋳造、溶着等)の原理を理解している。
B-3-2	歯科用機器の種類、構成、原理、特性及び使用方法を理解している。
B-3-3	歯科用検査装置の種類、構成、原理、特性及び使用方法を理解している。
B-3-4	成形・加工用機器(デジタル成形加工を含む)の種類、構成、原理、特性及び使用方法を理解している。

## Textbooks

Title	Author	Publisher
Select it yourself.		

2024年度

subject code:211014

# Advanced Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
contents of the research report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Gathering articless related to your own research subject, read them, compile them in a prescribed format, and present them. Response to questions. Correct the indicated matters and complete the document.s	Practice	池田 弘 永松 有紀	Preparation and review of practices (Preparation of handouts and correction of matters pointed out)	その他



# Advanced Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Course Description

Learn the latest information and future prospects from the following research results, established by the faculty members. 1 Dental adhesion 2 Bactericidal and antimicrobial properties of dental materials 3 Ceramics and composite materials 4 Digital dentistry

## Attainment Objectives

1 Explaining the latest knowledge of the field. 2 Developing a new research plan in the field. 3 Explaining the relationship between the basic knowledge of the field and clinical practice.

## Core Curriculum Item

Core Curriculum	Contents
B	歯科材料と歯科医療機器/歯科用材料と歯科用機器に必要な知識を修得し、医療の提供や発展に必要な考え方を身に付ける。
B-1-1	材料(生体組織を含む)の物理的(光学的、機械的性質を含む)性質を理解している。
B-1-2	材料の化学的性質を理解している。
B-1-3	材料の生物学的性質(生体活性、安全性)を理解している。
B-2-1	成形修復・歯冠修復用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-2	義歯用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-3	接着用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-4	歯科矯正用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-5	歯内療法用材料の種類、成分、特性、用途及び操作方法を理解している。
B-2-6	口腔インプラント、口腔外科、歯周治療用材料の種類、成分、特性、用途及び操作方法を理解している。
B-3-1	歯科用材料の成形、加工(切削、焼結、重合、鋳造、溶着等)の原理を理解している。
B-3-2	歯科用機器の種類、構成、原理、特性及び使用方法を理解している。
B-3-3	歯科用検査装置の種類、構成、原理、特性及び使用方法を理解している。
B-3-4	成形・加工用機器(デジタル成形加工を含む)の種類、構成、原理、特性及び使用方法を理解している。

## Textbooks

Title	Author	Publisher
The faculty member in charge prepares.		

2024年度

subject code:211015

# Advanced Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	IKEDA HIROSHI						
Instructor(s)	IKEDA HIROSHI ,NAGAMATSU YUKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
contents of the research report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Gathering information from faculty lecture Learning presentation method	Practice	池田 弘 永松 有紀	Review of lectures and practice	その他

# Anatomy Practice (Basic course)

Course Affiliation	the Faculty of Dentistry		Grades	1~2 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

## Course Description

【Language】English and Japanese This course deals with the basis of fundamental morphological analysis. It also enhances the development of students' skill in carrying out a morphological experiment.

## Attainment Objectives

The goals of this course are to (1) be able to understand morphological analysis, (2) be able to carry out cell culture (3) be able to prepare tissue section (4) be able to carry out immunohistochemistry.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Usual performance score	10%
Experimental performance in the lab	90%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			瀬田 祐司 豊野 孝 片岡 真司 松山 佳永		
1	Introduction What is morphological analysis.	Lecture	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
2,3	Cell culture (1): prepare culture medium	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
4,5	Cell culture (2): cell culture method	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

2024年度

subject code:211023

# Anatomy Practice (Basic course)

Course Affiliation	the Faculty of Dentistry		Grades	1~2 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6,7	Preparing method of tissue section (1): Fixation	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
8,9	Preparing method of tissue section (2): Sectioning tissue using frozen block	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
10,11	Preparing method of tissue section (3): Sectioning tissue using paraffin block	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
12,13	Immunohistochemistry (1): Detection target protein in section.	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
14,15	Immunohistochemistry (2): Detection target protein in section.	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

# Anatomy Practice (Advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

## Course Description

【Language】 English and Japanese This course deals with the basis of fundamental molecular biological analysis. It also enhances the development of students' skill in carrying out molecular biological experiment.

## Attainment Objectives

The goals of this course are to (1) be able to understand molecular biological analysis, (2) be able to carry out PCR cloning (3) be able to carry out transfection.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Usual performance score	10%
Experimental performance in the lab	90%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction	Lecture	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
2,3	RT-PCR (1): RNA preparation and cDNA synthesis	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
4,5	RT-PCR (2): Prepare gene-specific primers and PCR	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
6,7	PCR Cloning (1): TA cloning	LecturePracti ce	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

2024年度

subject code:211024

# Anatomy Practice (Advanced course)

Course Affiliation	the Faculty of Dentistry		Grades	2~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8,9	PCR Cloning (2): Transformation of plasmid DNA into E coli	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
10,11	PCR Cloning(3): Transformation of plasmid DNA into E coli	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
12,13	Transfection (1): Introduction of gene transfer technology	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
14,15	Transfection (2): Expression vector transfect into cultured cells	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

# Anatomy Practice

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Required	Methods	Practice	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

## Course Description

【Language】 English and Japanese This course deals with the basis of fundamental molecular biological analysis. It also enhances the development of students' skill in carrying out molecular biological experiment.

## Attainment Objectives

The goals of this course are to (1) be able to understand molecular biological analysis, (2) be able to carry out PCR cloning (3) be able to carry out transfection.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Usual performance score	10%
experimental performance in the lab	90%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Lecture	Lecture rooms
1	Introduction	Lecture	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
2,3	RT-PCR (1): RNA preparation and cDNA synthesis	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
4,5	RT-PCR (2): Prepare gene-specific primers and PCR	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
6,7	PCR Cloning (1): TA cloning	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
8,9	PCR Cloning (2): Transformation of plasmid DNA into E coli	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	



2024年度

subject code:211025

# Anatomy Practice

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Required	Methods	Practice	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10,11	PCR Cloning(3): Transformation of plasmid DNA into E coli T	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
12,13	Transfection (1): Introduction of gene transfer technology	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
14,15	Transfection (2): Expression vector transfect into cultured cells	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

# Anatomy Advanced course

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

## Course Description

【Language】 Japanese The aim of this course is to help students acquire an understanding and introducing articles about current topics of life sciences.

## Attainment Objectives

The goals of this course are to (1) be able to read scientific articles logically(2) be able to understand and review articles about life sciences(3) be able to introduce articles to let the audience understand the content

## Textbooks

Title	Author	Publisher
Textbooks and Reference Books : Choose an article that you would like to introduce and discuss with		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Attendance	80%
Question and answer	20%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			瀬田 祐司 豊野 孝 片岡 真司 松山 佳永		
1~15	Understand the article and introduce it including the background of the study	Lecture and Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Choose a topic and prepare for presentation	

# Head and Neck Dissection Course

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KATAOKA SHINJI						
Instructor(s)	KATAOKA SHINJI						

## Course Description

This course provides an in-depth study of the human body, in particular, of the head and neck, using cadaveric dissection.

## Attainment Objectives

The student is expected to gain a three-dimensional knowledge of the structures of head and neck.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
quality of performance in the dissection	60%
lab practical exam	40%

## Etc

If you wish to take this course, please contact by e-mail ([kataoka@kyu-dent.ac.jp](mailto:kataoka@kyu-dent.ac.jp)) in advance.  
Office hours: Monday - Friday 9-17 (by appointment).

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Introduction	Lecture		Related textbooks	
3,4	Skull	Practice		Related textbooks	
5-15	Head and Neck Dissection	Practice		Related textbooks	

# Physiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ONO KENTAROU						
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIEN						

## Course Description

【Language】 English and Japanese In this course, you will learn and practice basic knowledge and skills about studies for thirsty, oral dryness, salivary functions and pain mechanisms. Under the management by supervisors, you will carry out animal behavior analyses, preparation of brain slices, cell dissociation, molecular biological techniques, immunohistochemistry, intracellular dynamics analysis and electrophysiology, based on your research theme.

## Attainment Objectives

1. To develop techniques of behavioral analysis in thirsty and oral dry.
2. To develop techniques of behavioral analysis in pain.
3. To develop techniques of brain slices.
4. To develop techniques of patch-clamp recording.
5. To develop techniques of immunohistochemistry.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports and presentations	100%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Lecture		Review of practices	
2~4	Animal behavior analyses. To learn animal handling and behavioral analyses	Practice		Review of practices	
5~7	Brain slice preparation. To learn how to make slice preparation of thiest centers and electrophysiological recordings	Practice		Review of practices	

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subject code:211031

# Physiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ONO KENTAROU						
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8~10	Making of oral ulcer model. To learn how to make orofacial pain models and its evaluation of pain	Practice		Review of practices	
11~15	Analyses of signal transduction in pain	Practice		Review of practices	

# Physiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	ONO KENTAROU						
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIEN						

## Course Description

【Language】 English and Japanese In this course, you will learn and practice basic knowledge and skills about studies for thirsty, oral dryness, salivary functions and pain mechanisms. Under the management by supervisors, you will carry out animal behavior analyses, preparation of brain slices, cell dissociation, molecular biological techniques, immunohistochemistry, intracellular dynamics analysis and electrophysiology, with high reliability.

## Attainment Objectives

1. To improve techniques of behavioral analysis in thirsty and oral dry.
2. To improve techniques of behavioral analysis in pain.
3. To improve techniques of brain slices.
4. To improve techniques of patch-clamp recording.
5. To improve techniques of immunohistochemistry.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports and presentations	100%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~3	Experiments for water drinking. To learn how to inject drinking-inducible drugs and observe the drinking behavior	Practice		Review of practices	
4~7	Salivary secretion. To measure salivary secretion following injection of saliva-inducible drugs	Practice		Review of practices	
8~10	Oral mucositis and pain. To learn pain mechanism in oral ulcer model	Practice		Review of practices	

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subject code:211032

# Physiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	ONO KENTAROU						
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11 ~ 13	Analysis of pain-related behaviors. To observe behaviors following application of pain-inducible drugs	Practice		Review of practices	
14,15	Analyses of signal transduction in pain. To learn pain mechanisms	Practice		Review of practices	



# Physiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ONO KENTAROU							
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIEN							

## Course Description

【Language】 English and Japanese In this course, you will learn how to analyze data and describe manuscripts for studies for thirsty, oral dryness, salivary functions and pain mechanisms. In necessary, you will perform additional experiments.

## Attainment Objectives

1. To develop manuscripts for thirsty and oral dry.
2. To develop manuscripts for pain.
3. To develop manuscripts for salivary secretion.
4. To improve research ability

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
course attendance	30%
report/presentation	70%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Analyses of animal behaviors To analyze and consider behavioral results	Practice		Review of practices	
3,4	Analyses of salivary secretion To analyze and consider results of salivary secretion	Practice		Review of practices	
5~8	Analyses of pain signaling To analyze and consider results from pain models	Practice		Review of practices	
9~15	Research presentation	Practice		Review of practices	

# Physiology Division Colloquium

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKATOMI CHIHIRO						
Instructor(s)	NAKATOMI CHIHIRO,ONO KENTAROU,HSU CHIACHIEN						

## Course Description

Read and discuss papers or articles to understand the latest research trends in oral physiology.

## Attainment Objectives

- Improve the ability to read scientific papers in English.
- Understand the content of research.
- Improve the ability to critique research.
- Understand the background and trends of research.

## Reference Books

Title	Author	Publisher
Select papers and reference books as needed.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Content of presentation	100%

## Etc

Office hours: as needed

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-15	Read and discuss papers to understand the latest research trends in oral physiology.	Introduce and discuss the papers.	中富 千尋	Read the selected paper carefully and find out about related fields.	その他

# Molecular and Cell Biology Training Program (Bas

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

## Course Description

【Language】 English and Japanese In order to understand the life science, you will understand the principles of the important molecular biology techniques and perform the experiments to obtain the results.

## Attainment Objectives

1. You can perform cell culture. 2. You can handle mice and prepare tissue or cells from mice. 3. You can explain central dogma. 4. You can prepare RNA or protein from tissue or cells. 5. You can understand the principles of the RT-PCR, and perform it. 6. You can understand the principles of the Western blotting, and perform it.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	80%
Oral examination	20%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Orientation An overview of this lecture, and to learn about the basis of molecular biology.	Lecture (Web and Face to Face)	古株 彰一郎	Review of lecture	
3,4	Basis of cell culture I Cell handling How to prepare the culture media	Lecture practi ce (Web and Face to Face)	古株 彰一郎	Preparation about cell culture	
5,6	Basis of cell culture II Cell passage Cell stock	Lecture practi ce (Web and Face to Face)	古株 彰一郎	Review about cell culture	

# Molecular and Cell Biology Training Program (Bas

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7,8	How to handle mice I of mouse handling Treatment with drugs collection Basis Blood	Lecturepracti ce(Web and Face to Face)	古株 彰一郎	Review about mouse handling	
9,10	How to handle mice II Anesthesia for mice Preparation of thymocytes and bone marrow cells from mice	Lecturepracti ce(Web and Face to Face)	古株 彰一郎	Review about the preparation of tissue and cells	
11,12	How to handle mice III Preparation of primary osteoblasts Osteoclast differentiation	Lecturepracti ce(Web and Face to Face)	古株 彰一郎	Review about the osteoblast or osteoclast culture	
13,14	RT-PCR I Preparation of RNA from cells or tissue Measurement of RNA	Lecturepracti ce(Web and Face to Face)	松原 琢磨	Preparation about the principle of RT-PCR	
15,16	RT-PCR II cDNA synthesis Primer design using computer soft	Practice(Web and Face to Face)	松原 琢磨	Preparation about the principle of primer design	
17,18	RT-PCR III PCR Agarose gel electrophorsis	Practice(Web and Face to Face)	松原 琢磨	Review about the principle of RT-PCR	
19,20	Real-time PCR I Principle of Real-time PCR Real-time PCR	Lecturepracti ce(Web and Face to Face)	古株 彰一郎	Preparation about the principle of real-time PCR	
21,22	Real-time PCR II Data analysis	Lecturepracti ce(Web and Face to Face)	古株 彰一郎	Review about the data analysis	
23,24	Western Blotting I Preparation of protein from tissue or cells Measurement of protein	Lecturepracti ce(Web and Face to Face)	Addison William	Preparation about the protein preparation	
25,26	Western Blotting II SDS-PAGE Transfer to PVDF membrane	Lecturepracti ce(Web and Face to Face)	Addison William	Preparation about the principle of Western blotting	

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subject code:211041

# Molecular and Cell Biology Training Program (Bas

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
27,28	Western Blotting III Blocking antibody Reaction with 1st antibody Reaction with 2nd antibody	Practice(Web and Face to Face)	Addison William	Preparation about the protocol of Western blotting	
29,30	Western Blotting IV Stripping Reblotting	Practice(Web and Face to Face)	Addison William	Review about Western blotting	

# Molecular and Cell Biology Training Program (Mid

Course Affiliation	the Faculty of Dentistry			Grades	2~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

## Course Description

【Language】 English and Japanese In order to understand the life science, you will understand the principles of the important molecular biology techniques and perform the experiments to obtain the results. You further will learn the technique that was developed the techniques learned in the basic course, and developed the ability to get a reliable data.

## Attainment Objectives

1. You can understand the principles of gene recombination. 2. You can clone a known gene. 3. You can explain the types and principle of gene transfer, and perform them. 4. You can explain the principle of immunoprecipitation, and perform them. 5. You can explain the types of tag, and detect them. 6. You can explain the principle of luciferase assay, and perform them

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	80%
Oral examination	20%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	PCR cloning I Gene cloning using PCR method Digestion of vector and PCR products with restriction enzyme	Lecture・practice(Web and Face to Face)	古株 彰一郎	Preparation about gene cloning	
3,4	PCR cloning II Dephosphorylation of vector by ALP Ligation	Lecture・practice(Web and Face to Face)	古株 彰一郎	Preparation about ligation	
5,6	PCR cloning III How to prepare competent cells Transformation	Lecture・practice(Web and Face to Face)	古株 彰一郎	Preparation about transformation	

# Molecular and Cell Biology Training Program (Mid

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7,8	PCR cloning IV Pick up colonies Mini-scale culture	Lecture · practice(Web and Face to Face)	古株 彰一郎	Review of the previous step	
9,10	PCR cloning V Mini-preparation Agarose gel electrophoresis	Lecture · practice(Web and Face to Face)	古株 彰一郎	Preparation about mini-scale culture	
11,12	PCR cloning VI Midi-preparation Purification of plasmid	Lecture · practice(Web and Face to Face)	古株 彰一郎	Preparation about Midi-prep	
13,14	Gene function analysis I Types of gene transfer Gene transfer using lipofection method	Lecture · practice(Web and Face to Face)	Addison William	Preparation about gene transfer	
15,16	Gene function analysis II Point mutation based on PCR Screening	Lecture · practice(Web and Face to Face)	Addison William	Preparation about gene transfer	
17,18	Gene function analysis III Principle of luciferase assay Measurement of luciferase activity by luminometer	Lecture · practice(Web and Face to Face)	Addison William	Preparation about luciferase assay	
19,20	Gene function analysis IV Generation of dominant negative form or constitutive active form for gene transfer	practice(Web and Face to Face)	Addison William	Preparation about dominant negative form and constitutive active form	
21,22	Immunoprecipitation I Preparation of protein from cells Measurement of protein Immunoprecipitation	Lecture · practice(Web and Face to Face)	松原 琢磨	Preparation about handling of protein	
23,24	Immunoprecipitation II SDS-PAGE Transfer to PVDF membrane Blocking	practice(Web and Face to Face)	松原 琢磨	Preparation about immunoprecipitation	
25,26	Immunoprecipitation III Reaction with 1st antibody Reaction with 2nd antibody	practice(Web and Face to Face)	松原 琢磨	Review about immunoprecipitation	



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subject code:211042

# Molecular and Cell Biology Training Program (Mid

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
27,28	Tagged I Kind and principle of tag Cloning your interesting gene into FLAG-, HA-, Myc-, GFP-tagged vector	Lecture · practice(Web and Face to Face)	松原 琢磨	Preparation of the kind and principle of Tag	
29,30	Tagged II Detection of tagged protein by anti-tag antibody	Lecture · practice(Web and Face to Face)	松原 琢磨	Review of immunoprecipitation	

# Molecular and Cell Biology Training Program (Adv)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

## Course Description

English and Japanese In order to understand the life science, you will understand the principles of the important molecular biology techniques and perform the experiments to obtain the results. You further will learn the technique related to bone biology and perform them. You also will learn oral presentation and writing article.

## Attainment Objectives

1. You can understand the principles of viral vector and perform gene transfer using retroviral vector. 2. You can explain the principle of chromatin immunoprecipitation, and perform it. 3. You can explain the types and principle of genetically modified mice. 4. You can explain the principle of flow cytometry, and perform it.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	80%
Oral examination	20%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Gene transfer using viral vector I Principle of retroviral vector Generation of retroviral vector 1・ Digestion of vector and PCR products by restriction enzyme・ Dephosphorylation of vector・ Ligation	Lecture・ practice(Web and Face to Face)	松原 琢磨	Preparation about the principle of retroviral vecto	
3,4	Gene transfer using viral vector II Generation of retroviral vector 2・ Preparation of competent cells・ Transformation	Lecture・ practice(Web and Face to Face)	松原 琢磨	Preparation about the generation of retroviral vecto	

# Molecular and Cell Biology Training Program (Adv)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5,6	Gene transfer using viral vector III Generation of retroviral vector 3・ Pick up colonies・ Mini-scale culture	Lecture(Web and Face to Face)	松原 琢磨	Preparation about the generation of retroviral vector	
7,8	Gene transfer using viral vector IV Generation of retroviral vector 4・ Mid-scale culture・ Preparation of packaging cell	Practice(Web and Face to Face)	松原 琢磨	Preparation about the gene transfer using retroviral vector	
9,10	Gene transfer using viral vector V Generation of retroviral vector 5・ Collection of viral supernatant・ Measurement of MOI	Practice(Web and Face to Face)	松原 琢磨	Preparation about the gene transfer using retroviral vector	
11,12	Gene transfer using viral vector VI Generation of retroviral vector 6・ Gene transfer by retroviral vector containing GFP・ Detection of GFP expression by microscop	Lecture(Web and Face to Face)	松原 琢磨	Preparation about the gene transfer using retroviral vector	
13,14	Chromatin immunoprecipitation (ChIP) I Principle of ChIP	Lecture(Web and Face to Face)	古株 彰一郎	Preparation about the principle of ChIP	
15,16	Chromatin immunoprecipitation II Preparation of cells and cross-linking Immunoprecipitation	Practice(Web and Face to Face)	古株 彰一郎	Preparation about ChIP	
17,18	Chromatin immunoprecipitation III PCR	Practice(Web and Face to Face)	古株 彰一郎	Review about ChIP	
19,20	Genetically modified mice I Principle of transgenic mice Principle of knockout mice	Lecture(Web and Face to Face)	古株 彰一郎	Preparation about transgenic or knockout mice	

# Molecular and Cell Biology Training Program (Adv)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KOKABU SYOUITIROU						
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
21,22	Genetically modified mice II Principle of knockin mice Principle of conditional KO mice	Lecture(Web and Face to Face)	古株 彰一郎	Preparation about knockin or conditional knockout mice	
23,24	Analysis of the phenotype of the genetically modified mice I Genotyping by PCR Phenotype analyzed by histology	Lecture・practice(Web and Face to Face)	古株 彰一郎	Preparation about mouse genotyping	
25,26	Analysis of the phenotype of the genetically modified mice II Preparation of primary osteoblasts Osteoclast differentiation	Practice(Web and Face to Face)	古株 彰一郎	Preparation about osteoblast and osteoclast culture	
27,28	Analysis of the phenotype of the genetically modified mice III Analysis of lymphocyte markers by flow cytometry	Practice(Web and Face to Face)	松原 琢磨	Understanding of flow cytometry	
29,30	Analysis of the phenotype of the genetically modified mice IV	Practice(Web and Face to Face)	松原 琢磨	Understanding of flow cytometry	

# Molecular Biology Journal Club

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA, KOKABU SYOUITIROU, Addison William						

## Course Description

【Language】 \*English, Japanese We read the literature describing the current topics of bone metabolism and molecular biology to understand the trends of important, up-to-date research.

## Attainment Objectives

1. You can read English literature and understand its content.
2. You can understand the experimental procedures in the literature.
3. You can evaluate the contents of the literature objectively.
4. You can understand the research background.
5. You can introduce the other person to understand easily the contents of the literature.

## Core Curriculum Item

Core Curriculum	Contents
A-1-1-1	原子と生体を構成する元素を理解している。
A-1-1-2	分子の成り立ちと生体構成分子に関する化学的性質を理解している。
A-1-2-1	アミノ酸とタンパク質の構造、機能及び代謝を理解している。
A-1-2-2	糖質の構造、機能及び代謝を理解している。
A-1-2-3	脂質の構造、機能及び代謝を理解している。
A-1-2-4	電子伝達系と酸化リン酸化を理解している。
A-1-2-5	酵素の機能と調節、主な代謝異常を理解している。
A-1-2-6	ビタミン、ミネラルの種類と作用を理解している。
A-1-2-7	酸化ストレス(フリーラジカル、活性酸素)の発生と作用を理解している。
A-1-2-8	栄養素の相互変換とエネルギー代謝(エネルギーの定義、食品中のエネルギー値、エネルギー消費量、推定エネルギー必要量)を理解している。
A-1-2-9	空腹時、飢餓時、食後、過食時及び運動時における代謝を理解している。
A-1-3-1	メンデルの法則や遺伝子型と表現型の関係を理解している。
A-1-3-2	核酸、遺伝子及び染色体の構造と機能を理解している。
A-1-3-3	デオキシリボ核酸(DNA)複製と修復、DNAからリボ核酸(RNA)への転写、タンパク質合成に至る翻訳を含む遺伝情報の発現及び調節を理解している。
A-1-3-4	遺伝性疾患の発生機序を理解している。
A-1-3-5	遺伝子解析や遺伝子工学技術を理解している。
A-1-3-6	染色体分析とDNA配列決定を含むゲノム解析技術を理解している。
A-1-4-1	真核細胞の全体像と細胞膜、核、細胞小器官及び細胞骨格の構造と機能を理解している。
A-1-4-4	細胞周期、細胞分裂及び主な細胞分化のしくみを理解している。
A-1-5-1	細胞接着の機構を理解している。
A-1-5-2	受容体を介するホルモン、成長因子、サイトカイン等による細胞間及び細胞内の情報伝達機構を理解している。
A-1-5-3	主な細胞外マトリックス分子の種類、構造及び機能を理解している。
A-1-5-4	主な細胞外マトリックス分子の合成と分解を理解している。

# Molecular Biology Journal Club

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA, KOKABU SYOUITIROU, Addison William						

Core Curriculum	Contents
A-2-1-5	多能性幹細胞と基本的な発生学的技術を理解している。

## Textbooks

Title	Author	Publisher
Students will be required to select the articles and related literature.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Selection of article	30%
Oral presentation	40%
Discussion (question and answer)	30%

## Etc

Choose an article that you would like to share the content and discuss about it with members.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Understand the content and trends of important, up-to-date research in bone and skeletal muscle biology and molecular biology area and explained their importance to other persons.	Lecture and practice including presentation and discussion.	古株 彰一郎 松原 琢磨 Addison William	Choose a topic and prepare for presentation.	

# Oral Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	60	Credits	4
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU, YADA NAOMI						

## Course Description

Provide the latest knowledge and information about oral and maxillofacial diseases, to serve as a basis for the future studies on mechanism, diagnosis and treatment of those diseases.

## Attainment Objectives

1. Acquire the latest information and expertise in caries and dentin-pulp complex disease. 2. Acquire the latest information and expertise in periapical lesion. 3. Acquire the latest information and expertise in periodontal lesion. 4. Acquire the latest information and expertise in diseases of jaw and temporomandibular joint. 5. Acquire the latest information and expertise in oral mucosal diseases. 6. Acquire the latest information and expertise in oral cancer and premalignant lesion. 7. Acquire the latest information and expertise in odontogenic tumors and cystic lesions. 8. Acquire the latest information and expertise in non-odontogenic tumors. 9. Acquire the latest information and expertise in non-neoplastic salivary gland diseases. 10. Acquire the latest information and expertise in salivary gland tumors.

## Textbooks

Title	Author	Publisher
handout		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	100%

## Etc

【Office hours】 Kou Matsuo: Mon. ~ Fri. 17:00 ~ 19:00; Naomi Yada: Mon. ~ Fri. 17:00 ~ 19:00; or e-mail communications at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~3	Obtain the latest knowledge on caries and dentin-pulp complex disease from the covered topics.	lecture in office of Oral Pathology	松尾 拡 矢田 直美	report	その他
4~6	Obtain the latest knowledge on periapical lesion from the covered topics.	lecture in office of Oral Pathology	松尾 拡 矢田 直美	report	その他

# Oral Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	60	Credits	4	
Responsible Instructor	MATSUO KOU							
Instructor(s)	MATSUO KOU, YADA NAOMI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7~9	Obtain the latest knowledge on periodontal lesion from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
10~12	Obtain the latest knowledge on diseases of jaw and temporomandibular joint from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
13~15	Obtain the latest knowledge on oral mucosal diseases from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
16~18	Obtain the latest knowledge on oral cancer and premalignant lesion from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
19~21	Obtain the latest knowledge on odontogenic tumors and cystic lesions from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
22~24	Obtain the latest knowledge on non-odontogenic tumors from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
25~27	Obtain the latest knowledge on non-neoplastic salivary gland diseases from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
28~30	Obtain the latest knowledge on salivary gland tumors from the covered topics.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他



# Practice of Oral Pathology (basic course)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

## Course Description

Learn the basic knowledge and skills required for carrying out a study on the main theme of research at our laboratory. Teach the knowledge and skills of the preparation of histopathologic specimens, histochemical, immunohistochemical and ultrastructural analyses. According to the theme of the postgraduate work, teach the required knowledge and skills of biochemical, molecular, microbiological and immunological techniques.

## Attainment Objectives

1. Acquire expertise in the preparation of histopathologic specimen  
 2. Acquire expertise in the preparation of histochemical specimen  
 3. Acquire expertise in the preparation of immunohistochemical specimen  
 4. Acquire expertise in the preparation of electron microscopic specimen  
 5. (According to the theme) acquire expertise in cell culture  
 6. (According to the theme) acquire expertise in extraction of DNA and RNA  
 7. (According to the theme) acquire expertise in extraction of protein  
 8. (According to the theme) acquire expertise in electrophoresis and western blotting  
 9. (According to the theme) acquire expertise in gene cloning and recombination

## Textbooks

Title	Author	Publisher
handout		

## Reference Books

Title	Author	Publisher
Reference materials		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	100%

## Etc

【Office hours】 Kou Matsuo: Mon.~Fri. 17:00~19:00 or e-mail communications at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Practice of the preparation of histopathologic specimen	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他

# Practice of Oral Pathology (basic course)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3,4	Practice of the preparation of histochemical specimen	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
5,6	Practice of the preparation of immunohistochemical specimen	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
7,8	Practice of the preparation of electron microscopic specimen	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
9,10	Practice of cell culture	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
11	Practice of the extraction of DNA and RNA	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
12	Practice of the extraction of protein	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
13	Practice of RT-PCR and agarose gel electrophoresis	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
14	Practice of protein electrophoresis and western blotting	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他
15	Practice of gene cloning and recombination	practice in office and laboratory of Oral Pathology	松尾 拓	report	その他

# Practice of Oral Pathology (advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

## Course Description

Promote the study on the given theme of research. Train to produce reliable data in experiments using histopathologic, histochemical, immunohistochemical, ultra-structural, biological, molecular, microbial, immunological techniques.

## Attainment Objectives

1. Improve the skill in preparation of histopathologic specimen. 2. Obtain data from histochemical specimens for a research paper. 3. Obtain data from immunohistochemical specimens for a research paper. 4. Obtain data from electron microscopic specimens for a research paper. 5. Obtain data from cell culture experiments for a research paper. 6. Obtain data from extracted DNA and RNA for a research paper. 7. Obtain data from extracted protein for a research paper. 8. Increase reliability of the experimental data. 9. Improve the skills in designing experiments and developing research.

## Textbooks

Title	Author	Publisher
handout		

## Reference Books

Title	Author	Publisher
reference materials		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	50%
Presentation	50%

## Etc

【Office hours】 Kou Matsuo: Mon.~Fri. 17:00~19:00 or e-mail communications at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Analyze data obtained from microscopic specimens. Discuss and summarize them.	Practice in office of Oral Pathology	松尾 拓	Practice	その他
3,4	Analyze data obtained from electron microscopic specimens. Discuss and summarize them.	Practice in office of Oral Pathology	松尾 拓	Practice	その他

# Practice of Oral Pathology (advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5,6	Analyze data obtained from cell culture. Discuss and summarize them.	Practice in office of Oral Pathology	松尾 拓	Practice	その他
7,8	Analyze data obtained from experiments using biochemical and molecular techniques. Discuss and summarize them.	Practice in office of Oral Pathology	松尾 拓	Practice	その他
9~11	Presentation of research findings	Practice in office of Oral Pathology	松尾 拓	Practice	その他
12~15	Learn how to write a research paper and come up with the outline of thesis paper.	Practice in office of Oral Pathology	松尾 拓	Practice	その他

# Colloquium of Oral Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

## Course Description

Read intensively the related literatures and discuss their contents to understand new trends of general pathological and oral pathological research. Also present each participant's research results and discuss them.

## Attainment Objectives

1. Improve the ability to understand exactly the meaning of English literatures.
2. Understand exactly the contents of research paper and presentation.
3. Improve the ability to assess research.
4. Understand background and trend of research.
5. Improve the skills in research presentation.

## Textbooks

Title	Author	Publisher
handout		

## Reference Books

Title	Author	Publisher
reference materials		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	50%
Presentation	50%

## Etc

【Office hours】 Kou Matsuo: Mon.~Fri. 17:00~19:00; or e-mail communications at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation. Explanation of the outline of research performed at the division of Oral Pathology and discussion.	practice in office of Oral Pathology	松尾 拓	report	その他
2,3	Know the recent trend of research on premalignant lesion and carcinoma in situ, and discuss it.	practice in office of Oral Pathology	松尾 拓	report	その他

# Colloquium of Oral Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Introduce and discuss participant's research and related literatures (I).	practice in office of Oral Pathology	松尾 拓	report	その他
5,6	Know the recent trend of research on tumor marker, and discuss it.	practice in office of Oral Pathology	松尾 拓	report	その他
7	Introduce and discuss participant's research and related literatures (II).	practice in office of Oral Pathology	松尾 拓	report	その他
8,9	Know the recent trend of research on wound healing, and discuss it (I).	practice in office of Oral Pathology	松尾 拓	report	その他
10	Introduce and discuss participant's research and related literatures (III).	practice in office of Oral Pathology	松尾 拓	report	その他
11,12	Know the recent trend of research on wound healing, and discuss it (II).	practice in office of Oral Pathology	松尾 拓	report	その他
13	Introduce and discuss participant's research and related literatures (IV).	practice in office of Oral Pathology	松尾 拓	report	その他
14,15	Summarize the discussion about participants' research, and discuss the future development of the research.	practice in office of Oral Pathology	松尾 拓	report	その他

# Clinical Diagnostic Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	60	Credits	4	
Responsible Instructor	MATSUO KOU							
Instructor(s)	MATSUO KOU, YADA NAOMI							

## Course Description

Teach clinical diagnostic pathology to perform a diagnostic task as a routine work at the division of Oral Pathology. Also provide the latest information on oral and maxillofacial diseases, focusing on the pathological diagnosis.

## Attainment Objectives

1. Learn and practice pathological anatomy (autopsy). 2. Learn and practice biopsy diagnosis. 3. Learn handling of the surgical materials and practice diagnosis. 4. Learn and practice cytological diagnosis. 5. Learn and practice intraoperative rapid diagnosis. 6. Learn and practice preparation of histopathologic specimens. 7. Learn and practice histochemical and immunohistochemical staining. 8. Acquire expertise in pathological diagnosis of oral and maxillofacial diseases. 9. Acquire expertise in differential diagnosis of benign and malignant tumors.

## Textbooks

Title	Author	Publisher
handout		

## Reference Books

Title	Author	Publisher
Pathologic basis of disease, 10th edition	Robbins & Cotran	Elsevier
Pathology and Genetics of Tumours of the Head and Neck (IARC)		WHO Classification of Tumours
WHO Classification of Tumours, Pathology and Genetics of Tumours of the Head and Neck		
Reference materials		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	0%

## Etc

【Office hours】 Kou Matsuo: Mon. ~ Fri. 17:00 ~ 19:00; Naomi Yada: Mon. ~ Fri. 17:00 ~ 19:00; or e-mail communications at any time

# Clinical Diagnostic Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	60	Credits	4
Responsible Instructor	MATSUO KOU						
Instructor(s)	MATSUO KOU, YADA NAOMI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Learn outline of human pathology	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
3~5	Learn outline of pathological anatomy (autopsy)	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
6~8	Learn outline of biopsy	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
9~11	Learn outline of handling of the surgical materials	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
12~14	Learn outline of cytological diagnosis	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
15~17	Learn outline of intraoperative rapid diagnosis	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
18~20	Learn outline of the preparation of histopathologic specimens	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
21~23	Learn outline of histochemical and immunohistochemical staining	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
24~26	Learn outline and specificity of pathological diagnosis of oral and maxillofacial diseases, and also obtain the latest specific information on oral pathological diagnosis.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他
27~30	Learn differential diagnosis of benign and malignant tumors.	lecture in office of Oral Pathology	松尾 拓 矢田 直美	report	その他



# Practice of Clinical Diagnostic Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	YADA NAOMI						
Instructor(s)	YADA NAOMI						

## Course Description

Acquire skills in clinical diagnostic pathology, and develop an ability to make pathological diagnosis.

## Attainment Objectives

1. Acquire the skill of handling biopsy materials.2. Acquire the skill of handling surgical materials.3. Acquire the skill of cytological materials.4. Acquire the skill of materials of intraoperative rapid diagnosis.5. Experience autopsy and expand the knowledge of it.6. Acquire expertise in diagnosis of main diseases of oral and maxillofacial region.7. Acquire expertise in diagnosis of main general diseases.8. Acquire the skill in pathological diagnostic report writing.9. Acquire the skill in preparing manuscript of case report.

## Textbooks

Title	Author	Publisher
handout		

## Reference Books

Title	Author	Publisher
WHO Classification of of Head and Neck Tumours		IARC
handout		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	100%

## Etc

【Office hours】 Mon.~Fri. 17:00~19:00; or e-mail communications at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Lecture	矢田 直美	Report	
2, 3	Learn and practice the procedure of handling of biopsy and surgical materials.	Practice	矢田 直美	Report	
4, 5	Learn and practice the procedure of handling of cytological materials.	Practice	矢田 直美	Report	

# Practice of Clinical Diagnostic Pathology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	YADA NAOMI						
Instructor(s)	YADA NAOMI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Learn and practice the procedure of handling of materials of intraoperative rapid diagnosis.	Practice	矢田 直美	Report	
7	Learn and practice the procedure of autopsy.	Practice	矢田 直美	Report	
8, 9	Learn outline of main diseases of oral and maxillofacial region and practice diagnosis.	Practice	矢田 直美	Report	
10, 11	Learn outline of main general diseases and practice diagnosis	Practice	矢田 直美	Report	
12, 13	Learn and practice the pathological diagnostic report writing.	Practice	矢田 直美	Report	
14, 15	Learn and practice the preparation of manuscript of case report.	Practice	矢田 直美	Report	

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Course Description

You can obtain novel information and knowledge concerning life sciences for infection and immunity in molecular cell biology. At this course, you should perform a group study for individual themes, including "periodontopathic bacteria", "pattern recognition receptors" and "osteimmunology".

## Attainment Objectives

To obtain novel information and knowledge for

- Virulence factors responsible for infection
- Dental biofilm
- Oral infectious diseases
- Recognition and elimination of pathogens in immune system
- Cytokines and inflammatory mediators
- Pattern recognition receptors
- Role of immune cells in inflammatory response
- Host defense in oral lesion
- Diagnosis, prevention and treatment of infectious diseases
- Inflammasome
- Bone remodeling
- Interaction between bone metabolisms and immune system

## Textbooks

Title	Author	Publisher
Handout		

## Reference Books

Title	Author	Publisher
Recent reports in our laboratory publications and reference papers concerning this lecture		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports after the group studies and lectures	100%

## Etc

You can ask your study-counsel in our office time at our department in the 11th floor of main building. Email is available at any time.

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Molecular biology for pathogenic microbes : Fundamental knowledge of molecular biology and microbiology for studying infectious diseases	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
2	Molecular biology for pathogenic microbes : Knowledge for adhesion molecules and endotoxin bow pathogenic bacteria	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
3	Molecular biology for pathogenic microbes : Structure and functions of dental biofilm	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
4	Molecular biology for pathogenic microbes : Virulence factors of periodontopathic bacteria	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
5	Molecular biology for pathogenic microbes : Structure and functions of human oral microbiome	Lecture	有吉 涉 吉岡 香絵 山崎 亮太	Review of group study Report	Moodle Microsoft Teams
6	Molecular biology for host defense against infection : Fundamental knowledge of molecular biology for studying immunology	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
7	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by innate immune system	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by humoral immune system	Group study	有吉 涉 山崎 亮太 吉岡 香絵	Pre-reading of handout	Moodle Microsoft Teams
9	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by cell-mediated immune system	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
10	Molecular biology for host defense against infection : Host defense by saliva and immune system in oral lesion	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
11	Molecular biology for host defense against infection : Approach for diagnosis, prevention and treatment of oral infectious diseases in oral lesion	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
12	Molecular biology for host defense against infection : Molecular mechanisms involved in activation of inflammasome in inflammatory response	Lecture	有吉 涉 吉岡 香絵 山崎 亮太	Review of group study Report	Moodle Microsoft Teams
13	Inflammatory bone resorption : Molecular mechanisms involved in regulation of bone remodeling	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
14	Inflammatory bone resorption : Regulation of immunomodulatory molecules in bone metabolisms	Group study	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams

2024年度

subject code:211061

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15	Inflammatory bone resorption : Osteoimmunological approach for treatment of inflammatory bone resorption	Lecture	有吉 涉 吉岡 香絵 山崎 亮太	Review of group study Report	Moodle Microsoft Teams

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Course Description

You can study novel issue of infectious diseases and immunity through scientific papers, which were recently published on scientific journal concerning infection and immunity. At this course, you should explain the objects, methods, results and discussion in detail and we can share novel knowledge, which require to your experiments, through the discussion on this seminar.

## Attainment Objectives

- Bring up your ability to read scientific papers
- Bring up your ability to think critically
- Bring up your ability to think logically

## Textbooks

Title	Author	Publisher
Novel scientific papers, Nature, Cell, Science, etc		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentations and discussions	100%

## Etc

You can ask your study-counsel in our office time at our department in the 11th floor of main building. Email is available at any time.

2024年度

subject code:211062

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	1. Understanding the details of novel experiments for infectious diseases and immunity 2. Discussion about experimental view	Introduction of novel scientific paper and discussion	吉岡 香絵 有吉 涉 山崎 亮太	Reading paper intensively and investigating issues on the area related to your experiments  Studying the issues that are pointed out in the presentation	Moodle Microsoft Teams



# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Course Description

At this course, you should explain the objects, methods and results of your experiments. The instructors point out the critical points, which require to your experiments, through the discussion on this seminar.

## Attainment Objectives

- Bring up your ability to explain your experimental data
- Bring up your ability to understand the principles of experimental procedures and interpretation of results.
- Bring up your ability to listen to the reports of others and consider whether they can be applied to your own research.

## Textbooks

Title	Author	Publisher
Research lab notebook and reference papers concerning your project		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentations and discussions	100%

## Etc

You can ask your study-counsel in our office time at our department in the 11th floor of main building. Email is available at any time.

2024年度

subject code:211063

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	1. Understanding the background, methods and results of your experiments 2. Discussion about experimental data	Presentation and discussion of your experiments	山崎 亮太 有吉 涉 吉岡 香絵	Reading paper intensively and preparation for your presentation  Studying the issues that were pointed out in the presentatio	601 講義室 その他 Moodle Microsoft Teams

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

## Course Description

You can obtain basic knowledge and techniques of molecular biology for studying infection and immunity.

## Attainment Objectives

To obtain knowledge and technique for

Cell culture

Bacteria culture

RNA extraction from cultured cell

I real-time RT-qPCR analysis

Protein preparation from cultured cell

Western blotting analysis

## Textbooks

Title	Author	Publisher
Handout		

## Reference Books

Title	Author	Publisher
Recent reports in our laboratory publications and reference papers concerning this lecture		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Discussion	100%

## Etc

You can ask your study-counsel in our office time at our department in the 11th floor of main building. Email is available at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation: Aim and overview of this lecture	Lecture	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Cell culture : Preparation of culture media and cell cultivation	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
3	Cell culture : Cell passage and stock	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
4	Bacteria culture : Aseptic technique, preparation of media and bacteria cultivation	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
5	Bacteria culture : Pick up a single colony from plate, small-scale culture and large-scale culture	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
6	real-time RT-qPCR analysis : Principle of real-time RT-qPCR and primer design	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
7	real-time RT-qPCR analysis : RNA extraction from cultured cell and cDNA synthesis	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
8	real-time RT-qPCR analysis : Real-time RT-qPCR	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
9	real-time RT-qPCR analysis : Data analysis for real-time RT-PCR	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
10	Western blotting analysis : Principle of Western blotting and gel preparation	Lecture and Practice	有吉 涉 吉岡 香 山崎 絵 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams

# Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YOSHIOKA YOSHIE, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Western blotting analysis : Protein preparation from cultured cell	Lecture and Practice	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
12	Western blotting analysis : SDS-PAGE and blotting	Lecture and Practice	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
13	Western blotting analysis : Blocking and 1st antibody reaction	Lecture and Practice	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
14	Western blotting analysis : 2nd antibody reaction and chemiluminescent detection using ECL	Lecture and Practice	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams
15	Western blotting analysis : Data analysis for Western blotting	Lecture and Practice	有吉 涉 吉岡 香絵 山崎 亮太	Pre-reading of handout	その他 Moodle Microsoft Teams

# Specialized study of infectious diseases

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

## Course Description

You will identify issues related to your research projects and formulate methods and research plans based on these issues. In addition, through presentations of experimental research results in the meeting, you will have opportunities to update knowledge and exchange information in your research areas. The instructors conduct exercises and education as tutors in discussion.

## Attainment Objectives

Bring up your ability to identify issues regarding your own research project, based on trends in research fields.

Bring up your ability to understand and explain the principles and interpretation of experimental procedures.

Bring up your ability to interpret and discuss the results.

Bring up your ability to discuss with several researchers and to identify techniques that can be applied to your own research.

## Textbooks

Title	Author	Publisher
Research lab notebook and reference papers concerning your project.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Planning research project	25%
Interim report	25%
Conference report	25%
Final report	25%

## Etc

You can ask your study-counsel in our office time at our department in the 11th floor of main building. Email is available at any time.

# Specialized study of infectious diseases

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1	Research planning 1: Develop the ability to identify one's own research problem through reading of relevant papers.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers and identification of research issues [after learning task] Revision of extracted research issues	その他 Moodle Microsoft Teams
2	Research Planning 2: Understand the principles through the proposal of a research method to prove the extracted research question.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers and suggestions for research methods [after learning task] Revision of proposal method	その他 Moodle Microsoft Teams
3	Research Planning 3: Develop research planning skills by constructing a research plan to carry out the proposed research method.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers and development of a research plan [after learning task] Revision of drafting plan	その他 Moodle Microsoft Teams
4	Interim Report 1: Develop the ability to organize data obtained by August and compile research results.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers [after learning task] Interpretation and compilation of research data	その他 Moodle Microsoft Teams

# Specialized study of infectious diseases

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
5	Interim Report 2: Develop presentation skills of research results through preparation for presentation of data obtained by August.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers [after learning task] Devising a presentation structure	その他 Moodle Microsoft Teams
6	Interim Report 3: Develop scientific question-and-answer skills by giving a presentation and accurately answering faculty members' questions about your presentation.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Creating presentation slides [after learning task] Correction of points raised in presentation	その他 Moodle Microsoft Teams
7	Interim Report 4: Cultivate the ability to summarize the content of the questions and answers from the presentation.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Creating presentation slides [after learning task] Correction of points raised in presentation	その他 Moodle Microsoft Teams
8	Interim Report 5: Identify research issues from the feedback, and develop research plans.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Identification of new research topics [after learning task] Suggestions for research methods and development of a research plan	その他 Moodle Microsoft Teams
9	Conference 1: Explore conferences in research area and understand research topics from past presentations. Develop the ability to organize research results by preparing abstracts for conference (3rd and 4th grade students).	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Searching for information on conferences and confirming the content of presentations [after learning task] Preparation of manuscript	その他 Moodle Microsoft Teams



# Specialized study of infectious diseases

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
10	Conference 2: Develop the ability to understand the relevance of research and to identify problems by reading the abstracts of the conferences. Develop the ability to present research results through preparation for conference (3rd and 4th grade students).	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Confirmation of conference abstract content [after learning task] Extraction of discussion items and creation of presentation slides and posters	その他 Moodle Microsoft Teams
11	Conference 3: Participate in conferences and actively ask questions to the presenters of related topics, and cultivate the ability to engage in discussion. Develop scientific question and answer skills by accurately answering questions about your presentations (3rd and 4th grade students)..	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Preparation for presentation and Q&A session [after learning task] Summary of questions and answers	その他 Moodle Microsoft Teams
12	Conference 4: Develop the ability to summarize the content of questions and answers at conferences, and to feed back and reflect on the results of your research.	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Identification of research issues based on questions and answers [after learning task] Suggestions for research methods and development of a research plan	その他 Moodle Microsoft Teams
13	Report of research results 1: Develop the ability to compile research results through the preparation of an interim report (2nd-3rd year) and a final report of research results (final year).	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Close reading of relevant papers and drafting of the structure of the report [after learning task] Revision of report structure	その他 Moodle Microsoft Teams

# Specialized study of infectious diseases

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	Report of research results 2: Develop the ability to reflect on research findings through the preparation of interim reports (2nd-3rd year) and a final report of research results (final year).	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Preparation of draft report [after learning task] Revision of draft report	その他 Moodle Microsoft Teams
15	Report of research results 3: Develop the ability to summarize the results of your own research by preparing an interim report (1st-3rd year) and a final report of research results (final year).	Exercises and Discussions	有吉 涉 山崎 亮太	[before learning task] Preparation of report [after learning task] Revision and submission of report	その他 Moodle Microsoft Teams

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 Japanese In the present, the elderly is administered a large number of drugs for systemic disease. In this course, you will study the hematologic drugs (anticoagulant drugs and antiplatelet drugs) and central nervous system drugs (antidepressants, etc.).

## Attainment Objectives

1. You will administer the proper drug to the patient with systemic disease. 2. You will treat the patient with systemic disease with safety. 3. You will explain the drugs used in systemic disease.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	50%
Activities in lectures and exercises	50%

## Etc

Student consultation: Accepted at any time by email.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1	Outline of hematologic drugs and central nervous system drugs	Lecture (Combination of on-line and in-person class)			
2	Hematologic drugs 1 You will obtain knowledge of anticoagulant drug (heparin).	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
3	Hematologic drugs 2 You will obtain knowledge of anticoagulant drug (low molecular weight heparin).	Lecture (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Hematologic drugs 3You will obtain knowledge of anticoagulant drug (warfarin).	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
5	Hematologic drugs 4You will obtain knowledge of antiplatelet drug (aspirin).	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
6	Hematologic drugs 5You will obtain knowledge of new antiplatelet drugs .	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
7	Hematologic drugs 6You will study the things to be careful about the patients who take hematologic drugs in dental treatment.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
8	Hematologic drugs 7You will study the things to be careful about the patients who take hematologic drugs in dental treatment.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
9	Central nerves system drugs 1You will obtain knowledge of mental disorder.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
10	Central nerves system drugs 2You will obtain knowledge of drugs used in Parkinsonism.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
11	Central nerves system drugs 3You will obtain knowledge of antidepressants.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Central nerves system drugs 4You will obtain knowledge of drugs used in Alzheimer disease.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
13	Central nerves system drugs 5You will obtain knowledge of drugs used in epilepsy.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
14	Central nerves system drugs 6You will study the drugs used in the elderly.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
15	SummaryYou will study the relationship between dental treatments and hematologic or central nerves system drugs.	Lecture and practice (Combination of on-line and in-person class)			

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 Japanese In the present, the elderly is administered a large number of drugs for systemic disease. In this course, you will study the cardiovascular drugs (drugs used in hypertension, etc.) and central nervous system drugs (antidepressants, etc.).

## Attainment Objectives

1. You will administer the proper drug to the patient with systemic disease. 2. You will treat the patient with systemic disease with safety. 3. You will explain the drugs used in systemic disease.

## Reference Books

Title	Author	Publisher
Goodman & Gilman's the Pharmacological Basis of Therapeutics		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	50%
Activities in lectures and exercises	50%

## Etc

Student consultation: Accepted at any time by email.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Outline of cardiovascular drugs and central nervous system drugs	Lecture (Combination of on-line and in-person class)			
2	Cardiovascular drugs 1 You will obtain knowledge of drugs used in hypertension.	Practice (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Cardiovascular drugs 2 You will obtain knowledge of drugs used in hypertension.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
4	Cardiovascular drugs 3 You will obtain knowledge of drugs used in heart failure.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
5	Cardiovascular drugs 4 You will obtain knowledge of drugs used in the treatment of angina pectoris.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
6	Cardiovascular drugs 5 You will obtain knowledge of antiarrhythmic drugs.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
7	Cardiovascular drugs 6 You will study the things to be careful about the patients who take cardiovascular drugs in dental treatment.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
8	Cardiovascular drugs 7 You will study the things to be careful about the patients who take cardiovascular drugs in dental treatment.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
9	Central nerves system drugs 1 You will obtain knowledge of mental disorder.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
10	Central nerves system drugs 2 You will obtain knowledge of antidepressants.	Practice (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Central nerves system drugs 3You will obtain knowledge of drugs used in mania.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
12	Central nerves system drugs 4You will obtain knowledge of drugs used in Alzheimer disease.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
13	Central nerves system drugs 5You will obtain knowledge of antipsychotic drugs.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
14	Central nerves system drugs 6You will study alcoholism and drug dependence.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
15	SummaryYou will study the relationship between dental treatments and cardiovascular drugs or central nerves system drugs.	Lecture and practice (Combination of on-line and in-person class)			



# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 Japanese In this course, you will read the literature of drug which has a close relationship with dental treatments and obtain the up-to-date knowledge of drugs. You will study the adverse effects of drugs used in dental treatment.

## Attainment Objectives

1. You will administer drugs to patients with effectively and safety. 2. You will obtain the up-to-date knowledge of drugs. 3. You will read scientific articles logically.

## Reference Books

Title	Author	Publisher
The antimicrobial stewardship textbook for lifelong continuing education		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	50%
Activities in lectures and exercises	50%

## Etc

Student consultation: Accepted at any time by email.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	You will discuss the lecture and practice in this course.	Lecture (Combination of on-line and in-person class)			
2	Antimicrobial drugs 1You will obtain knowledge of the theory of PK-PD.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Antimicrobial drugs 2 You will obtain knowledge of the theory of PK-PD.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
4	Antimicrobial drugs 3 You will study resistant bacteria.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
5	Antimicrobial drugs 4 You will obtain knowledge of carbapenem antibiotics.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
6	Antiviral drugs You will obtain knowledge of new anti-influenza drugs.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
7	Antiplatelet drugs 1 You will study the coagulation of blood and fibrinolytic system.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
8	Antiplatelet drugs 2 You will obtain knowledge of new antiplatelet drugs.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
9	Antiplatelet drugs 3 You will study the relationship between dental treatment and new antiplatelet drugs.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
10	You will study the guideline for use of the coagulation of blood inhibitors.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Antifungal drugs 1 You will obtain knowledge of antifungal drugs. You will study the application of antifungal drugs in dental treatment.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
12	Antifungal drugs 2 You will study the drug-interaction of antifungal drugs.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
13	Pharmaceuticals for osteoporosis 1 You will obtain knowledge of bisphosphonates.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
14	Pharmaceuticals for osteoporosis 2 You will study the adverse effect of bisphosphonates.	Lecture (Combination of on-line and in-person class)		Careful reading of handout	
15	Summary You will study the administration of drugs in dental treatment with safety.	Lecture and practice (Combination of on-line and in-person class)			

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 Japanese In this course, you will learn about basic knowledge, mechanism of action, clinical application, and proper use of newly developed drugs.

## Attainment Objectives

1. You can obtain and understand the latest information of newly developed drugs. 2. You can explain informations about newly developed drugs, focusing on molecular targeting drugs.

## Reference Books

Title	Author	Publisher
Documents prepared by each person in charge.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	50%
Activities in lectures and exercises	50%

## Etc

Student consultation: Accepted at any time by email.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation. Learn how to collect information on newly developed drugs.	Lecture (Combination of on-line and in-person class)			
2	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
4	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
5	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
6	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
7	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
8	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
9	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	

# Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
11	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
12	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
13	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
14	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Practice (Combination of on-line and in-person class)		Careful reading of handout	
15	The person in charge of the presentation introduces and explains newly developed drugs, and learns how to collect information and present it.	Lecture and practice (Combination of on-line and in-person class)			

# Journal Club - Current Topics for Drug Discovery -

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

Understand and introduce articles about current topics of life sciences to provide hints for drug discovery.

## Attainment Objectives

1. You can read scientific articles logically.
2. You can understand and review articles about basic life science.
3. You can introduce articles about basic life science to let the audience understand the content.

## Textbooks

Title	Author	Publisher
Choose an article that you would like to introduce and discuss with the members.		

## Reference Books

Title	Author	Publisher
Literature and reference books to be introduced are individually selected by the person in charge		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentations	50%
Discussions and activities	50%

## Etc

Anytime, but an appointment is required prior to visit our office.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms

2024年度

subject code:211075

# Journal Club - Current Topics for Drug Discovery -

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Understand the article and introduce it including the background of the study, discuss about the possible application for drug discovery.	Lecture and Practice including Presentation and Discussion (Combination of on-line and in-person class)		Choose a topic and prepare for presentation.	



# Seminar in Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 English and Japanese Learn basic techniques required for pharmacological experiments. Learn the methods to prepare recombinant protein and examine effects of drugs using it.

## Attainment Objectives

1. You can explain how to prepare recombinant proteins. 2. You can design and prepare DNA constructs for preparing recombinant proteins. 3. You can prepare recombinant proteins. 4. You can perform in vitro pharmacological experiments using recombinant proteins.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	30%
Activities in lectures and practices	70%

## Etc

Lecture with writing on the whiteboard. Textbooks will be recommended to referring the course contents.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1	Orientation Learn overall process of the examination.	Lecture (Combination of on-line and in-person class)		Careful reading of the handout	
2	Pre-preparation of bacterial expression DNA construct Learn how to obtain the information of the genes of interest and design the construct.	Practice		Recording the results	

# Seminar in Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Preparation of bacterial expression DNA construct (1) Learn how to prepare the gene of interest by PCR and the vector for cloning.	Practice		Recording the results	
4	Preparation of bacterial expression DNA construct (2) Learn how to judge the result of cloning.	Practice		Recording the results	
5	Confirming expression of recombinant protein (1) Learn how to culture bacteria to induce expression of recombinant protein and prepare sample for analysis of expression.	Practice		Recording the results	
6	Confirming expression of recombinant protein (2) Learn how to analyze the expression of recombinant protein; SDS-PAGE.	Practice		Recording the results	
7	Preparation of recombinant protein (1) Learn how to optimize introducing condition in large scale culture for preparing recombinant protein.	Practice		Recording the results	
8	Preparation of recombinant protein (2) Learn how to purify recombinant protein from the lysate of bacteria.	Practice		Recording the results	
9	Preparation of recombinant protein (3) Learn how to examine concentration and purity of the prepared protein.	Practice		Recording the results	
10	In vitro assay using the recombinant protein (1) Learn how to prepare samples for examining binding activity of the prepared protein.	Practice		Recording the results	

# Seminar in Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	In vitro assay using the recombinant protein (2) Learn how to examine binding activity of the prepared protein: SDS-PAGE.	Practice		Recording the results	
12	In vitro assay using the recombinant protein (3) Learn how to examine enzymatic activity of the prepared protein.	Practice		Recording the results	
13	In vitro assay using the recombinant protein (4) Learn how to examine effects of drugs on enzymatic activity of the prepared protein.	Practice		Recording the results	
14	Summarizing the data Summarize your data and prepare for the presentation.	Practice (Combination of on-line and in-person class)		Summarize your results and prepare for the presentation	
15	Presentation of the summarized data Present your summarized data and discuss about the result.	Practice (Combination of on-line and in-person class)		Summarize your results and prepare for the presentation	

# Seminar in Cellular and Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 English and Japanese Learn basic techniques required for pharmacological experiments. Learn the methods to examine effects of drugs using techniques for gene modification and mammalian cell culture.

## Attainment Objectives

1. You can explain how to control exogenous gene expression in cultured cells.
2. You can design and prepare DNA constructs for gene expression.
3. You can transfect exogenous gene into cultured cells.
4. You can examine effect of drugs using genetically modified cultured cells.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	30%
Activities in lectures and exercises	70%

## Etc

Lecture with writing on the whiteboard. Textbooks will be recommended to referring the course contents.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation Learn overall process of the examination.	Lecture (Combination of on-line and in-person class)		Careful reading of the handout	
2	Pre-preparation of mammalian expression DNA construct Learn how to obtain the information of the genes of interest and design the construct.	Practice		Recording the results	

# Seminar in Cellular and Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Preparation of mammalian expression DNA construct (1)Learn how to prepare the interest gene and the vector for cloning.	Practice		Recording the results	
4	Preparation of mammalian expression DNA construct (2)Learn how to judge the result of cloning.	Practice		Recording the results	
5	Introducing genes into cultured cells and confirming the expression (1)Learn how to introduce the prepared expression constructs into cultured cells.	Practice		Recording the results	
6	Introducing genes into cultured cells and confirming the expression (2)Learn how to introduce the prepared expression constructs into cultured cells.	Practice		Recording the results	
7	Introducing genes into cultured cells and confirming the expression (3)Learn how to check expression of the introduced gene. (Microscopic examination and electrophoresis of the protein).	Practice		Recording the results	
8	Introducing genes into cultured cells and confirming the expression (4)Learn how to check expression of the gene (Western blotting).	Practice		Recording the results	
9	Examining the effect of drugs using the transfected cells (1)Learn how to observe translocation of the intracellular protein in response to drug treatment.	Practice		Recording the results	

# Seminar in Cellular and Molecular Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Examining the effect of drugs using the transfected cells (2) Learn how to evaluate effect of the drug based on phosphorylation of the intracellular protein (Preparation of samples).	Practice		Recording the results	
11	Examining the effect of drugs using the transfected cells (3) Learn how to evaluate effect of the drug based on phosphorylation of the intracellular protein (Electrophoresis).	Practice		Recording the results	
12	Examining the effect of drugs using the transfected cells (4) Learn how to evaluate effect of the drug based on phosphorylation of the intracellular protein (Detection and judgment of the result).	Practice		Recording the results	
13	Examining the effect of drugs using the transfected cells (5) Learn how to evaluate effect of the drug based on intracellular calcium level (Preparation of cells).	Practice		Recording the results	
14	Examining the effect of drugs using the transfected cells (6) Learn how to evaluate effect of the drug based on intracellular calcium level (Calcium imaging).	Practice		Recording the results	
15	Summary of the data and discussion Summarize your data and present/discuss the result.	Practice (Combination of on-line and in-person class)		Summarize your results and prepare for the presentation	

# Seminar in Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

## Course Description

【Language】 Japanese In this course, you will study the basic knowledge and experimental procedures for animal experiment. You will study the animal experiment protocol drafting.

## Attainment Objectives

1. You will explain the laboratory animals. 2. You will draft an animal experiment protocol. 3. You will administer drugs to animals. 4. You will explain and practice the basic pharmacological experiment.

## Reference Books

Title	Author	Publisher
Guidelines for proper conduct of animal experiments		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral presentation	30%
Activities in lectures and exercises	70%

## Study Method

Lecture No.	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1	You will discuss the lecture and practice in this course.	Lecture (Combination of on-line and in-person class)		Check the schedule	
2	Laboratory animal science 1 You will study the outline of laboratory animals. Laboratory animal science 1 You will study the outline of laboratory animals. Laboratory animal science 1 You will study the outline of laboratory animals.	Lecture and practice		Careful reading of handout	

# Seminar in Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Laboratory animal science 2 You will obtain knowledge of laws and guidelines for laboratory animals.	Lecture and practice		Careful reading of handout	
4	Laboratory animal science 3 You will obtain knowledge of animal welfare for laboratory animals.	Lecture and practice		Careful reading of handout	
5	Laboratory animal science 4 You will obtain knowledge of the administration of drug, anesthetics management and euthanasia procedures.	Lecture and practice		Careful reading of handout	
6	Laboratory animal science 5 You will obtain knowledge of the administration of drug, anesthetics management and euthanasia procedures.	Lecture and practice		Careful reading of handout	
7	Laboratory animal science 5 You will obtain knowledge of the administration of drug, anesthetics management and euthanasia procedures.	Lecture and practice		Careful reading of handout	
8	Pharmacological experiment 1 You will obtain knowledge of the acute toxicity test.	Lecture and practice		Careful reading of handout	
9	Pharmacological experiment 2 You will obtain knowledge of the chronic toxicity test.	Lecture and practice		Careful reading of handout	
10	Pharmacological experiment 3 You will obtain knowledge of the local irritation test.	Lecture and practice		Careful reading of handout	
11	Pharmacological experiment 4 You will obtain knowledge of another toxicity tests.	Lecture and practice		Careful reading of handout	



# Seminar in Pharmacology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	TAKEUCHI HIROSHI						
Instructor(s)	TAKEUCHI HIROSHI, HIGASHI SEN						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Drafting of animal experiment protocol 1 You will study the method of drafting the animal experiment protocol.	Lecture and practice		Careful reading of handout	
13	Drafting of animal experiment protocol 2 You will study the method of drafting the animal experiment protocol.	Lecture and practice		Careful reading of handout	
14	Drafting of animal experiment protocol 3 You will draft the animal experiment protocol.	Lecture and practice		Careful reading of handout	
15	Summary You will summarize pharmacological experiments.	Lecture and practice (Combination of on-line and in-person class)		Summarize the points to handle animals	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

## Course Description

【Language】 English and Japanese In this lecture, you will learn basic aspects of clinical epidemiology and study designs. You will learn about critical appraisal of research articles according to each study design, which will lead to develop practical skills in Evidence-Based Dentistry (EBD).

## Attainment Objectives

At the completion of this course, you will be able to: 1. Understand the outlines of clinical epidemiology. 2. Understand how to read the structure of research articles and abstracts on clinical epidemiology. 3. Understand the outlines of clinical epidemiological study designs. 4. Critically appraise clinical research papers and structured abstracts. 5. Practice Evidence-Based Dentistry (EBD).

## Textbooks

Title	Author	Publisher
Introduction to Evidence-Based Dentistry		Nagasue Shoten

## Reference Books

Title	Author	Publisher
Designing Clinical Research	Stephen B Hulley	Lippincott Williams & Wilkins
Guide to Practice-Based Research and Scientific Writing		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	100%

## Etc

【Office hour】 Before and after every class, or email at any time.

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Introduction: You will learn about the definition of clinical epidemiology and study designs.	Lecture	角舘 直樹	Definition of clinical epidemiology	
3,4	Research articles and Structured abstracts: You will learn about the structure of research articles and abstracts on clinical epidemiology.	Lecture	角舘 直樹	Structure of the research articles and abstracts	
5,6	Literature search : You will learn how to search the literature using PubMed.	Practice	角舘 直樹	Literature search/PubMed	
7,8	Literature search : You will learn how to search the literature using the Cochrane library and Minds.	Practice	角舘 直樹	Literature search/Cochrane review・Minds	
9,10	Study design : You will learn about the design of cross sectional study and case control study.	Lecture	角舘 直樹	Cross sectional study and case control study	
11,12	Critical Appraisal : You will learn about critical appraisal of reports of cross sectional study.	Practice	角舘 直樹	Critical appraisal of research articles of cross sectional study	
13,14	Study design : You will learn about the design of cohort study.	Lecture	角舘 直樹	Cohort study	
15,16	Critical Appraisal : You will learn about critical appraisal of reports of cohort study	Practice	角舘 直樹	Critical appraisal of research articles of cohort study	
17,18	Study design :You will learn about the design of interventional study.	Lecture	角舘 直樹	Interventional Study	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
19,20	Critical Appraisal : You will learn about critical appraisal of reports of interventional study	Practice	角舘 直樹	Critical appraisal of research articles of interventional study	
21,22	Study design : You will learn about the design of systematic reviews and meta-analyses.	Lecture	角舘 直樹	Systematic reviews and meta-analyses	
23,24	Critical Appraisal : You will learn how to critically appraise systematic reviews and meta-analyses.	Practice	角舘 直樹	Critical appraisal of research papers of systematic reviews and meta-analysis	
25,26	Study design : You will learn about the design of diagnosis and screening.	Practice	角舘 直樹	Study design of diagnosis and screening.	
27,28	Critical Appraisal : You will learn how to critically appraise diagnosis and screening.	Practice	角舘 直樹	Critical appraisal of research papers of diagnosis and screening	
29,30	Clinical Guidelines: You will learn about the role of clinical guidelines and about AGREE and GRADE systems.	Practice	角舘 直樹	AGREE and GRADE systems.	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI						

## Course Description

【Language】 English and Japanese In this lecture, you will obtain specialized knowledge on clinical epidemiology and applied skills in the conduct of clinical epidemiological study. In addition, you will make a study design and statistical design protocol based on a research question. Finally you can develop the practical ability to create a study.

## Attainment Objectives

At the completion of this course, you will be able to: 1. Formulate a research question derived from your own dental practice. 2. Develop a conceptual framework 3. Develop an appropriate clinical epidemiological study design. 4. Develop an appropriate statistical design. 5. Create a study protocol.

## Reference Books

Title	Author	Publisher
Introduction to Evidence-Based Dentistry		Nagasue Shoten
Designing Clinical Research	Stephen B Hulley	Lippincott Williams & Wilkins
Guide to Practice-Based Research and Scientific Writing		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	100%

## Etc

【Office hour】 Before and after every class, or email at any time.

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKU DATE NAOKI						
Instructor(s)	KAKU DATE NAOKI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Introduction to clinical research: You will learn how to formulate an answerable question.	Lecture	角館 直樹	PICO/Finer 's check	
3,4	Setting of outcome measures: You will learn about indicators in measuring outcomes, measurement methods, and patient-reported outcomes.	Lecture	角館 直樹	Outcome indicators	
5,6	Hypothetical conceptual framework: You will learn how to build a hypothetical conceptual framework.	Lecture and Practice	角館 直樹	Hypothetical conceptual framework	
7,8	Planning of clinical epidemiology study design: You will devise an appropriate clinical epidemiology study design based on your own research question. You will learn about research methods consistent with various types of design.	Lecture and Practice	角館 直樹	Study design of clinical epidemiology	
9,10	Controlling bias: You will learn how to control information, selection, and confounding bias.	Lecture	角館 直樹	Controlling bias	
11,12	Data measurement methods: You will learn about the reliability and validity of data measurement methods, including those of calibration.	Lecture and Practice	角館 直樹	Reliability and validity of data measurement	
13,14	Statistical analysis part : You will learn about types of data, distribution, descriptive statistics, odds ratio, risk ratio, and the difference between risk difference and hazard ratio.	Lecture and Practice	角館 直樹	Odds ratio, Risk ratio, Risk difference and Hazard ratio	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15,16	Statistical analysis part : You will learn about statistical hypothesis testing, P values and level of significance, confidence intervals, correlation, and correlation coefficient.	Lecture and Practice	角舘 直樹	P value and level of significance, confidence intervals, correlation, and correlation coefficient.	
17,18	Statistical analysis part : You will learn about statistical test methods for comparison between two groups and comparison among multi-groups, and errors in the test.	Lecture and Practice	角舘 直樹	Statistical test methods for comparison between two groups and comparison among multi-groups	
19,20	Statistical analysis part : You will learn about multivariate analyses including logistic regression analysis and multiple regression analysis.	Lecture and Practice	角舘 直樹	Logistic regression analysis and multiple regression analysis	
21,22	Statistical analysis part : You will learn about methods for survival analysis including Cox regression (proportional hazards model), Kaplan-Meier curves, and log-rank testing.	Lecture and Practice	角舘 直樹	Survival analysis	
23,24	Statistical analysis part : You will learn how to estimate sample size.	Lecture and Practice	角舘 直樹	Sample size estimation	
25,26	Questionnaire survey: You will learn how to produce questionnaires and question items to reduce information bias.	Lecture and Practice	角舘 直樹	Questionnaire development	
27,28	Research protocol: You will learn about guidelines for research reports including the Consort statement and Strobe statement, and understand how to create efficient research protocols.	Lecture	角舘 直樹	How to make a research protocol	

2024年度

subject code:211082

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKU DATE NAOKI						
Instructor(s)	KAKU DATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
29,30	Ethical considerations in clinical epidemiology research: You will learn about various ethical guidelines, document-based applications to Institutional Review Boards, and registration of clinical research trials.	Lecture	角館 直樹	Research protocol for an Institutional Review Board	



# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	3~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

## Course Description

【Language】 English and Japanese In this course, you will study examples of various types of clinical epidemiology research in the field of dentistry. In addition, you will learn about international clinical epidemiological studies, and understand the significance and methodology of Practice-based Research.

## Attainment Objectives

At the completion of this course, you will: 1. understand the theory and examples of various types of clinical epidemiology research in the field of dentistry. 2. learn about international clinical epidemiology research. 3. understand Practice-based Research. 4. understand the Evidence-Practice Gap. 5. learn how to create a clinical epidemiology research paper.

## Reference Books

Title	Author	Publisher
Introduction to Evidence-Based Dentistry		Nagasue Shoten
Designing Clinical Research		Lippincott Williams & Wilkins
Guide to Practice-Based Research and Scientific Writing		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	100%

## Etc

【Office hour】 Before and after every class, or email at any time.

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	3 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Clinical epidemiology of dental caries: You will learn about the clinical epidemiology of dental caries, including its causes, diagnosis, treatment, prevention, and prognosis.	Lecture and Practice	角舘 直樹	Clinical epidemiology of dental caries	
3,4	Clinical epidemiology of periodontal disease: You will learn about the clinical epidemiology of periodontal disease, including its causes, diagnosis, treatment, prevention, and prognosis.	Lecture and Practice	角舘 直樹	Clinical epidemiology of periodontal disease	
5,6	Clinical epidemiology of temporomandibular disorders: You will learn about the clinical epidemiology of temporomandibular disorders including its causes, diagnosis, treatment, prevention, and prognosis.	Lecture and Practice	角舘 直樹	Clinical epidemiology of temporomandibular disorders	
7,8	Clinical epidemiology of crown restoration: You will learn about the clinical epidemiology of prognosis and survival period of dental restoration.	Lecture and Practice	角舘 直樹	Clinical epidemiology of dental restoration	
9,10	Clinical epidemiology of dental health guidance: You will learn about the clinical epidemiology of dental health instruction.	Lecture and Practice	角舘 直樹	Clinical epidemiology about dental health instruction	
11,12	Patient-based outcomes research: You will understand patient-reported outcomes such as patient satisfaction and QOL, and learn about case studies in the field of dentistry.	Lecture and Practice	角舘 直樹	Patient-reported outcome research	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	3 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13,14	Clinical epidemiology about behavioral science: You will understand a variety of behavioral science theories, and learn about case studies in the field of dentistry.	Lecture and Practice	角館 直樹	Health behavioral science theories	
15,16	Clinical epidemiology of cost-effectiveness in dental treatment: You will understand cost-effectiveness in dental treatment, and learn about case studies in the field of dentistry.	Lecture and Practice	角館 直樹	Clinical epidemiology of cost-effectiveness	
17,18	Clinical epidemiology of cost-effectiveness in dental treatment: You will understand cost-effectiveness in dental treatment, and learn about case studies in the field of dentistry.	Lecture and Practice	角館 直樹	Studies in the quality of health care	
19,20	Practice-Based Research: You will understand the history, meaning, and current status of Practice-based Research, and learn about research examples.	Lecture and Practice	角館 直樹	Practice-Based Research	
21,22	Evidence-Practice Gap: You will understand the Evidence-Practice Gap, and learn about research examples.	Lecture and Practice	角館 直樹	Evidence-Practice Gap	
23,24	International clinical epidemiology research: You will understand trends in international clinical epidemiology research, and learn about research examples in the field of dentistry.	Lecture and Practice	角館 直樹	Trends in international clinical epidemiology research	

# Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	3~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	International comparative study on dental practice: You will learn about the international comparison of dental practice patterns, and consider differences in dental health care system.	Lecture and Practice	角舘 直樹	International comparative study on dental practice	
27,28	Dental health care policy and clinical epidemiology: You will learn about the relationship of dental health care policy and clinical epidemiology research.	Lecture and Practice	角舘 直樹	Dental health care policy and clinical epidemiology research	
29,30	Creation of clinical epidemiology research papers: You will learn how to write clinical epidemiology research papers and methods of statistical reporting.	Lecture and Practice	角舘 直樹	Creation of clinical epidemiology research papers	

# Clinical Epidemiology Practice

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI						

## Course Description

You will participate in research progress meetings for presentation of the research content and achievements, and strengthen your understanding of research contents through discussion and Question & Answer. You will review your own research on the basis of the feedback received from the meeting participants, including the supervisor, and improve the quality of your research.

## Attainment Objectives

1. You understand and are able to explain research methods. 2. You can logically interpret and explain your own research results (data analysis). 3. You can create a slide explaining the progress and results of your research and can give an easy-to-understand presentation.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	50%
presentation and Q&A	50%

## Etc

You will select the latest papers related to your research theme. The presenter will prepare materials for presentation in slides, and pre-distribute printed materials to participants. 【Office hour】 Before and after every class, or email at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	You will summarize in slides your research progress and data analysis, and give a presentation. The presenter shall answer questions from the participants, and through the discussion you will better understand the research methods and contents.	Reporting and presentation of, and debate about research progress.	角館 直樹	Reading of the literature and collection of related literature	

# Journal Club in Clinical Epidemiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKU DATE NAOKI						
Instructor(s)	KAKU DATE NAOKI						

## Course Description

You will participate in research progress meetings for presentation of the research content and achievements, and strengthen your understanding of research contents through discussion and Question & Answer. You will review your own research on the basis of the feedback received from the meeting participants, including the supervisor, and improve the quality of your research.

## Attainment Objectives

1. You understand and are able to explain research methods. 2. You can logically interpret and explain your own research results (data analysis). 3. You can create a slide explaining the progress and results of your research and can give an easy-to-understand presentation.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	50%
presentation and Q&A	50%

## Etc

You will select the latest papers related to your research theme. The presenter will prepare materials for presentation in slides, and pre-distribute printed materials to participants. 【Office hour】 Before and after every class, or email at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	You will summarize in slides your research progress and data analysis, and give a presentation. The presenter shall answer questions from the participants, and through the discussion you will better understand the research methods and contents.	Reporting and presentation of, and debate about research progress.	角館 直樹	Reading of the literature and collection of related literature	

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, FUJII WATARU, SOH INHO, TSUJISAWA TOSHIYUKI, NAKAMICHI ATSUKO, IZUMI MAYA, FUNAHARA MADOKA						

## Course Description

【Language】 Japanese To obtain the ability for research and instruction on oral health sciences, students learn the recent oral health-related evidences and the research skills/analytical methods with lectures in omnibus form

## Attainment Objectives

You should achieve the basic and applied knowledge indicated below.

1. explain the role of dental personnel based on knowledge of the health policy on public health;
2. explain the logical perspective and the research methods to resolve the problems of oral health-related diseases /disorder;
3. explain the basic / clinical methods concerning evidence-based medicine (EBM) on oral health sciences;
4. imagine the oral health related-professional value and ability based on clients background;
5. explain the methodology to provide relationship between oral status/diseases and general status;
6. explain for higher-order brain, neurophysiological, and non-invasive research methods on feeding behavior;
7. explain the logical perspective and the research methods to resolve the problems of nutritional-related health or disease.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
evaluation of after-action report	90%
Oral examination	10%

## Etc

Student consultation: at all times

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, FUJII WATARU, SOH INHO, TSUJISAWA TOSHIYUKI, NAKAMICHI ATSUKO, IZUMI MAYA, FUNAHARA MADOKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Public health and health policy (1) To lecture system and policy of healthcare in public health. To discuss how research, human resources development, and other professional activities contribute to social system and policy on healthcare.	remote lecture (Teams, Moodle)	邵 仁浩	before: system and policy of healthcare in public health after: after-action report	
2	Public health and health policy (2) To discuss how distribute limiting healthcare resource, based on knowledge that how research, human resources development, and other professional activities contribute to social system and policy on healthcare	remote lecture (Teams, Moodle)	邵 仁浩	before: distribution of healthcare resource after: after-action report	
3	Oral health related-perspective (1) To discuss human health from dental health perspective, and strategy from micro to macro to maintain, enhance and recover human health.	remote lecture (Teams, Moodle)	秋房 住郎	before: concept of health after: after-action report	
4	Oral health related-perspective (2) To lecture dental health perspective regarding with caries and periodontal disease, and to discuss the problems and the solutions.	remote lecture (Teams, Moodle)	秋房 住郎	before: research reviews on caries and periodontal disease after: after-action report	



# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, FUJII WATARU, SOH INHO, TSUJISAWA TOSHIYUKI, NAKAMICHI ATSUKO, IZUMI MAYA, FUNAHARA MADOKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Perspective of oral hygiene in convalescent and chronic phase To lecture background of patients in convalescent and chronic phase with dental health perspective, and to discuss the study subjects and solutions.	Lecture (Teams, Moodle)	泉 繭依	before: states of patients in convalescent and chronic phase after: after-action report	
6	Oral adverse event and maintenance of oral function in acute phase To lecture oral adverse event, maintenance of oral function and supporting treatment prevention methods in acute phase with dental health perspective, and to discuss the study subjects and solutions with referring related articles.	Lecture (Teams, Moodle)	船原 まどか	before: oral adverse event, maintenance of oral function and supporting treatment prevention methods in acute phase after: after-action report	
7	Perspective on higher education for dental hygienist (1) In view of change of social situation and oral health, to lecture values and ability required of leader of professionals.	Lecture (Teams, Moodle)	中道 敦子	before: values and ability required of leader of professionals after: after-action report	
8	Perspective on higher education for dental hygienist (2) To lecture educational methods in medical and nursing, and to discuss educational methods to foster higher professionalism of oral health.	Lecture (Teams, Moodle)	中道 敦子	before: educational methods in medical and nursing after: after-action report	

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, FUJII WATARU, SOH INHO, TSUJISAWA TOSHIYUKI, NAKAMICHI ATSUKO, IZUMI MAYA, FUNAHARA MADOKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9	Methodology on relation with oral and general status (1) to lecture experimental methods from past to present to have proven relationship between oral states or oral diseases and general states.	Lecture (Teams, Moodle)	秋房 住郎	before: relationship between oral states or oral diseases and general states after: after-action report	
10	Methodology on relation with oral and general status (2) to lecture epidemiological methods from past to present to have proven relationship between oral states or oral diseases and general states.	Lecture (Teams, Moodle)	秋房 住郎	before: relationship between oral states or oral diseases and general states after: after-action report	
11	medical practice for dysphagia (1) To lecture clinical status of swallowing based on clinical knowledge on swallowing.	Lecture (Teams, Moodle)	藤井 航	before: swallowing after: after-action report	
12	medical practice for dysphagia (2) To lecture support of swallowing via case studies.	Lecture (Teams, Moodle)	藤井 航	before: support of swallowing after: after-action report	
13	Dietetic perspective on health (1) To lecture dietetics perspective regarding with health and life style related disease, and to discuss the problems and the solutions.	Lecture (Teams, Moodle)	辻澤 利行	before: dietetics perspective regarding with health and life style related disease after: after-action report	
14	Dietetic perspective on health (2) To lecture dietetics perspective regarding with health and life style related disease, and to discuss the problems and the solutions.	Lecture (Teams, Moodle)	辻澤 利行	before: dietetics perspective regarding with health and life style related disease after: after-action report	

2024年度

subject code:211091

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, FUJII WATARU, SOH INHO, TSUJISAWA TOSHIYUKI, NAKAMICHI ATSUKO, IZUMI MAYA, FUNAHARA MADOKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15	Summary	Lecture (Teams, Moodle)	秋房 住郎	before: past reviews after-action report	

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	FUJII WATARU						
Instructor(s)	FUJII WATARU						

## Course Description

【Language】 Japanese To understand most recent trend of discipline on oral health sciences, discuss the related papers of international journal.

## Attainment Objectives

You should achieve the basic and applied knowledge indicated below. You can  
 1. explain the contents of papers in English.  
 2. explain the background of papers.  
 3. explain the methods described in papers in detail.  
 4. explain the results described in papers in detail.  
 5. explain critically the discussion described in papers.  
 6. perform presentation for the contents of the read papers.

## Textbooks

Title	Author	Publisher
Use papers and reference books provided by faculty members and literature in related fields searched		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Presentation	50%
questions and answers	50%

## Etc

Consultation is accepted at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~30	understand and explain the contents of most recent trend of discipline on oral health sciences[Prior learning] Ask educators individually in advance.	Practice	藤井 航	paper search, after-action report	

# Oral Health Science

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	FUJII WATARU						
Instructor(s)	FUJII WATARU						

## Course Description

【Language】 Japanese All teacher and students discuss on the outcome of study, to improve the quality of study, and to develop ability of presentation

## Attainment Objectives

You should achieve the basic and applied knowledge indicated below. You can

1. explain logically the contents of your study.
2. explain the background of your study in detail.
3. answer questions on your study.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
presentation	50%
questions and answers	50%

## Etc

Consultation is accepted at any time

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~30	Presentation of your study followed with question and answer[Prior learning] Ask educators individually in advance.	Practice	藤井 航	paper search, after-action report	

# Advanced Oral health and Welfare Promotion

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO						

## Course Description

The purpose of this course is to practice actual activity of community dental healthcare and welfare using model case , based on the knowledge on community dental healthcare and welfare.

## Attainment Objectives

The ability to: (1) describe activities community health and welfare activities;  
 (2) describe collaboration of medical, health, and welfare section in oral healthcare;  
 (3) learn methods to drive the collaboration of medical, health, and welfare section in oral healthcare;  
 (4) learn knowledge of methods to practice oral HP/WP in community

## Textbooks

Title	Author	Publisher
地方分権時代の健康政策実践書 みんなで楽しくできるヘルスプロモーション (Japanese)	Aut. 石井敏弘、中村譲治、その他	Pub. ライフサイエンスセンター

## Reference Books

Title	Author	Publisher
国民衛生の動向 (Japanese)	Aut. 厚生労働統計協会編集	
不平等が健康を損なう (Japanese)	Aut. イチローカワチ, ブルース・P. ケネディ	Pub. 日本評論社
ソーシャル・キャピタルと健康 (Japanese)	Aut. イチローカワチ	Pub. 日本評論社

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
after-action report on all lectures	80%
practice assignments of No. 5 and 7	20%

# Advanced Oral health and Welfare Promotion

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO						

## Etc

Student who dose not attend the Advanced Oral Health and Welfare Promotion I can attend this course.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			秋房 住郎		
1	Theory of health promotion To learn general and new methods for health promotion.	Lecture (Teams, Moodle)	秋房 住郎	before: PRECEDE-PROCEED model after: after-action report	
2	Welfare activity with oral healthcare To learn roles and ideal state of oral health in welfare for older adults and impaired persons.	Lecture (Teams, Moodle)	秋房 住郎	before: old-age welfare, welfare for the disabled after: after-action report	
3	Theory of oral health promotion To learn theories of health promotion in oral health.	Lecture (Teams, Moodle)	秋房 住郎	before: oral health promotion after: after-action report	
4	Practice of oral health promotion (1) To learn methods for oral health promotion through examples in municipalities.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion after: after-action report	
5	Practice of oral health promotion (2) To learn methods for oral health promotion through examples in municipalities.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion after: after-action report	
6	Case study on community oral HP/WP (1) To select examples of oral health promotion and welfare from reports of community oral health.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	

# Advanced Oral health and Welfare Promotion

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7	Case study on community oral HP/WP (2) To discuss problem and its solution of oral health in community, selected in previous lecture.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
8	Case study on community oral HP/WP (3) To discuss case studies of problem and its solution of oral health in community by bibliographical consideration.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
9	Case study on community oral HP/WP (4) To discuss case studies of problem and its solution of oral health in community by bibliographical consideration.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
10	strategy for community oral HP/WP (1) To extract problems of oral health promotion and welfare of model municipality in Fukuoka prefecture.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
11	Strategy for community oral HP/WP (2) To plan solution for oral health problem of model municipality in Fukuoka prefecture, extracted in previous lecture.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
12	Strategy for community oral HP/WP (3) To plan solution for oral health problem of model municipality in Fukuoka prefecture, extracted in previous lecture	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	



# Advanced Oral health and Welfare Promotion

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13	Strategy for community oral HP/WP (4) To plan solution for oral health problem of model municipality in Fukuoka prefecture, extracted in previous lecture.	Lecture (Teams, Moodle)	秋房 住郎	before: case collection of oral health promotion and welfare after: after-action report	
14	Approach to community oral HP/WP To discuss methods for approach to local community through case studies.	Lecture (Teams, Moodle)	秋房 住郎	before: community HP and WP after: after-action report	
15	Summary Presentation of summary of this course.	Lecture (Teams, Moodle)	秋房 住郎	before: preparation of presentation after: after-action report	
			秋房 住郎		

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Course Description

【Language】 Japanese

You can learn about the importance of researching the problems of the dental field, among health issues of all people living in the region, by focusing on the relationship between epidemiological methods and social system. In particular, you can learn about the basic knowledge to study the role that play of the dental health care and dental health care workers among the social security system.

## Attainment Objectives

- 1 . You can explain about dignity of the patient, medical ethics and research ethics.
- 2 . You can explain the concept of health and disease.
- 3 . You can explain the basic idea of the dental practitioners laws and related regulations.
- 4 . You can explain the concept of prevention in public health and dental care.
- 5 . You can explain the main overview of health medical statistics.

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
Concise Text of Hygiene and Public Health. Japan. 2024.	Ichiro Tsuji	Nankodo.Co.
Visual Guide: Medical Care and Public Health 2024-2025. Japan.	Medic Media Co.	Institute for Health Care Information Sciences, Inc.
Dental Practice Management. Japan. 2018.	Ishiyaku Pub, Inc	Japanese Society of Dental Practice Administration

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
percentage of reports	50%
oral examination	50%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			福泉 隆喜		
1	Society and dentistry You can learn about the concepts of health which become a foundation of public health, the relations between society and the environment, and the concepts of prevention.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
2	Society and dentistry You can learn about the patient's dignity, the ethics of medicine which support this and the various norms.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
3	Society and dentistry You can learn about the relations between dentistry and society, and the responsibilities of the dentist.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
4	Medical insurance system You can recognize about the whole picture of the social security system, and learn about the national health insurance system which supports the medical care among the social insurance.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Pension insurance system, Workers' compensation insurance system You can learn about pension insurance system and workers' compensation insurance system which constitute the social insurance.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
6	Nursing care insurance system You can learn about the long-term care insurance system which is one of the social insurance.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
7	Employment insurance, Social welfare system You can learn about the employment insurance system which is one of the social insurance, and the social welfare and public assistance which are component of the social security.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
8	Dental doctor and related regulations You can recognize the responsibility of dentist and the overview of Dental Practitioners Law which defines the business, and learn about the current situation surrounding the dentist from the relevant statistics.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
9	Dental doctor and related regulations You can recognize the overview of medical law that defines the healthcare delivery system in Japan and learn about the support of the selection for medical and the ensuring the safety of medical.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Dental doctor and related regulations You can learn about the management of hospitals and clinics which defined in the Medical Care Act, and the ensuring of the health care provider system of medical care plans.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
11	Dental doctor and related regulations You can recognize about the overview of the Pharmaceuticals and Medical Devices Act and learn about management of the pharmacy, examination of pharmaceutical products, and the relationship of medical equipment and health insurance treatment.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
12	Dental doctor and related regulations You can recognize about the advertising regulations and adverse reaction reports which are defined in the Pharmaceuticals and Medical Devices Act, and learn about the regulations such as poison and narcotic.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
13	Society and demographics You can recognize about the overview of Statistics Act and learn about the typical official statistics and the typical indicators, related to health care among the fundamental statistics and general statistics.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

2024年度

subject code:211101

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	The actual condition of dental health administration in urban and rural prefectures Following the trend of dental health care administration promoted by the country, you can learn about the concrete efforts of the dental health administration which is carried out in the prefectures.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
15	The actual condition of dental health administration in cities, towns and villages Following the trend of dental health care administration promoted by the national and prefectural, you can learn about the concrete efforts of the dental health administration which is carried out in the municipality.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Course Description

【Language】 Japanese

You can learn about the basic idea of epidemiology, the underlying law of regulations and the relations between the dental doctors and the health services in each field such as dental health in region, school dental health, health promotion, disease prevention, international health and mental health. In particular, you can learn about the basic knowledge to study the role of dental health care workers in various health businesses.

## Attainment Objectives

- 1 .You can explain about the basic idea of the medical occupations and related laws and regulations.
- 2 .You can explain about health, medical care, welfare and social institutions related to nursing care, community health care and social environment.
- 3 .You can explain about the relations between the environment and health.
- 4 .You can explain about the population level prevention and health management.
- 5 .You can explain about the medical care based on epidemiological and scientific basis, and application of health statistics.

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
Concise Text of Hygiene and Public Health. Japan. 2024.	Ichiro Tsuji	Nankodo.Co.
Visual Guide: Medical Care and Public Health 2024-2025. Japan.	Medic Media Co.	Institute for Health Care Information Sciences, Inc.
Manual of epidemiology. Japan. 2012.	Hiroshi Yanagawa	Nanzando.Co.

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
percentage of reports	50%
oral examination	50%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			福泉 隆喜		
1	Related laws and regulations and health care occupations You can learn about the overview of Dental Hygienists Act and Health Nurses Midwives and Nurses Act, the relevant government ordinance, the system based on law and the situation of employment.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
2	Related laws and regulations and health care occupations You can learn about the dental technician method, pharmacist method, the overview of the Medical Practitioners Law, and the relevant government ordinance, the system based on the law, and the situation of employment.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	



# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Related laws and regulations and health care occupations You can learn about the radiological technologists method, speech therapist method, physical therapists and occupational therapists method, a compendium of the law of relationship occupations of dietitian method, and the situation of employment.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
4	Adult health You can recognize about the change of the disease structure and the current situation of lifestyle-related diseases, and learn about the target value which defined as health promotion business of the municipality, specific medical examinations and specific health guidance, Healthy Japan 21 (second) and Dental and Oral Health Law.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
5	Community health, public health centers You can recognize about the business of the health centers and municipal health centers which become a base of the public health of the region, and learn about the importance of regional diagnosis.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Epidemiology and dental care You can learn about the basic idea of epidemiology which is the foundation of public health, and epidemiological approach, research procedures, and the applications of dental medicine.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
7	Epidemiology and dental care Give the topics of specific epidemiological studies in order to understand the detailed exposition of epidemiology, and you can learn about the study design and the level of evidence.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
8	Epidemiology and dental care You can recognize the concept of screening, and learn about the relationship of various epidemiological indicators and research design.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
9	Maternal and child health You can get the overview of maternal and child health which supports the healthy growth of children, and learn about maternal and child health policy in Japan.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
10	Health Promotion You can get the overview of health promotion law, and learn about current state of health promotion measures in the municipality.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	International Health You can recognize about the overview of international health and the concept of the important disease prevention in public health, and learn about various infectious diseases prescribed in the Infectious Disease Law and Preventive Vaccination Law.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
12	School Health You can recognize about the concept of school health which is important for health management in the school age, and learn about variety of measures prescribed in the School Health and Safety Act.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
13	Environment and Health You can recognize about relationship of the various environmental factors and Basic Environment Law which affect the public health, and learn about the hygiene standards of water supply and sewerage systems.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
14	Mental Health and Welfare You can recognize about the overview of mental health and welfare, and learn about Mental Health Act and medical observation method.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

2024年度

subject code:211102



# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15	Care of the elderly You can recognize about the current state of aging and the Elderly, and learn about overview of the oral-related care service in long-term care insurance, the relationship between the long-term care insurance facilities and the elderly welfare facilities.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Course Description

【Language】 Japanese

You can learn about the measures to responses to industrial dental health, labor management, medical safety management (including the safety management of pharmaceuticals and medical devices), medical information management, food hygiene, people with disabilities health and welfare and responding to medical malpractice. In particular, you can learn about the basic knowledge to study the role of dental health care workers in the efforts that are required in the position and social security system on a variety of systems.

## Attainment Objectives

1. You can explain about the relations between environment and health.
2. You can explain about health, medical care, welfare and social institutions related to nursing care, the regional medical care and social environment.
3. You can explain the prevention and health management of the office level.
4. You can explain about the use and management methods of health care information.
5. You can explain about the dialogue capability, the attitude and mindset necessary to obtain the principal consent of the patient after conducting an appropriate description of the order to practice medicine in the patient-oriented.

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
Concise Text of Hygiene and Public Health. Japan. 2024.	Ichiro Tsuji	Nankodo.Co.
Visual Guide: Medical Care and Public Health 2024-2025. Japan	Medic Media Co.	Institute for Health Care Information Sciences, Inc.
Manual of epidemiology. Japan. 2012.	Hiroshi Yanagawa	Nanzando.Co.

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
percentage of reports	50%
oral examination	50%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			福泉 隆喜		
1	Occupational health You can understand about the overview of the occupational health which is responsible for the health management of workers, and learn about worker protection measures stipulated in the Labor Standards Act and the Occupational Safety and Health Act.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
2	Occupational health You can understand about the overview of the Labor Contract Law which is one of the worker protection measures, and learn about the handing of fixed-term employment contract of dentist and the features of medical contract.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Medical information and its management You can understand about the handling of medical records associated with dental care and learn about the provisions in Dental Practitioners Law, the medical law and the recuperation charge rules.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
4	Medical information and its management You can understand about the handling of personal information in the dental clinic and learn about the provisions in the Personal Information Protection Act and the guidelines for handling.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
5	Pharmaceuticals (including biologics) and the safety management of medical equipment (medical Care law, etc.) You can understand about the safety management of the pharmaceuticals and medical devices in dental clinic, and learn about the provisions in the Medical Care Act.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
6	National Nutrition and Food Health (National Health and Nutrition Examination Survey, the Food Sanitation Law, etc.) You can understand about the significance of the National Health and Nutrition Examination Survey, and learn about the overview of food hygiene involved in closely public health, and trend of food poisoning.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7	Disability health and welfare You can understand about the overview of health and welfare measures for people with disabilities and learn about the circumstance leading to the enactment of the Disability Comprehensive Support Law, and the Convention on the Rights of Persons with Disabilities, and normalization.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
8	Dentistry viewed from the patient's point of view You can understand about patient's dignity and medical ethics and learn about legal status related to responsibility of the dentist.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
9	Conflict Management You can understand about the cause of medical dispute in dental clinic and learn about Medical Mediation which is a method to solve this.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
10	Conflict Management To understand alternative dispute resolution procedures, which are attracting attention as a method of resolving medical disputes, and to learn about trends in medical litigation.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
11	Recent Trends in dental health care administration As a summary of health care theory in general, you can learn about recent developments in the dental health care administration.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	



2024年度

subject code:211103

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Study design You can learn about whole picture of the level of evidence, the various study design and the outcome measures.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
13	Study design You can learn about the design outcome measures, advantages and disadvantages of cross-sectional study.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
14	Study design You can learn about the design outcome measures, advantages and disadvantages of the cohort study.	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	
15	Study design You can learn about the design outcome measures, advantages and disadvantages of randomized controlled trials (RCT).	lecture	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

## Course Description

【Language】 Japanese

Based on objective documentation, while to clarify the current status and changes in disease, risk and lifestyle, you can learn about the epidemiology technique which is essential in order to evaluate the results of individual health policy. In particular, you can learn about the basic knowledge to study the stretching of the healthy life expectancy and the reduction of health disparities, and the prevention of the onset and severity of lifestyle-related diseases.

## Attainment Objectives

1. You can explain about the epidemiological studies and ethics.
2. You can explain about the basic method of epidemiology.
3. You can explain about the distraction of healthy life expectancy and reduction of health disparities.
4. You can explain the onset prevention and aggravation prevention of lifestyle-related diseases.
5. You can explain about the practice of policy epidemiology.

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
Concise Text of Hygiene and Public Health. Japan. 2024.	Ichiro Tsuji	Nankodo.Co.
Visual Guide: Medical Care and Public Health 2024-2025. Japan.	Medic Media Co.	Institute for Health Care Information Sciences, Inc.
Manual of epidemiology. Japan. 2012.	Hiroshi Yanagawa	Nanzando.Co.

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
percentage of reports	50%
artifacts of practice	50%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			福泉 隆喜		
1	Epidemiology of meaning and ethics You can learn about the epidemiology's meaning and purpose, ethics of epidemiological research, and the validity of the intervention studies and subject selection.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
2	Measurement of disease frequency You can learn about prevalence, cumulative incidence, prevalence, mortality, fatality rate, relative frequency.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
3	Measurement of exposure effect You can learn about the rate of difference ratio, survival rate, and healthy life expectancy.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Epidemiological research methods You do the review of the contents of the scientific papers using the CASP (CRITICAL APPRAISAL SKILLS PROGRAMME), and learn and to clarify the difference between observational studies.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
5	Sample survey You can learn about complete enumeration and sample surveys, the population and the sample, randomization, the concept of sampling, method of determining the size of the specimen.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
6	Error, bias and its control You can learn about error classification, bias, exclusion of confounding factors, and the standardization of the rate.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
7	The judgement of the cause-and-effect relationship You can learn about criteria for causality, evaluation methods, risk factors and prevention factors.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
8	Epidemiological factors You can learn about host factors, environmental factors, and multi-factor etiology.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
9	Screening You can learn about the significance of Screening, evaluation method, implementation conditions, program evaluation, and typical screening program.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	

# Training Program in Public Health and Social Sec

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Epidemiology of infectious diseases You can learn about three conditions of the infection onset, the index of spread of infection, resistance force of epidemic and host, pathogen and the route of infection, and the epidemic investigation.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
11	Etiology epidemiology You can learn about etiology epidemiology, risk factors, and molecular epidemiology.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
12	Policy epidemiology You can learn about population approach, high-risk approach, and medical economic evaluation (outcome analysis).	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
13	Actual research plan You can learn about selection of the survey items, information collection method, the creation of questionnaire, and the flow of data analysis.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
14	Epidemiological analysis technique You can learn about contingency tables, regression and correlation, actual assays, and multivariate analysis.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	
15	Creating a statistical chart You can learn about the principle of charting, and the formats and features of the statistics chart.	lecturepracti ce	福泉 隆喜	Reading an article, handout, reference book intensively	

# Practice of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Course Description

【Language】 Japanese

About the medical service fee system which revised every two years, and the long-term care compensation plans which revised every three years, You can analyze the background leading up to each of the most recent changes and institutional reforms. Also, from the statistical survey associated with each reward including Survey of Medical Care Activities in Public Health Insurance and Survey of Long-term Care Benefit Expenditures, you can understand the trends of the post-reform of the system and learn a method of utilizing Policy Research, and a research technique for performing a simulation.

## Attainment Objectives

1. You can explain the long-term care compensation system and the medical fee system.
2. You can explain the statistical survey associated with each reward including the social care intervention surveys and nursing care payment survey.
3. You can take advantage of the policy research and practice the simulation.

## Textbooks

Title	Author	Publisher
The list of Statistical Surveys conducted by Ministry of Health		
The Portal Site of Official Statistics of Japan(e-Stat)		

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
The Trends of Insurance and Pension. Japan.		Health, Labour and Welfare Statistics Association
Health, Labour and Welfare Statistics Association		Health, Labour and Welfare Statistics Association

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
results of simulation	35%

# Practice of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Evaluation item	Ratio
oral presentation	35%
discussion	30%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Recognize the background of institutional reforms and the relationship of the statistical survey associated with each reward, You can take advantage of the policy research and practice the simulation. Give your presentation about the results of the simulation and discuss about the latest trend.	Take advantage of the policy research and practice the simulation. Practice including Presentation and Discussion	福泉 隆喜	Reading an article,handout,reference book intensively and investigate issues on the related area	

# Practice of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	FUKUIZUMI TAKAKI							
Instructor(s)	FUKUIZUMI TAKAKI							

## Course Description

【Language】 Japanese

About the medical service fee system which revised every two years, and the long-term care compensation plans which revised every three years, You can analyze the background leading up to each of the most recent changes and institutional reforms. Also, from the statistical survey associated with each reward including Survey of Medical Care Activities in Public Health Insurance and Survey of Long-term Care Benefit Expenditures, you can understand the trends of the post-reform of the system and learn a method of utilizing Policy Research, and a research technique for performing a simulation.

## Attainment Objectives

1. You can explain the long-term care compensation system and the medical fee system.
2. You can explain the statistical survey associated with each reward including the social care intervention surveys and nursing care payment survey.
3. You can take advantage of the policy research and practice the simulation.

## Textbooks

Title	Author	Publisher
The list of Statistical Surveys conducted by Ministry of Health		
The Portal Site of Official Statistics of Japan(e-Stat)		

## Reference Books

Title	Author	Publisher
Health in Japan : Recent Vital Statistics. Japan.		Health, Labour and Welfare Statistics Association
The Trends of Insurance and Pension. Japan.		Health, Labour and Welfare Statistics Association
Health, Labour and Welfare Statistics Association		Health, Labour and Welfare Statistics Association

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
results of simulation	35%



# Practice of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Evaluation item	Ratio
oral presentation	35%
discussion	30%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Recognize the background of institutional reforms and the relationship of the statistical survey associated with each reward, You can take advantage of the policy research and practice the simulation. Give your presentation about the results of the simulation and discuss about the latest trend.	Take advantage of the policy research and practice the simulation. Practice including Presentation and Discussion	福泉 隆喜	Reading an article,handout,reference book intensively and investigate issues on the related area	

# Colloquium of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

## Course Description

You examine carefully several article related public health and social security policy in order to recognize latest trend of the study. Moreover, you give your own presentation about state of progress and discuss the development of your study.

## Attainment Objectives

1. You can learn the way of critical thinking throughout examining carefully several article related public health and social security policy.
2. You can recognize the background and methods of your own study.
3. You can explain your own research exactly.

## Reference Books

Title	Author	Publisher
Choose an article that you would like to introduce and discuss with the members.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
comprehension of the article	35%
oral presentation	35%
discussion	30%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms

# Colloquium of Public Health and Social Security Po

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	Recognize background, methods and the latest trend of the study. Give your presentation about state of progress and discuss to embody and to develop your study.	Practice including Presentation and Discussion	福泉 隆喜	Reading an article intensively and investigate issues on the related area to your study.	

# Primary Dental Care (Clinical Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	AWANO SHUUJI						
Instructor(s)	AWANO SHUUJI, MORISHITA MASAKI, MURAOKA KOUSUKE						

## Course Description

This course is designed to practice primary dental care based on holistic dentistry in the clinical work.

## Attainment Objectives

You should achieve the following competencies;

- practice a medical interview to patients based on patient-centered dentistry
- perform prevention and control of medical accidents and infection
- create a comprehensive treatment plan according to EBM
- practice prevention, treatment and management of oral and dental diseases according to EBM
- practice a medical management which needs to perform social roles as a dentist

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-60			村岡 宏祐 守下 昌輝 栗野 秀慈		診療室_病院
1-60	The contents of this course are as follows; <ul style="list-style-type: none"> <li>• understand speciality of primary dental care</li> <li>• master knowledges and skills in searching for and applying evidence</li> <li>• practice prevention and control of medical accidents and infection</li> <li>• practice medical interview and examination</li> <li>• diagnose oral and dental diseases</li> <li>• create a comprehensive treatment plan according to EBM</li> <li>• practice of primary dental care according to EBM</li> </ul>	lecture practice seminar presentation discussion	村岡 宏祐 守下 昌輝 栗野 秀慈	You should read the reference related to this course and submit the report after each class.	診療室_病院

# Primary Dental Care (Clinical Advance Course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	AWANO SHUUJI						
Instructor(s)	AWANO SHUUJI, MORISHITA MASAKI, MURAOKA KOUSUKE						

## Course Description

This course is designed to improve various special clinical abilities which are needed for primary dental care related to improvement in QOL of patients

## Attainment Objectives

You should be achieve the following competencies;

- practice prevention and control of medical accidents and infection in every clinical fields
- create a comprehensive treatment plan according to the difference in the life-stage of each patient
- practice prevention, treatment and management of oral and dental diseases based on the life-stage of patients
- practice patient-centered team care medicine with other health care professionals who are experts in different specialties
- understand Japanese system of community-based comprehensive health care • participate in the community-based comprehensive health care

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-60			村岡 宏祐 守下 昌輝 栗野 秀慈		診療室_病院
1-60	The contents of this course is are as follows; • practice primary dental care based on life-stage of patients • practice the risk assessment of dental caries and periodontal diseases of patients • practice basic periodontal surgery • practice treatment of patients with xerostomia • practice primary dental care for elderly patients with some systemic disease in the fields of the community-based health care	lecturepracti ceseminarpres entationdiscu ssion	村岡 宏祐 守下 昌輝 栗野 秀慈	You should prepare for each practice and summarize the content of the case after practice.	診療室_病院

# Primary Dental Care (Clinical Conference)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	AWANO SHUUJI						
Instructor(s)	AWANO SHUUJI, MORISHITA MASAKI, MURAOKA KOUSUKE						

## Course Description

This course is designed to improve the ability which solve various clinical problems to need the practice for primary dental care via case studies.

## Attainment Objectives

You should be achieve the following competencies;

- make a list of the clinical problem based on patient information
- create a comprehensive treatment plan according to the latest EBM
- collect information of the latest dental treatment from the international journals of various special fields
- prepare the material for a case presentation and make a presentaion

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of presentation	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-15	The contents of this course is are as follows; • learn the latest clinical information by making a case presentation based on primarydental care	Seminar	栗野 秀慈 守下 昌輝 村岡 宏祐	You should prepare the material for a case presentation	その他

# Educational Research of Comprehensive Clinical Den

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	AWANO SHUUJI						
Instructor(s)	AWANO SHUUJI, MORISHITA MASAKI, MURAOKA KOUSUKE						

## Course Description

This course is designed to improve the ability which solve various clinical problems to need the practice for primary dental care via case studies.

## Attainment Objectives

You should be achieve the following competencies;

- make a list of the clinical problem based on patient information
- create a comprehensive treatment plan according to the latest EBM
- collect information of the latest dental treatment from the international journals of various special fields
- prepare the material for a case presentation and make a presentaion

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of presentation	0%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-15	The contents of this course is are as follows; • learn the latest clinical information based on primarydental care	Seminar	守下 昌輝 村岡 宏祐 栗野 秀慈	You should prepare the material for a presentation	その他

# Educational Research of Comprehensive Clinical Den

Course Affiliation	the Faculty of Dentistry		Grades	3~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	AWANO SHUUJI						
Instructor(s)	AWANO SHUUJI, MORISHITA MASAKI, MURAOKA KOUSUKE						

## Course Description

This course is designed to train the ability of comprehensive management for research through the research work to complete the research subjects.

## Attainment Objectives

You should be achieve the following competencies;

- review the reference paper related to your research theme
- summarize the problems and subjects in your research
- analyze the research data for the conference presentation and writing the research paper
- make the presentation material for the conference presentation
- write the research paper to publish to the international academic journals

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of presentation	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1-15	The contents of this course is are as follows; <ul style="list-style-type: none"> <li>• present the review of reference papers for your research</li> <li>• present the results and process in your research work</li> </ul>	Presentation	守下 昌輝 村岡 宏祐 粟野 秀慈	You should prepare the material for presentation	その他



# Comprehensive dentistry (Basic course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To provide patients with reassuring and safe comprehensive dental care, we reflect upon and review the knowledge, skills, and attitudes acquired through undergraduate education and clinical training. In addition, we put these elements into practice and master them in clinical settings. Regarding dental treatment skills, we revisit and apply the challenges outlined in the Dental Education Model Core Curriculum (Revised in 2022) under "E. Examination, Diagnosis, and Treatment Skills", specifically addressing " a. Challenges to be experienced firsthand in patient care" and " b. Challenges where firsthand experience is expected in patient care but can be supplemented through simulations in challenging situations", as well as " . Important challenges where experience is desirable".

## Attainment Objectives

The goals of this course are to

- Acquire the knowledge, skills, and attitudes necessary for comprehensive dental care.
- Obtain the knowledge and skills required for primary care.
- Develop the ability to formulate comprehensive treatment plans.
- Enhance awareness of team-based healthcare.

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
Essential handbook for dental resident		
Real medical interview matched with the patients' needs		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
The minimum requirements	100%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

# Comprehensive dentistry (Basic course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			木尾 哲朗 永松 浩 鬼塚 千絵		
1	Guidance	Lecture	木尾 哲朗 永松 浩 鬼塚 千絵	-	
2~3	Impression taking	Lecture, Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Types of impression taking methods by purpose	
4~7	Impression taking	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Individual tray	
8	Impression taking Intraoral scanning	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Intraoral scanner	
9~14	Study model making	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Oral examination using a study model	
15~22	Information gathering (pictures etc.)	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Oral examination with intraoral photographs Periodontal tissue examination	
23~24	Referral patient from other clinical office	Lecture, Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Interpretation of CT X-ray examination Evaluation of clinical examination	
25~29	Medical interview 1	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	communication skills	
30~34	Medical interview 2	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Narrative Based Medicine	
35~37	Medical system and treatment position ・ Learn about treatment planning and clinical management. ・ Learn about mirror technique and Pd (posture based on proprioceptive awareness).	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Mirror technique Dental treatment posture by awareness of proprioceptive derivation	

2024年度

subject code:212021

# Comprehensive dentistry (Basic course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
38 ~ 41	endodontic treatment ・Learn the basic techniques of endodontic treatment from the perspective of the anatomical form of teeth, based on clinical practice.	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Endodontic treatment based on tooth anatomy	
42 ~ 45	Basic periodontal treatment Learn about basic periodontal treatment through a series of practical exercises. Learn the rules of insurance medical treatment.	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Scaling root planing	
46 ~ 49	Treatment of the teeth disease	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Minimal Intervention	
50 ~ 54	Limited orthodontic treatment	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Minor Tooth Movement Typodont	
55 ~ 57	Presentation resume making	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Handling digital images	
58 ~ 60	Oral Presentation	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	How to use presentation software	

# Comprehensive dentistry (advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To provide patients with reassuring and safe comprehensive dental care, we reflect upon and review the knowledge, skills, and attitudes acquired through undergraduate education and clinical training. In addition, we put these elements into practice and master them in clinical settings. Regarding dental treatment skills, we revisit and apply the challenges outlined in the Dental Education Model Core Curriculum (Revised in 2022) under "E. Examination, Diagnosis, and Treatment Skills", specifically addressing " a. Challenges to be experienced firsthand in patient care" and " b. Challenges where firsthand experience is expected in patient care but can be supplemented through simulations in challenging situations", as well as " . Important challenges where experience is desirable".

## Attainment Objectives

The goals of this course are to

- Acquire the knowledge, skills, and attitudes necessary for comprehensive dental care.
- Obtain the knowledge and skills required for primary care.
- Develop the ability to formulate comprehensive treatment plans.
- Enhance awareness of team-based healthcare.

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
Essential handbook for dental resident,		
Real medical interview matched with the patients' needs		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
The minimum requirements are to submit reports and to present cases.	100%

# Comprehensive dentistry (advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~4	Guidance, Medical interview1 Good patient-medical relationship	Practice		Good patient-medical relationship	
5~8	Medical interview2 Medical interviews for patients who have difficulty communicating	Practice		Patients who have difficulty communicating	
9~12	Periodontal treatment	Practice		-	
13~17	Endodontic treatment	Practice		microscope	
18~21	Endodontic treatment	Practice		Minimal Intervention	
22~26	Dental crown treatment	Practice		Clinical dental technique	
27~31	Fixed prosthetic treatment for the missing teeth	Practice		Fixed prosthetics	
32~36	Removable prosthetic treatment for the missing teeth	Practice		Partial denture	
37~40	Orthodontic treatment	Practice		-	
41~44	Team approach treatment	Practice		Multidisciplinary collaboration	

2024年度

subject code:212022

# Comprehensive dentistry (advanced course)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	KONOO TETSUROU							
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
45 ~ 46	Application of the explanatory model	Practice		LEARN's approach	
47 ~ 48	Occlusal development	Practice		Occlusal development	
41-44	Infection control	Practice		<ul style="list-style-type: none"> <li>Standard precaution</li> <li>COVID19</li> </ul>	
51-52	Medical safety management	Practice		Incident report	
53-57	Comprehensive dentistry	Practice		Comprehensive treatment plan	
58-60	Oral presentation	Practice		Utilization of presentation software	

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	ONIDUKA CHIE, KONOO TETSUROU, NAGAMATSU HIROSHI						

## Course Description

To provide safe and comprehensive dental treatment to patients, We reflect upon and review the knowledge, skills, and attitudes we have acquired through undergraduate education and clinical training, and based on this, we understand and put into practice communication techniques and dental education techniques.

## Attainment Objectives

The goals of this course are to

1. Understand the communication methodology
2. Understand the dental educational methodology
3. Practice communication techniques
4. Practice dental education techniques
5. Cultivate professionalism as a dentist and dental educator

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed		

## Reference Books

Title	Author	Publisher
Method of medical communication analysis		
Introduction to Text Mining for Welfare / Psychology / Nursing		
How to make a research question		
Narrative Dental Communication		
Read other educational technique literature, related literature, and reference books.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios	30%
oral examinations	50%

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	ONIDUKA CHIE, KONOO TETSUROU, NAGAMATSU HIROSHI						

Evaluation item	Ratio
paper examination	20%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			木尾 哲朗		
1	orientation	Lecture	木尾 哲朗	Communication skills, Educational technique	
2	Communication skills 1 (Active listening, empathy and Cross-cultural communication)	Lecture	木尾 哲朗	Communication skills, Cross-cultural communication	
3	Communication research methods	Lecture	木尾 哲朗	Ethnomethodology, Taxonomy	
4~5	Communication skills 2	Practice	木尾 哲朗 永松 浩 鬼塚 千絵	Communication skills, Competences, Dialect	
6~7	Interaction analysis (quantitative)	Lecture, Practice	木尾 哲朗 鬼塚 千絵	Scripts, RIAS	
8~9	Interaction analysis (qualitative)	Lecture, Practice	木尾 哲朗 鬼塚 千絵	Textmining Grounded Theory Competences	
10	Global standard of the dental education	Lecture	木尾 哲朗	global standard Outcome-Based Education	
11	Problem Based Learning	Lecture	木尾 哲朗	Problem Based Learning	



2024年度

subject code:212023

# Research of the dental education

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	ONIDUKA CHIE, KONOO TETSUROU, NAGAMATSU HIROSHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12-13	Medical Interview	Lecture	永松 浩 木尾 哲朗 鬼塚 千絵	Psychosocial factors	
14	Model simulation 1(guidance, automatic trace pursuit and preparation pressure	Lecture, Practice	木尾 哲朗 永松 浩	Simulation-based medical education	
15	Oral Examination	Examination	木尾 哲朗 永松 浩 鬼塚 千絵	Examination	

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To provide safe and comprehensive dental treatment to patients, We reflect upon and review the knowledge, skills, and attitudes we have acquired through undergraduate education and clinical training, and based on this, we understand and put into practice communication techniques and dental education techniques.

## Attainment Objectives

The goals of this course are to

1. Understand the communication methodology
2. Understand the dental educational methodology
3. Practice communication techniques
4. Practice dental education techniques
5. Cultivate professionalism as a dentist and dental educator.

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
Read other educational technique literature, related literature, and reference books.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios	30%
oral examinations	50%
paper examination	20%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			木尾 哲朗		
1~5	Model simulation 2(Cavity, preparation and root canal measuring)	Lecture, Practice	木尾 哲朗 永松 浩	simulator	
6~7	Microteaching	Lecture, Practice	木尾 哲朗	Characteristic	
8~9	Medical Behavior	Lecture	木尾 哲朗	Behavior education	
10~11	Medical Ethics	Lecture	木尾 哲朗	Professionalism	
12~13	KJ method	Lecture, Practice	木尾 哲朗 鬼塚 千絵	Characteristic	
14	Facilitation skills	Lecture, Practice	木尾 哲朗	Behavior changes Facilitation	
15	oral examination	examination	木尾 哲朗		

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	3~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To provide safe and comprehensive dental treatment to patients, We reflect upon and review the knowledge, skills, and attitudes we have acquired through undergraduate education and clinical training, and based on this, we understand and put into practice communication techniques and dental education techniques.

## Attainment Objectives

The goals of this course are to

1. Understand the communication methodology
2. Understand the dental educational methodology
3. Practice communication techniques
4. Practice dental education techniques
5. Cultivate professionalism as a dentist and dental educator.

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
Read other educational technique literature, related literature, and reference books.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios	30%
oral examinations	50%
paper examination	20%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

# Research of the dental education

Course Affiliation	the Faculty of Dentistry			Grades	3 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			木尾 哲朗		
1~2	Coaching	Lecture, Practice	木尾 哲朗	Coaching theory Assertion	
3~4	Paper questionnaire	Lecture, Practice	木尾 哲朗 鬼塚 千絵	Characteristic and benefits of Questionnaire method	
5~7	dental psychosomatic disease	Lecture	木尾 哲朗	Behavioral characteristics Dental psychosomatic disorder	
8	patient psychology	Lecture	木尾 哲朗	Cognitive psychology	
9	correspondence to a complainer	Lecture, Practice	木尾 哲朗	Complainer Cognitive psychology	
10~11	Simulated (Standardized) )patient	Lecture	木尾 哲朗 鬼塚 千絵	SP Facilitation	
12~13	Safety medical environment design	Lecture	木尾 哲朗 永松 浩	Risk management Incident	
14	Professionalism	Lecture	木尾 哲朗	professionalism competence	
15	Oral examination	Examination	木尾 哲朗		

# Education and research of the general dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To understand the worldwide research trend of comprehensive dental treatment, we read abstracts the research paper.

We hold a debriefing session, discussion, etc. about the own research.

## Attainment Objectives

The goals of this course are to

- 1.Explain papers in specialized areas. (Cognitive domain)
- 2.Understand, evaluate, and discuss research in the other fields. (Cognitive/affective domain)
- 3.Improve your ability to read research papers written mainly in English. (psychomotor domain)
- 4.Improve your ability to discuss research. (psychomotor domain)
- 5.Present own research. (psychomotor domain)

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
An important related research article and appropriate reference book		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios, oral and paper examination.	100%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Understanding the educational research paper	Abstract, report and discussion	木尾 哲朗 永松 浩 鬼塚 千絵	Investigation the associated research paper	

# Education and research of the general dentistry

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To understand the worldwide research trend of comprehensive dental treatment, we read abstracts the research paper.

We hold a debriefing session, discussion, etc. about the own research.

## Attainment Objectives

The goals of this course are to

- 1.Explain papers in specialized areas. (Cognitive domain)
- 2.Understand, evaluate, and discuss research in the other fields. (Cognitive/affective domain)
- 3.Improve your ability to read research papers written mainly in English. (psychomotor domain)
- 4.Improve your ability to discuss research. (psychomotor domain)
- 5.Present own research. (psychomotor domain)
- 6.Write research reports and abstracts (Japanese and English). (Psychomotor domain)
- 7.Plan and manage graduate school seminar content. (psychomotor domain)

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
An important related research article and appropriate reference book		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios, oral and paper examination	100%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms

2024年度

subject code:212027

# Education and research of the general dentistry

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Understanding the educational research paper	Abstract , report and discussion	木尾 哲朗 永松 浩 鬼塚 千絵	Investigation the associated research paper	



# Education and research of the general dentistry

Course Affiliation	the Faculty of Dentistry			Grades	3~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

Abstract the research paper to understand the worldwide research trend of the general dentistry. Report, discuss and present the own research.

## Attainment Objectives

The goals of this course are to

- 1.Explain papers in specialized areas. (Cognitive domain)
- 2.Understand, evaluate, and discuss research in the other fields. (Cognitive/Affective domain)
- 3.Improve your ability to read research papers written mainly in English. (Psychomotor domain)
- 4.Improve your ability to discuss research. (Psychomotor domain)
- 5.Present own research. (Psychomotor domain)
- 6.Write research reports and abstracts (Japanese and English). (Psychomotor domain)
- 7.Plan and manage graduate school seminar content. (Psychomotor domain)
- 8.write a research paper. (Psychomotor domein)
- 9.Provide guidance regarding graduate school seminar content. (Affective/Psychomotor domain)
9. Instruction the seminar contents. (affective and psychomotor domain)

## Textbooks

Title	Author	Publisher
Handouts will be distributed as needed.		

## Reference Books

Title	Author	Publisher
An important related research article and appropriate reference book		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
portfolios, oral and paper examination	100%

## Etc

Learning Counseling: Counseling is available at any time, but you should make a reservation by email or phone in advance.

Subject manager: Tetsuro Konoo Email or extension: 7911

2024年度

subject code:212028

# Education and research of the general dentistry

Course Affiliation	the Faculty of Dentistry			Grades	3~4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	KONOO TETSUROU							
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE							

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Understanding the educational research paper	Abstract , report and discussion	木尾 哲朗 永松 浩 鬼塚 千絵	Investigation the associated research paper	

# Comprehensive dentistry 3 (Case Study Meetin)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KONOO TETSUROU						
Instructor(s)	KONOO TETSUROU, NAGAMATSU HIROSHI, ONIDUKA CHIE						

## Course Description

To develop a treatment plan tailored to the patient's background, and to improve your presentation skills, we collect information and conduct tests necessary

## Attainment Objectives

The goals of this course are to

- 1) Collect information from patients.
- 2) Conduct necessary inspections.
- 3) Develop a treatment plan according to the patient's narrative.
- 4) Prepare data for case presentation.
- 5) Give a presentation that is easy for the audience to understand.
- 6) Reflect on yourself and improve.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of case presentations	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	outline	lecture	木尾 哲朗	Confirmation of evaluation methods	
2~14	Formulation of comprehensive treatment plan and preparation of presentation materials	Lectures & Exercises	木尾 哲朗 永松 浩 鬼塚 千絵	Preparing for Case Presentations	
15	Case Presentations	Presentations	木尾 哲朗 永松 浩 鬼塚 千絵	Case Presentations	

# Endodontics and Restorative Dentistry (Clinical B)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Course Description

In the present, the elderly person has many teeth, and the importance of the tooth is recognized. High-precision skills to carry out dental treatment of a tooth is demanded. In this course, you will practice basic skills about Restorative Dentistry, Endodontics, Aesthetic Dentistry and Prosthodontics. Under the management by Supervisors, you will carry out simulation training and clinical practice, and acquire fundamental knowledge as well as skills for a specialist in the area of Conservative Dentistry.

## Attainment Objectives

To acquire fundamental knowledge and skills for tooth therapeutics, you will practice basic skills about Restorative Dentistry, Endodontics, Aesthetic Dentistry and Prosthodontics. You should achieve following assignments; • Construction of good relationship with patients and stuffs • Pass to grade tests (1) and (2) • Collection of clinical cases • Acquisition of skills for Endodontics, Pulp Preservation, Pre-treatment before Endodontics • Acquisition of skills for tooth preparation • Acquisition of basic skills for dissection and suturing of gingiva

## Textbooks

Title	Author	Publisher
Operative Dentistry 7th Edition	Akira Senda, et al., Ed	Ishiyaku Publishers, Inc
Operative Dentistry 21 7th Edition	Junji Tagami, et al., Ed	Nagasueshoten
Endodontics 5th Edition	Ichiro Katsuimi, et al., Ed	Ishiyaku Publishers, Inc.
Endodontics 6th Edition	Takafumi Okiji, et al., Ed	Nagasueshoten
Let's Start Micro-Endodontics	Chiaki Kitamura	Ishiyaku Publishers, Inc.
A Clinical Approach to Non-Odontogenic Toothache,	Chiaki Kitamura et al., Ed	Ishiyaku Publishers, Inc.

# Endodontics and Restorative Dentistry (Clinical B)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
the average of Tests (1) and (2)	50%
evaluation by Rubric sheet	50%

## Etc

Consultation is available at anytime out of school hour. In addition, a reservation for consultation by e-mail is available.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将		
1~3	Basic of Endodontics I You will master basic endodontics skills in simulator to clear Test (1).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Endodontics 【After Learning Task】Review about Endodontics	
4~6	Basic of Restorative Dentistry I You will master basic restorative dentistry skills in simulator to clear Test (1).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Restorative dentistry 【After Learning Task】Review about Restorative dentistry	
7~9	Basic of Tooth Preparation I You will master basic prosthodontics skills in simulator to clear Test (1).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Prosthodontics 【After Learning Task】Review about Prosthodontics	

# Endodontics and Restorative Dentistry (Clinical B)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
10~12	Test (1) You will take exams of basic skills in simulator.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about Endodontics, Restorative dentistry, and Prosthodontics 【After Learning Task】 Review about Endodontics, Restorative dentistry, and Prosthodontics	
13~15	Basic of Endodontics II You will master basic endodontics skills in clinic to clear Test (2).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about Endodontics 【After Learning Task】 Review about Endodontics	
16~18	Basic of Restorative Dentistry II You will master basic restorative dentistry skills in clinic to clear Test (2).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about Restorative dentistry 【After Learning Task】 Review about Restorative dentistry	
19~21	Basic of Tooth Preparation II You will master basic prosthodontic skills in clinic to clear Test (2).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about Prosthodontics 【After Learning Task】 Review about Prosthodontics	
22~24	Basic of Periodontal treatment You will master basic Periodontics skills in clinic to clear Test (2).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about Periodontics 【After Learning Task】 Review about Periodontics	

2024年度

subject code:212031

# Endodontics and Restorative Dentistry (Clinical B)

Course Affiliation	the Faculty of Dentistry		Grades	1~2 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25~27	Test (2) You will take exams of basic skills in clinical cases.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Preparation about Endodontics, Restorative dentistry, Prosthodontics, and Periodontics 【After Learning Task】Review about Preparation about Preparation about Endodontics, Restorative dentistry, Prosthodontics, and Periodontics	
28~30	Basic of Dissection and Suturing You will master basic dissection and suturing skills in simulator.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about dissection and suturing skills 【After Learning Task】Review about dissection and suturing skills	

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Course Description

In this course, you will collect cases to be a specialist in the area of Conservative Dentistry, and practice basic skills about Restorative Dentistry, Endodontics, Aesthetic Dentistry and Prosthodontics. Also, you will carry out training of microscope-enhanced dentistry to pass to grade test (3).

## Attainment Objectives

To acquire full knowledge and high-precision skills for tooth therapeutics and be a specialist in the area of Conservative Dentistry, you will practice special skills about Restorative Dentistry, Endodontics, Aesthetic Dentistry and Prosthodontics. You should achieve following assignments; • Pass to grade test (3) • Acquisition of special skills for Microscope-Enhanced Dentistry • Full planning of dental treatment

## Textbooks

Title	Author	Publisher
Operative Dentistry 7th Edition	Akira Senda, et al., Ed	Ishiyaku Publishers, Inc.
Operative Dentistry 21 7th Edition	Junji Tagami, et al., Ed	Nagasueshoten
Endodontics 5th Edition	Ichiro Katsuami, et al., Ed	Ishiyaku Publishers, Inc.
Endodontics 6th Edition	Takafumi Okiji, et al., Ed	Nagasueshoten
Let's Start Micro-Endodontics	Chiaki Kitamura	Ishiyaku Publishers, Inc.
A Clinical Approach to Non-Odontogenic Toothache	Chiaki Kitamura et al., Ed	Ishiyaku Publishers, Inc.



# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Test (3)	50%
evaluation by Rubric sheet	50%

## Etc

Consultation is available at anytime out of school hour. In addition, a reservation for consultation by e-mail is available.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
			北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将		
1~5	Micro-Endodontics You will master micro-endodontics skills in simulator to clear Test (3).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Microendodontics 【After Learning Task】Review about Microendodontics	
6~10	Aesthetic Dentistry under Microscope You will master aesthetic dentistry skills under microscope in simulator to clear Test (3).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Microscope and Aesthetic Dentistry 【After Learning Task】Review about Microscope and Aesthetic Dentistry	

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
11~15	Tooth Preparation under Microscope You will master prosthodontics skills in simulator to clear Test (3).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	<b>【Before Learning Task】</b> Preparation about Microscope and Prosthodontics <b>【After Learning Task】</b> Review about Microscope and Prosthodontics	
16~20	Removal of Post under Microscope You will master removal of post under microscope in simulator to clear Test (3).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	<b>【Before Learning Task】</b> Preparation about removal of post under microscope <b>【After Learning Task】</b> Review about removal of post under microscope	
21~25	Dissection and Suturing under Microscope You will master dissection and suturing under microscope in simulator to clear Test (3).	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	<b>【Before Learning Task】</b> Preparation about dissection and suturing under microscope <b>【After Learning Task】</b> Review about dissection and suturing under microscope	
26~30	Test (3) You will take exams of basic microscope skills in simulator.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	<b>【Before Learning Task】</b> Preparation about Microscope Enhanced Dentistry <b>【After Learning Task】</b> Review about Microscope Enhanced Dentistry	

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Course Description

In this course, you will collect cases to be a specialist in the area of Conservative Dentistry, and acquire special skills of microscope-enhanced dentistry to pass to grade test (4). Also, you will acquire skills for presentation and clinical reasoning through clinical seminar.

## Attainment Objectives

To acquire full knowledge and high-precision skills for tooth therapeutics and be a specialist of Conservative Dentistry, you will practice special skills about Microscope Enhanced Dentistry. Also, you will acquire skills for presentation and clinical reasoning. You should achieve following assignments; • Pass to grade test (4) • Acquisition of special skills for Microscope-Enhanced Dentistry • Full planning of dental treatment • Case Presentation

## Textbooks

Title	Author	Publisher
Operative Dentistry 7th Edition	Akira Senda, et al., Ed	Ishiyaku Publishers, Inc.
Operative Dentistry 21 7th Edition	Junji Tagami, et al., Ed	Nagasueshot en
Endodontics 5th Edition	Ichiro Katsuami, et al., Ed	Ishiyaku Publishers, Inc.
Endodontics 6th Edition	Takafumi Okiji, et al., Ed	Nagasueshot en
Let 's Start Micro-Endodontics	Chiaki Kitamura	Ishiyaku Publishers, Inc.
A Clinical Approach to Non-Odontogenic Toothache	Chiaki Kitamura et al., Ed	Ishiyaku Publishers, Inc.

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	KITAMURA CHIAKI							
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA							

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Test (4)	50%
evaluation by Rubric sheet	50%

## Etc

Consultation is available at anytime out of school hour. In addition, a reservation for consultation by e-mail is available.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将		
1~8	Micro-Endodontics You will master micro-endodontics skills in clinic to clear Test (4).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Micronodontics 【After Learning Task】Review about Micronodontics	
9~16	Aesthetic Dentistry under Microscope You will master aesthetic dentistry skills under microscope in clinic to clear Test (4).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Microscope and Aesthetic Dentistry 【After Learning Task】Review about Microscope and Aesthetic Dentistry	

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
17~24	Micro-Endodontic Surgery You will master micro-endodontic surgery skills in clinic to clear Test (4).	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Endodontic Microsurgery 【After Learning Task】Review about Endodontic Microsurgery	
25~32	Test (4) You will take exams of microscope skills in clinical cases.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Microscope Enhanced Dentistry 【After Learning Task】Review about Microscope Enhanced Dentistry	
33~40	Planning in clinics You will plan to treat in clinic to obtain accredited specialist.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Accredited Specialist and Treatment Planning 【After Learning Task】Review about Accredited Specialist and Treatment Planning	
41~48	Clinics You will carry out clinical cases to obtain accredited specialist.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Accredited Specialist and Case Presentation 【After Learning Task】Review about Accredited Specialist and Case Presentation	

# Endodontics and Restorative Dentistry (Clinical A)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
49 ~ 56	Case Presentation and Lectures You will carry out clinical case presentations, and attend lectures to obtain accredited specialist.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Accredited Specialist and Case Presentation 【After Learning Task】Review about Accredited Specialist and Case Presentation	
57 ~ 60	Preparation of Cases for Accredited Specialists You will prepare clinical case presentations to obtain accredited specialist.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about Accredited Specialist and Case Presentation 【After Learning Task】Review about Accredited Specialist and Case Presentation	

# Endodontics and Restorative Dentistry (Research S)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Course Description

In this course, you will read and present papers related your research to acquire logical thinking as well as international point of view. Also, you will present results of your research to discuss.

## Attainment Objectives

To acquire full knowledge and skills for research and presentation, you will read and present international papers related your research to acquire logical thinking as well as international point of view. You should achieve following assignments; • Collect international papers related to your research • Read and present papers • Acquire presentation skills • Case Presentation

## Textbooks

Title	Author	Publisher
Operative Dentistry 7th Edition	Akira Senda, et al., Ed	Ishiyaku Publishers, Inc.
Operative Dentistry 21 7th Edition	Junji Tagami, et al., Ed	Nagasueshot en
Endodontics 5th Edition	Ichiro Katsumi, et al., Ed	Ishiyaku Publishers, Inc.
Endodontics 6th Edition	Takafumi Okiji, et al., Ed	Nagasueshot en
Let 's Start Micro-Endodontics	Chiaki Kitamura	Ishiyaku Publishers, Inc.
A Clinical Approach to Non-Odontogenic Toothache	Chiaki Kitamura et al., Ed	Ishiyaku Publishers, Inc.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Presentation	50%

# Endodontics and Restorative Dentistry (Research S)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Evaluation item	Ratio
evaluation by Rubric sheet	50%

## Etc

Consultation is available at anytime out of school hour. In addition, a reservation for consultation by e-mail is available.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
			北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将		
1~5	Reading and presentation of research paper You will master reading and presentation of related international research paper.	Introduction and Discussion of Papers	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about reading and presentation of related international research paper 【After Learning Task】Review about reading and presentation of related international research paper	
6~10	Presentation of research You will show and explain your research.	Discussion of Research	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about show and explain your research 【After Learning Task】Review about show and explain your research	



2024年度

subject code:212034

# Endodontics and Restorative Dentistry (Research S

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11~15	Introduction of international papers by supervisors You will learn and attend lectures by specialists.	Introduction and Discussion of Papers	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about lectures by specialists 【After Learning Task】Review about lectures by specialists	

# Endodontics and Restorative Dentistry (Research P

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Course Description

In this course, you will acquire skills related to research for PhD.

## Attainment Objectives

To be a international researcher, dentist, and educator, you will acquire abilities to carry out experiments and prepare papers for PhD. You should achieve following assignments; • Acquisition of knowledge and skills to carry out research • Preparation of results from experiments • Presentation in scientific meeting • Prepare scientific papers

## Textbooks

Title	Author	Publisher
Operative Dentistry 7th Edition	Akira Senda, et al., Ed	Ishiyaku Publishers, Inc.
Operative Dentistry 21 7th Edition	Junji Tagami, et al., Ed	Nagasueshot en
Endodontics 5th Edition	Ichiro Katsumi, et al., Ed	Ishiyaku Publishers, Inc.
Endodontics 6th Edition	Takafumi Okiji, et al., Ed	Nagasueshot en
Let ' s Start Micro-Endodontics	Chiaki Kitamura	Ishiyaku Publishers, Inc.
A Clinical Approach to Non-Odontogenic Toothache	Chiaki Kitamura et al., Ed	Ishiyaku Publishers, Inc.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Practices	50%
evaluation by Rubric sheet	50%

# Endodontics and Restorative Dentistry (Research P)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning Task	Lecture rooms
			北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将		
1	Orientation You will discuss and decide your research theme with supervisors.	Lecture	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about research theme 【After Learning Task】Review about research theme	
2,3	Research with Cells You will master research skills with cells.	Discussion of Research	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about research skills with cells 【After Learning Task】Review about research skills with cells	
4,5	Research with animals You will master research skills with animals.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about research skills with animals. 【After Learning Task】Review about research skills with animals.	
6,7	Research of Materials You will master research skills about dental materials.	Practice	北村 知昭 鷺尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】Preparation about research skills about dental materials 【After Learning Task】Review about research skills about dental materials	

# Endodontics and Restorative Dentistry (Research P)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	KITAMURA CHIAKI						
Instructor(s)	KITAMURA CHIAKI, WASHIO AYAKO, ORIMOTO AI, AIHARA RYOSUKE, MURATA KAZUMASA						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
8,9	Research of Devices You will master research skills about medical and dental devices.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about research skills about medical and dental devices 【After Learning Task】 Review about research skills about medical and dental devices	
10,11	Clinical Research You will master clinical research skills.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about clinical research skills 【After Learning Task】 Review about Eclinical research skills	
12~15	Preparation of Presentation and Papers You will master preparation of presentation and paper to obtain PhD.	Practice	北村 知昭 鷲尾 絢子 折本 愛 相原 良亮 村田 一将	【Before Learning Task】 Preparation about preparation of presentation and paper to obtain PhD 【After Learning Task】 Review about preparation of presentation and paper to obtain PhD	

# Periodontology (Clinical Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANNO KOUTARO, KASAI SHINGO						

## Course Description

【Language】 English and Japanese  
 Periodontitis has received a lot of attention as an oral disease associated with systemic disease in recent years. This course deals with effective diagnosis and treatment procedure of periodontitis based on EBM. You will be able to read a number of published articles related to periodontitis all over the world and acquire diagnostic ability and clinical problem resolution skill as a periodontist.

## Attainment Objectives

By the end of the course, students should be able to do the following; 1. Practice a medical interview to patients of periodontitis (1), 2. Describe and explain periodontal tissue examination (2~7, 20), 3. Design a treatment plan based on periodontal tissue examination (8), 4. Practice an effective patient education (9~14), 5. Practice ultrasonic scaling and scaling and root planing (15~19), 6. Recognize basic techniques of periodontal surgery and explain wound healing after surgery (21~23), 7. Recognize periodontal regenerative therapy and explain prognosis after regenerative surgery (24, 25), 8. Describe and explain prosthetics, orthodontics and implant in periodontal therapy (26~28), 9. Explain significance and procedure of SPT (29), 10. Report a case of periodontitis and explain treatment plan and outcome of periodontal therapy (30).

## Core Curriculum Item

Core Curriculum	Contents
D-3-2-3	歯周疾患の病因と病態を理解している。
D-3-2-4	口腔細菌、プラーク(口腔バイオフィルム)及び歯石を理解している。
D-4-2-3	治療方針と治療の優先性及び患者の背景や希望を考慮して治療計画を立案できる。
D-5-1-3	プラークコントロールの意義と方法を理解している。
D-5-2-3-2	歯周疾患の検査法、診断及び治療方針(メンテナンスを含む)を理解している。
D-5-2-3-3	歯周治療の術式と適応症を理解している。
D-5-2-3-4	歯周外科治療の種類と適応症を理解している。
D-5-2-3-5	歯周治療後の組織の治癒機転と予後を理解している。
E-2-5-1	診断並びに治療に必要な画像検査及び臨床検査を選択し、実施できる。
E-5-3-3-1	歯周基本治療としてプラークコントロール指導ができる。(a)
E-5-3-3-2	歯周基本治療としてスクレーリングができる。(a)
PS-05	病因と病態、生体の構造と機能の異常を理解している。
PS-06	診断と治療を理解している。
PS-07	歯科医療における材料と機器の性質と使用法を理解している。

# Periodontology (Clinical Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANO KOUTARO, KASAI SHINGO						

## Textbooks

Title	Author	Publisher
Journal of Periodontology		
Journal of Clinical Periodontology		

## Reference Books

Title	Author	Publisher
Texts will be delivered in every class.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination in clinical conference	100%

## Etc

Student consultation: as needed.  
Questions by e-mail are also acceptable.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1,2	Medical interview to patient of periodontitis	Practice	中島 啓介	post-learning : medical interview	
3,4	Periodontal Tissue Examination (Intraoral photograph 1)	Practice	中島 啓介	post-learning : Intraoral photo	
5,6	Periodontal Tissue Examination (Intraoral photograph 2)	Practice	中島 啓介	post-learning : Intraoral photo	
7,8	Periodontal Tissue Examination (Probing)	Practice	中島 啓介	post-learning : probing	
9,10	Periodontal Tissue Examination (Radiologic image reading)	Practice	中島 啓介	post-learning : X-ray photo	
11,12	Periodontal Tissue Examination (Measurement and analysis of occlusal force)	Practice	臼井 通彦	post-learning : occlusal force	

# Periodontology (Clinical Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANO KOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
13,14	Periodontal Tissue Examination (Tooth mobility measurement)	Practice	白井 通彦	post-learning : mobility	
15,16	Design of treatment plan	Practice	白井 通彦	post-learning : treatment plan	
17,18	Effective Patient Education 1	Practice	白井 通彦	post-learning : motivation	
19,20	Effective Patient Education 2	Practice	白井 通彦	post-learning : motivation	
21,22	Effective Patient Education 3	Practice	中村 太志	post-learning : motivation	
23,24	Effective Patient Education 4	Practice	中村 太志	post-learning : motivation	
25,26	Effective Patient Education 5	Practice	中村 太志	post-learning : motivation	
27,28	Effective Patient Education 6	Practice	中村 太志	post-learning : motivation	
29,30	Ultrasonic Scaling (supragingiva)	Practice	中村 太志	post-learning : ultrasonic scaling	
31,32	Ultrasonic Scaling (subgingiva and furcation)	Practice	鬼塚 理	post-learning : ultrasonic scaling	
33,34	Scaling and Root Planing 1 (operator position)	Practice	鬼塚 理	post-learning : ultrasonic scaling	
35,36	Scaling and Root Planing 2 (sharpening scaler)	Practice	鬼塚 理	post-learning : ultrasonic scaling	
37,38	Scaling and Root Planing 3 (nonsurgical periodontal therapy)	Practice	鬼塚 理	post-learning : ultrasonic scaling	
39,40	Design of treatment plan based on reevaluation and response to periodontal therapy	Practice	鬼塚 理	post-learning : reevaluation	

# Periodontology (Clinical Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANO KOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
41,42	Periodontal Surgery 1 (basic techniques in periodontal surgery; periodontal flap (full and partial thickness) and method for suturing)	Practice	佐野 孝太郎	post-learning : Flap operation	
43,44	Periodontal Surgery 2 (Flap operation)	Practice	佐野 孝太郎	post-learning : Flap operation	
45,46	Periodontal Surgery 3 (connective tissue graft)	Practice	佐野 孝太郎	post-learning : Flap operation	
47,48	Periodontal Regenerative Therapy 1 (GTR method)	Practice	佐野 孝太郎	post-learning : GTR method	
49,50	Periodontal Regenerative Therapy 2 (Emdogain)	Practice	佐野 孝太郎	post-learning : Emdogain	
51,52	Periodontal Prosthetics	Practice	笠井 信吾	post-learning : Periodontal Prosthetics	
53,54	Implants in Periodontal Therapy	Practice	笠井 信吾	post-learning : Implants in Periodontal Therapy	
55,56	Orthodontics in Periodontal Therapy	Practice	笠井 信吾	post-learning : Emdogain	
57,58	Practical Significance of Supportive Periodontal Therapy (SPT)	Practice	笠井 信吾	post-learning : SPT	
59,60	Clinical Conference	Practice	笠井 信吾	post-learning : Clinical Conference	



# Periodontology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANNO KOUTARO, KASAI SHINGO						

## Course Description

【Language】 English and Japanese Research of periodontology is constantly advancing field in dentistry. It is important to recognize the latest data of the field before you start research. This course introduces a variety of tools to understand paper in English and also deals with clinical statistics, meta-analysis and sentence writing for scientific paper and presentation.

## Attainment Objectives

By the end of the course, students should be able to do the following;1. Understand content of paper in English using online dictionary2. Create database searching references by PubMed3. Perform basic analysis of clinical data by statistical procedure4. Understand procedure of meta-analysis5. Make simple and logical sentences for scientific papers

## Core Curriculum Item

Core Curriculum	Contents
C-6-2-1	確率変数とその分布、統計的推測(推定と検定)の原理と方法を理解している。
C-6-2-4	調査方法と統計的分析法を理解している。

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination	100%

## Etc

Questions from students are always welcome. Questions may also be submitted via email.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1	Search on Online Dictionary	practice	中島 啓介	post-learning: Online Dictionary	その他
2	Search on PubMed	practice	中島 啓介	post-learning: PubMed	その他
3	Preparation of Literature Database	practice	中島 啓介	post-learning: Preparation of Literature Database	その他

# Periodontology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANO KOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Clinical Statistics (Control of data)	practice	中村 太志	post-learning: Control of data	その他
5	Clinical Statistics (normal distribution of data )	practice	中村 太志	post-learning: normal distribution of data	その他
6	Clinical Statistics (mean and comparison between groups )	practice	中村 太志	post-learning: mean and comparison between groups	その他
7	Clinical Statistics (analysis of variance)	practice	鬼塚 理	post-learning: analysis of variance	その他
8	Clinical Statistics (simple linear regression analysis)	practice	鬼塚 理	post-learning: simple linear regression analysis	その他
9	Clinical Statistics (multiple linear regression analysis)	practice	鬼塚 理	post-learning: multiple linear regression analysis	その他
10	Analysis of Clinical Data 1	practice	笠井 信吾	post-learning: Analysis of Clinical Data	その他
11	Analysis of Clinical Data 2	practice	笠井 信吾	post-learning: Analysis of Clinical Data	その他
12	Basis of meta-analysis	practice	笠井 信吾	post-learning: Basis of meta-analysis	その他
13	Application of meta-analysis	practice	佐野 孝太郎	post-learning: Application of meta-analysis	その他
14	Preparation of a paper in Japanese	practice	佐野 孝太郎	post-learning: Preparation of a paper	その他

2024年度

subject code:212042

# Periodontology

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	USUI MICHIIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANO KOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
15	Preparation of a paper in English	practice	佐野 孝太郎	post-learning: Preparation of a paper	その他

# Periodontology (Clinical Conference)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	NAKASHIMA KEISUKE,USUI MICHIIKO,NAKAMURA TAJI,ONIZUKA SATORU,SANO KOUTARO,KASAI SHINGO						

## Course Description

【Language】 English and Japanese You will read a number of the latest articles associated with periodontitis and learn methods for solving problems based on clinical cases.

## Attainment Objectives

By the end of the course, students should be able to do the following;1. Respond to acute and chronic periodontitis2. Develop the knowledge of surgical and nonsurgical periodontal therapy3. Recognize the concept of refractory chronic periodontitis4. Learn dental treatment based on psychosomatic dentistry and respond to the patients5. Develop the knowledge of periodontal regenerative therapy

## Textbooks

Title	Author	Publisher
Journal of Periodontology		
Journal of Clinical Periodontology		
Journal of Periodontal Research		

## Reference Books

Title	Author	Publisher
Select and handout a paper from the following journals each time.		
Journal of Periodontology		
Journal of Clinical Periodontology		
Journal of Periodontal Research		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination in seminar, clinical conference	100%

## Etc

Questions from students are always welcome. Questions may also be submitted via email.

# Periodontology (Clinical Conference)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	NAKASHIMA KEISUKE,USUI MICHIIHIKO,NAKAMURA TAIJI,ONIZUKA SATORU,SANO KOUTARO,KASAI SHINGO						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Seminar・Clinical conferences You will consider future development of periodontal research and treatment from the latest articles and examine application of them to clinical case.	Seminar and clinical conference	中島 啓介 白井 通彦 中村 太志 佐野 孝太朗 笠井 信吾 鬼塚 理	Post-learning: handouts of clinical papers	その他

# Periodontology (Advanced Periodontal Surgery)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and practice	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	NAKASHIMA KEISUKE, USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANNO KOUTARO, KASAI SHINGO						

## Course Description

【Language】 English and Japanese  
Periodontists need technological capacity and knowledge of periodontal surgery. This course deal with the basic concept and knowledge of periodontal surgery. It also enhances the development of student's skill of periodontal surgery on practicing phantom and porcine jawbone and assistance of supervisory doctor.

## Attainment Objectives

By the end of the course, students should be able to do the following;1. Describe and explain a basic concept of periodontal surgery2. Select appropriate operative procedure according to cases3. Handle and select necessary surgical instruments on periodontal surgery4. Practice periodontal surgery under the guidance of supervisory doctor

## Textbooks

Title	Author	Publisher
Handouts		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination	100%

## Etc

Questions from students are always welcome. Questions may also be submitted via email. Texts will be delivered in every class.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Flap operation using mucoperiosteal flap	lecture	中島 啓介	Post-learning: Flap Operation	その他
2	Flap operation using mucosal flap	lecture	中島 啓介	Post-learning: Flap Operation	その他
3	Flap operation You will practice flap operation using phantom and porcine jawbone.	practice	中島 啓介	Post-learning: Flap Operation	その他

# Periodontology (Advanced Periodontal Surgery)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and practice	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	NAKASHIMA KEISUKE, USUI MICHIIHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANNO KOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
4	Frenectomy	lecture	中村 太志	Post-learning: Frenectomy	その他
5	Vestibuloplasty	lecture	中村 太志	Post-learning: Vestibuloplasty	その他
6	Periodontal plastic surgery (pedicle gingival graft)	lecture	中村 太志	Post-learning: Periodontal plastic surgery	その他
7	Periodontal plastic surgery (free gingival graft)	lecture	佐野 孝太郎	Review	その他
8	Periodontal plastic surgery (connective tissue graft)	lecture	佐野 孝太郎	Review	その他
9	Periodontal plastic surgery You will practice periodontal plastic surgery using phantom and porcine jawbone.	practice	佐野 孝太郎	Post-learning: Periodontal plastic surgery	その他
10	GTR method	lecture	笠井 信吾	Post-learning: GTR method	その他
11	GTR method You will practice GTR method using phantom and porcine jawbone.	practice	笠井 信吾	Post-learning: GTR method	その他
12	Emdogain	lecture	笠井 信吾	Post-learning: Emdogain	その他
13	Autogenous bone graft	lecture	鬼塚 理	Post-learning: Autogenous bone graft	その他
14	Assistance of periodontal plastic surgery You will assist periodontal plastic surgery in clinic.	practice	鬼塚 理	Post-learning: Periodontal plastic surgery	診療室_病院

2024年度

subject code:212044

# Periodontology (Advanced Periodontal Surgery)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and practice	Total time	30	Credits	2
Responsible Instructor	NAKASHIMA KEISUKE						
Instructor(s)	NAKASHIMA KEISUKE, USUI MICHHIKO, NAKAMURA TAIJI, ONIZUKA SATORU, SANOKOUTARO, KASAI SHINGO						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
15	Assistance of periodontal regenerative surgery You will assist periodontal regenerative surgery in clinic.	practice	鬼塚 理	Post-learning: Regenerative Therapy	診療室_病院



# Removable Prosthesis (Basic Course)

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	120	Credits	4
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

## Course Description

Acquire clinical techniques for practicing all-deficiency prosthetic treatment in clinical settings.

## Attainment Objectives

1. All can be clinically and technically performed up to the installation of complete dentures.2. The occlusal adjustment is possible.3. Can adjust dentures.4. Can repair dentures.

## Reference Books

Title	Author	Publisher
Complete denture technique		Ishiyaku Publisher

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	58%
Final test	42%

## Etc

Learning consultation Arita Watanabe

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					Moodle
1,2	Preliminary impression	Remote Lecture (Moodle) Exercise	有田 正博	Preliminary impression	Moodle
3,4	Study model	Remote Lecture (Moodle) Exercise	有田 正博	Study model	Moodle
5,6	Individual tray	Remote Lecture (Moodle) Exercise	有田 正博	Individual tray	Moodle

# Removable Prosthesis (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	120	Credits	4
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7,8	Border molding	Remote Lecture (Moodle) Exercise	有田 正博	Border molding	Moodle
9,10	Precise impression	Remote Lecture (Moodle) Exercise	有田 正博	Precise impression	Moodle
11,12	Definitive cast	Remote Lecture (Moodle) Exercise	有田 正博	Definitive cast	Moodle
13,14	Bite plate	Remote Lecture (Moodle) Exercise	有田 正博	Bite plate	Moodle
15,16	Bite taking 10 occlusal plane	Remote Lecture (Moodle) Exercise	有田 正博	Bite taking	Moodle
17,18	Bite taking 2 Vertical dimension	Remote Lecture (Moodle) Exercise	有田 正博	Bite taking	Moodle
19,20	Mount to the articulator 1 Face-bow transfer	Remote Lecture (Moodle) Exercise	有田 正博	Face-bow transfer	Moodle
21,22	Mount to the articulator 2 Mounting plate	Remote Lecture (Moodle) Exercise	有田 正博	Mounting plate	Moodle
23,24	Gothic arch tracing	Remote Lecture (Moodle) Exercise	有田 正博	Gothic arch	Moodle
25,26	Check-bite technique	Remote Lecture (Moodle) Exercise	有田 正博	Check-bite	Moodle
27,28	Simultaneous recording method of Gothic arch tracing and check bite technique	Remote Lecture (Moodle) Exercise	有田 正博	Gothic arch Check-bite	Moodle

# Removable Prosthesis (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	120	Credits	4
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
29,30	Artificial tooth selection Anterior	Remote Lecture (Moodle) Exercise	有田 正博	Artificial tooth	Moodle
31,32	Artificial tooth selection Posterior	Remote Lecture (Moodle) Exercise	渡辺 崇文	Artificial tooth	Moodle
33,34	Tooth arrangement Anterior	Remote Lecture (Moodle) Exercise	渡辺 崇文	Tooth arrangement	Moodle
35,36	Tooth arrangement Posterior	Remote Lecture (Moodle) Exercise	渡辺 崇文	Tooth arrangement	Moodle
37,38	Festoon	Remote Lecture (Moodle) Exercise	渡辺 崇文	Festoon	Moodle
39,40	Investment	Remote Lecture (Moodle) Exercise	渡辺 崇文	Investment	Moodle
41,42	Curing	Remote Lecture (Moodle) Exercise	渡辺 崇文	Curing	Moodle
43,44	Polishing	Remote Lecture (Moodle) Exercise	渡辺 崇文	Polishing	Moodle
45,46	Occlusal adjustment	Remote Lecture (Moodle) Exercise	渡辺 崇文	Occlusal adjustment	Moodle
47,48	Fitness of mucosal surface	Remote Lecture (Moodle) Exercise	渡辺 崇文	Fitness of mucosal surface	Moodle
49,50	Patient education	Remote Lecture (Moodle) Exercise	渡辺 崇文	Patient education	Moodle

2024年度

subject code:212051

# Removable Prosthesis (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	120	Credits	4
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
51,52	Reline	Remote Lecture (Moodle) Exercise	渡辺 崇文	Reline	Moodle
53,54	Denture repair 1 Decrease of vertical dimension	Remote Lecture (Moodle) Exercise	渡辺 崇文	Adjust of VD	Moodle
55,56	Denture repair 2 Replacement method for metal teeth	Remote Lecture (Moodle) Exercise	渡辺 崇文	Metal teeth	Moodle
57,58	Coping with mucosal redness	Remote Lecture (Moodle) Exercise	渡辺 崇文	Denture stomatitis	Moodle
59,60	Final test	Remote Test (Moodle)	渡辺 崇文	Prepare for final test	Moodle

# Removable Prosthesis (Flange Technique)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

## Course Description

Learn a basic technique for the higher special technical acquisition

## Attainment Objectives

- You can treat a removable prosthetic treatment with flange technique.

## Reference Books

Title	Author	Publisher
Prosthetic treatment for edentulous patients		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	70%
Final test	30%

## Etc

Learning consultation Makihara

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Remote Lecture(Moodle)	有田 正博	Denture space	Moodle
2	What is denture space?	Remote Lecture(Moodle)	有田 正博	Denture space	Moodle
3	Denture space 1Neutral zone technique	Remote Lecture(Moodle)	有田 正博	Neutral zone technique	Moodle
4	Denture space 2Piezography	Remote Lecture(Moodle)	有田 正博	Piezography	Moodle
5	Denture space 3Flange technique	Remote Lecture(Moodle)	有田 正博	Flange technique	Moodle

# Removable Prosthesis (Flange Technique)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Clinic of Flange technique 1Preliminary impression Study model	Remote Lecture(Moodle) Exercise	有田 正博	Preliminary impression Study model	Moodle
7	Clinic of Flange technique 2Closed impression technique	Remote Lecture(Moodle) Exercise	有田 正博	Closed impression technique	Moodle
8	Clinic of Flange technique 3Precise impression Definitive cast	Remote Lecture(Moodle) Exercise	有田 正博	Precise impression Definitive cast	Moodle
9	Clinic of Flange technique 4Face-bow transfer Bite taking	Remote Lecture(Moodle) Exercise	有田 正博	Face-bow transfer Bite taking	Moodle
10	Clinic of Flange technique 5Preparation for denture space taking	Remote Lecture(Moodle) Exercise	有田 正博	Preparation for denture space taking	Moodle
11	Clinic of Flange technique 6Denture space taking	Remote Lecture(Moodle) Exercise	有田 正博	Denture space taking	Moodle
12	Clinic of Flange technique 7Gypsum core and artificial tooth arrangement	Remote Lecture(Moodle) Exercise	有田 正博	Gypsum core and artificial tooth arrangement	Moodle
13	Clinic of Flange technique 8Flange technique for gingival region	Remote Lecture(Moodle) Exercise	有田 正博	Flange technique for gingival region	Moodle
14	Clinic of Flange technique 9Reline	Remote Lecture(Moodle) Exercise	有田 正博	Reline	Moodle
15	Conclusion, final test	Remote Test(Moodle)	有田 正博	Prepare for final test	Moodle

# Removable Prosthesis (Magnet Denture)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

## Course Description

Learn a basic technique for the higher special technical acquisition

## Attainment Objectives

You can treat a removable prosthetic treatment with dental magnetic attachment.

## Reference Books

Title	Author	Publisher
New Dental magnetic attachment Q&A	New Dental magnetic attachment Q&A	Ishiyaku Pub. Inc.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	42%
Final test	50%
Total evaluation (Attitude, Interest, etc)	8%

## Etc

Learning consultation

Watanabe: E-mail

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Lecture	有田 正博 渡辺 崇文	Dental magnetic attachment	
2	History of dental magnetic attachment	Lecture	有田 正博 渡辺 崇文	History	
3	Construction of DMA Cap-york, Sandwich, Split-pole	Lecture	有田 正博 渡辺 崇文	Construction	

# Removable Prosthesis (Magnet Denture)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Characteristics of DMA Basic form	Lecture	有田 正博 渡辺 崇文	Basic form	
5	Clinical application of DMA	Lecture	有田 正博 渡辺 崇文	Clinical application	
6	Effect on MRI 1 Dental metal	Lecture Exercise	有田 正博 渡辺 崇文	Dental metal	
7	Effect on MRI 2 Casting method	Lecture Exercise	有田 正博 渡辺 崇文	Casting method	
8	Countermeasures for MRI Removable attachment	Lecture Exercise	有田 正博 渡辺 崇文	Removable attachment	
9	Countermeasures for MRI Modification of commercial keeper	Lecture Exercise	有田 正博 渡辺 崇文	Modification of commercial keeper	
10	New generation magnetic attachment	Lecture Exercise	有田 正博 渡辺 崇文	New DMA	
11	Direct bonding method	Lecture Exercise	有田 正博 渡辺 崇文	Direct bonding method	
12	Magnet denture (case1) Removable partial denture	Lecture Exercise	有田 正博 渡辺 崇文	Direct bonding method	
13	Magnet denture (case2) Maxillofacial prosthesis	Lecture Exercise	有田 正博 渡辺 崇文	Maxillofacial prosthesis	
14	Magnet denture (case3) Removable bridge	Lecture Exercise	有田 正博 渡辺 崇文	Removable bridge	
15	Final test	Test	有田 正博 渡辺 崇文	Prepare for final test	



# Removable Prosthodontics (Obstru

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MAKIHARA ERI						
Instructor(s)	MAKIHARA ERI						

## Course Description

Obstructive sleep apnea (OSA) is a disorder in which the upper airway is partially or completely obstructed during sleep resulting in repeated snoring, hypopnea, and apnea, and causing daytime sleepiness and other problems in daily life. The cause is due to functional or morphological abnormalities of the upper airway, and it is important to select treatment according to the cause. Oral appliance (OA) therapy can be provided by dentists, but it is important to fully understand its therapeutic effects and side effects and to relationship with medical institutions. In this lecture, students will deepen their understanding of the basic knowledge as well as the details of medical treatment and medical-dental cooperation.

## Attainment Objectives

Knowledge of OSA and treatment of patients.

## Core Curriculum Item

Core Curriculum	Contents
D-2-4-2	医療情報提供書の記載方法を理解している。
D-2-4-3	医科歯科連携の必要性と歯科医師の関わり方を理解している。
D-3-1-11-6	睡眠時無呼吸の原因、診察、検査、診断及び治療方針を理解している。
D-6-2-2	歯科技工士と連携する歯科技工の方法の概要を理解している。
D-6-2-3	多職種連携に必要となる基本的な専門用語を理解している。

## Reference Books

Title	Author	Publisher
Clinical of sleep medicine and dentistry		Hyoron Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	42%
Final test	50%
Total evaluation	8%

## Etc

Learning consultation Makihara E-mail

# Removable Prosthodontics (Obstru

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MAKIHARA ERI						
Instructor(s)	MAKIHARA ERI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Orientation	Remote Lecture(Moodle)	槇原 絵理	SAS	
3,4	Overview of sleep apnea (SAS)	Remote Lecture(Moodle)	槇原 絵理	SAS	
5,6	Overview of obstructive sleep apnea (OSA)	Remote Lecture(Moodle)	槇原 絵理	OSAS	
7,8	Diagnosis of SAS	Remote Lecture(Moodle)	槇原 絵理	ESS, PSG	
9,10	Treatment of SAS	Remote Lecture(Moodle)	槇原 絵理	Treatment of SAS	
11,12	When an OSA patient comes to the hospital	Remote Lecture(Moodle)	槇原 絵理	Outcome patient	
13,14	OA clinical 1 Examination / diagnosis	Remote Lecture(Moodle) Exercise	槇原 絵理	Examination / diagnosis	
15,16	OA clinical 2 Impression taking , Bite taking	Remote Lecture(Moodle) Exercise	槇原 絵理	Fabrication	
17,18	OA clinical 3 Oral appliance (OA) 1	Remote Lecture(Moodle) Exercise	槇原 絵理	Fabrication	
19,20	OA clinical 4 Oral appliance (OA) 2	Remote Lecture(Moodle) Exercise	槇原 絵理	Fabrication	
21,22	OA clinical 5 Therasnore	Remote Lecture(Moodle) Exercise	槇原 絵理	Therasnore	
23,24	OA clinical 6 Commercial OA	Remote Lecture(Moodle)	槇原 絵理	Commercial OA	

2024年度

subject code:212054

# Removable Prosthodontics (Obstru

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MAKIHARA ERI						
Instructor(s)	MAKIHARA ERI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	OA clinical 7 Titration	Remote Lecture(Moodle)Exercise	槇原 絵理	Titration	
27,28	OA clinical 8 Compliance	Remote Lecture(Moodle)	槇原 絵理	Compliance	
29,30	Final test	Remote Test(Moodle)	槇原 絵理	prepare for final test	

# Removable Prosthodontics (TMD)

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MAKIHARA ERI						
Instructor(s)	MAKIHARA ERI						

## Course Description

TMJ disorder is a comprehensive diagnostic term for a disorder whose main symptoms are pain in the temporomandibular joint and masticatory muscles, TMJ noise, and disorders of mouth opening or abnormal jaw movements. Diagnostic Criteria for Temporomandibular disorders (DC/TMD) have been published as a diagnostic method. In this lecture, students will be able to understand and practice diagnostic methods of TMD and learn clinical aspects of TMD related to occlusion.

## Attainment Objectives

Knowledge of TMD and therapy of patients.

## Core Curriculum Item

Core Curriculum	Contents
D-3-1-7-1	顎関節疾患の分類と特徴を理解している。
D-3-1-7-2	顎関節疾患の症状、診断法及び治療法を理解している。

## Reference Books

Title	Author	Publisher
Temporomandibular disorders		Nagasue Publisher

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	42%
Final test	50%
Total evaluation	8%

## Etc

Learning consultation: Eri Makiyara (E-mail)

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Orientation	Remote lecture (Moodle)	槇原 絵理	TMD	

# Removable Prosthodontics (TMD)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MAKIHARA ERI						
Instructor(s)	MAKIHARA ERI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3,4	TMD tide	Remote lecture (Moodle)	槇原 絵理	TMD	
5,6	DC/TMD	Remote lecture (Moodle)	槇原 絵理	DC/TMD	
7,8	Thought of the Japanese Society for Temporomandibular joint	Remote lecture (Moodle)	槇原 絵理	The Japanese Society fo Temporomandibular joint	
9,10	Contribution factors of TMD	Remote lecture (Moodle)	槇原 絵理	Contribution factors	
11,12	Low vertical occlusion	Remote lecture (Moodle)	槇原 絵理	Low vertical occlusion	
13,14	Force control	Remote lecture (Moodle)	槇原 絵理	Force control	
15,16	Increase Vertical dimension and TMD	Remote lecture (Moodle)	槇原 絵理	Increase VD and TMD	
17,18	Occlusal adjustment	Remote lecture (Moodle)	槇原 絵理	Occlusal adjustment	
19,20	Neuromuscular regulation mechanism	Remote lecture (Moodle)	槇原 絵理	Neuromuscular regulation mechanism	
21,22	Habitual mastication	Remote lecture (Moodle)	槇原 絵理	Habitual mastication	
23,24	Fabrication of appliance for TMD	Remote lecture (Moodle)	槇原 絵理	Fabrication	
25,26	Adjustment of appliance 1	Remote lecture (Moodle)	槇原 絵理	Adjustment	
27,28	Adjustment of appliance 2	Remote lecture (Moodle)	槇原 絵理	Adjustment	
29,30	Final test	Remote lecture (Moodle)	槇原 絵理	Prepare for final test	

# Removable Prosthodontics (Research Discussion)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ARITA MASAHIRO						
Instructor(s)	ARITA MASAHIRO						

## Course Description

Read the literature in detail to understand the latest trends in dental prosthodontics-related research. Discussions on your research. Temporomandibular disorders team approach, clinical seminar in the field of our division.

## Attainment Objectives

1. Develop the ability to read English literature.
2. Understand the content of the research.
3. Develop the ability to criticize research.
4. Understand the background and trends of research.
5. Develop the latest clinical techniques.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	90%
Final Report	10%

## Etc

Learning consultation Tsuda

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~30	Understand the background of research, the contents of the latest literature, and the future prospects of research in related fields	Round reading, literature introduction and discussion Although it is basically a face-to-face meeting, since abstracts of documents are also delivered by e-mail, questions and answers can	有田 正博 渡辺 崇文 大楠 弘通	Detailed literature reading and research in related fields	

# Prosthodontics Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Course Description

【Language】 English and Japanese

In this course, you will learn basic theories such as anatomy, diagnostic imaging, and the use of simulation software to pursue implant treatment safely and reliably. You will also need to learn broad clinical knowledge to make total treatment plans. You will be able to train yourselves on phantom or pig bone to place implant, to make incisions, to suture, to take impressions, and other procedures to acquire basic skills needed for implant treatment.

## Attainment Objectives

When you successfully complete this course, you will be able to explain:

- (1) history of dental implant,
- (2) anatomy needed for implant treatment,
- (3) the importance of diagnostic wax-up and stent and actually fabricate them,
- (4) healing process of dental implant,
- (5) basic theory of simulation software,
- (6) prosthodontics procedure for implant treatment,
- (7) importance of maintenance for implant treatment.

## Reference Books

Title	Author	Publisher
Fundamental Concepts and Techniques of Oral Implants (4th ed.)		ISHIYAKU PUBLISHERS, INC.
Implant Positioning (Practice in Prosthodontics Extra Issue)		ISHIYAKU PUBLISHERS, INC.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Responses upon consultation with instructors during the practice	60%
Contents and attitudes at the case conferences	40%

# Prosthodontics Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~4	Orientation "What is implant supported prosthesis?": You will learn about the significance of implant treatment in dental medicine.	Lecture	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
5~12	History of dental implant, clinical evidence, major implant system: You will learn about fundamental concept of implant treatment based on implant history.	Lecture	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
13~20	Anatomy important for implant treatment: Pathology of dental implant You will learn about anatomy and pathology crucial for implant treatment.	Lecture	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
21~28	Preoperative diagnosis and treatment planning & Case practice using Simplant (implant simulating software): You will practice using simulation software an actual cases and practice making a treatment plan.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
29~36	Diagnostic wax-up and stent fabrication: You will prepare wax-up and fabricate diagnostic stent on ongoing patient.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
37~44	Implant placement surgical procedure: You will learn about the total image of implant placement surgery by watching recorded tapes.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams



2024年度

subject code:212061

# Prosthodontics Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
45 ~ 52	Impression procedure and prosthodontics procedure: You will learn about implant prosthesis of different implant system using case materials.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
53 ~ 60	Prosthesis by CAD/CAM, occlusal control and postoperative management: You will learn about CAD/CAM prosthesis from actual cases.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Prosthodontics Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry		Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI , NODAI TOMOTAKA						

## Course Description

【Language】 English and Japanese

In this course, after acquiring basic knowledge necessary, such as anatomy, diagnostic imaging and CT simulation, to make implant treatment plan, you will practice implant treatment on a patient. You will learn about advanced procedures such as bone grafts, sinus elevation, immediate loading, and immediate implant placement in the post-extraction site. You are expected to learn broad knowledge and acquire high skills of implant dentistry through case conferences and various lectures.

## Attainment Objectives

When you successfully complete this course, you will be able to:

- (1) explain advantages and disadvantages of implant treatment in comparison with other prosthodontics treatments.
- (2) plan implant treatment by understanding basic principles of CT simulating software.
- (3) conduct implant placement surgery safely and reliably by undergoing necessary preoperative examinations.
- (4) practice supplemental operating methods such as bone graft, immediate loading and immediate implant placement in the post-extraction site by appropriately judging their necessity.
- (5) apply provisional prosthesis with knowledge of its significance and purpose.
- (6) fabricate adequate implant prosthesis. (7) perform implant maintenance with knowledge of its importance.

## Reference Books

Title	Author	Publisher
Implant Positioning (Practice in Prosthodontics Extra Issue)		ISHIYAKU PUBLISHERS, INC.
Latest Clinical Guide for Japanese Patient-oriented "All-on-4" Treatment		ISHIYAKU PUBLISHERS, INC.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Responses upon consultation with instructors during the practice	60%
Contents and attitudes at the case conferences	40%

# Prosthodontics Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~4	Informed consent: You will learn about the informed consent necessary for dental implant treatment.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
5~11	Diagnostic wax-up and diagnostic stent: You will learn how to prepare diagnostic cast, diagnostic wax-up and to fabricate diagnostic stent.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
12~18	Treatment planning using simulating software on CT images: You will learn how to use implant simulation software by working on difficult prosthodontics cases.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
19~25	Hands-on training to place implant with the instructor: You will learn about the surgical procedure for implant placement.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
26~32	Bone graft, immediate loading and immediate implant placement in the post-extraction site: You will learn about the supplemental operating methods for implant surgical procedure.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
33~39	Case report on the outcome of experienced implant treatment cases: You will be required to make a case presentation and get feedbacks and evaluation from multiple instructors.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Prosthodontics      Implant supported Prosthesis

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI , NODAI TOMOTAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
40 ~ 46	Fabrication of provisional prosthesis with adequate occlusion: You will learn about the timing and the technique to fabricate provisional prosthesis.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
47 ~ 53	Impression taking and implant denture fabrication: You will learn about the fabrication of implant-supported dentures.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
54 ~ 60	Postoperative management of dental implant treatment: You will learn about postoperative management of dental implant treatment by studying actual cases.	Lecture and practice	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Course Description

【Language】English and Japanese

The purpose of this course is to conduct basic and clinical research on risk factors of dental implant treatment, such as bone quality, bone metabolism, systemic diseases and intraoral environment (especially, salivary gland function), and to acquire an attitude of viewing clinical dentistry from a scientific perspective.

## Attainment Objectives

When you successfully complete this course, you will learn and acquire:

- 1 Acquire and practice basic concepts of implant treatment and its risk factors.
- 2 Understand and utilize the literature review.
- 3 Explain bone quality and bone metabolism.
- 4 Describe water transport mechanism in salivary glands.

## Reference Books

Title	Author	Publisher
Latest articles on the topic should be handed out before each lecture and exercise.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Attainment on the subject	70%
Attainment on the technique	30%
	0%

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day.

# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation (What is basic research in a clinical course?) Preliminary Study Assignment Basic Research	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
2	Literature review 1 (How to read scientific papers and scientific presentation) Prior Learning Assignment English paper	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
3	Literature review 2 (how to search literature, scientific journals, quality of research) Prior Learning Assignment English paper	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
4	Laboratory usage 1 (basic use of laboratory equipment) Prior Learning Assignment Laboratory Equipment	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
5	Laboratory usage 2 (preparation and handling of reagents) Prior Learning Assignment Reagents	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
6	Concept of implant treatment and peri-implantitis Pre-Learning Assignment Implants	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
7	Preparation of model animals Prior Learning Assignment Diabetes model, xerostomia model, menopause model, chronic kidney disease model	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
8	Concepts of Bone Quality Prior Learning Assignment Bone Quality	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

2024年度

subject code:212063

# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry		Grades	1~2 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI , NODAI TOMOTAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9	Bone metabolism Prior Learning Assignment Bone Metabolism	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
10	Salivary gland function Prior Learning Assignment Water Transport Mechanism in Salivary Glands	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2	
Responsible Instructor	MASAKI CHIHIRO							
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA							

## Course Description

【Language】 English and Japanese

This course is an extension of "Oral Reconstruction and Rehabilitation 1". In this course, basic and clinical research will be conducted on risk factors of dental implant treatment, such as bone quality, bone metabolism, systemic diseases and oral environment (especially, salivary gland function). The purpose of this course is to master research techniques and the ability to consider the results.

## Attainment Objectives

When you successfully complete this course, you will learn and acquire:

1. Explain the analysis of bone quality and bone metabolism.
2. Explain the analysis of salivary gland function.
3. Explain statistical analysis.

## Reference Books

Title	Author	Publisher
Latest articles on the topic should be handed out before each lecture and exercise.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Attainment on the subject	70%
Attainment on the technique	30%

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Bone Metabolic Markers Prior Learning Assignment Bone Metabolic Markers	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams



# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Bone Analysis 1 Prior Learning Assignment Micro CT	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
3	Bone analysis 2 Preliminary study Nanoindentation, Raman spectroscopy	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
4	Sample analysis 1 Pre-requisite: Real-time PCR	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
5	Sample analysis 2 Preliminary study Western blotting	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
6	Analysis of samples 3 Preliminary study ELISA method	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
7	Knockout mice Pre-Learning Assignment Knockout Mouse	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
8	Analysis of Salivary Gland 1 Prior Learning Assignment Salivary Gland Perfusion Model	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
9	Salivary Gland Function 2 Prior Learning Assignment Ion Imaging	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
10	Statistical Analysis Prior Learning Assignment Statistical Analysis	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Course Description

【Language】English and Japanese

The student will select one of the ongoing research themes in our division. They will understand the research background through literature review, formulate a research plan, and conduct preliminary experiments, discussions, main experiments, and critical examination of the results to obtain the foundation for writing a research article.

Few examples for our division research projects are as follows.

- (1) Clinical research on risk factors for immediate loading implant treatment
- (2) Basic research on systemic diseases which are risk factors for dental implant treatment
- (3) Basic research on diagnosis and treatment of peri-implantitis
- (4) Research on jaw bone quality
- (5) Research on salivary gland function and treatment methods for xerostomia

## Attainment Objectives

You should learn scientific background of the subject, inquire into the subject closely, and become a practitioner who can practice medicine based on evidence.

## Reference Books

Title	Author	Publisher
Latest articles on the topic should be handed out before each lecture and exercise.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Attainment on the subject	70%
Attainment on the technique	30%

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day.

2024年度

subject code:212065



# Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry		Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MASAKI CHIHIRO						
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation (Have discussion with the instructors on the theme of each research)	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
2~15	Each instructor will be assigned to lead and carry out each research.	Lecture and exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

# Advanced Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	MASAKI CHIHIRO							
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI, NODAI TOMOTAKA							

## Course Description

【Language】 English and Japanese

This course will be in a seminar style using literature review, which include assigned readings and classroom discussions.

Newly published research articles on Clinical Oral Implants Research, International Journal of Oral and Maxillofacial Implant, Journal of Prosthodontic Research, International Journal of Prosthodontics, Journal of Dental Research, Dental Materials, and others should be reviewed.

## Attainment Objectives

To acquire higher knowledge in the field, you should come to understand how to read an outline and scientific backgrounds of a scientific research paper, how to prepare handouts, which efficiently explain the topic, and how to use presentation software and make effective presentation slides.

## Reference Books

Title	Author	Publisher
Latest articles on the topic should be handed out before each seminar.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Contents of the presentation	60%
Attendance, participation and comprehension in the discussion	40%

## Etc

Student consultation: Any time

\*Textbooks are not specified, and handouts will be distributed on the lecture day.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams

2024年度

subject code:212066

# Advanced Oral Reconstruction and Rehabilitation

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2	
Responsible Instructor	MASAKI CHIHIRO							
Instructor(s)	MASAKI CHIHIRO, KONDOU YUUSUKE, MUKAIBO TARO, MUNEMASA TAKASHI , NODAI TOMOTAKA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2 ~ 15	Each allocated should review a paper of ones selection. You should prepare handouts and make a presentation.	Exercise	正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝	Review handouts	その他 Microsoft Teams
			正木 千尋 近藤 祐介 向坊 太郎 宗政 翔 野代 知孝		その他 Microsoft Teams

# Basic Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

## Course Description

【Language】 Japanese and English You can learn the knowledge and practical skills of community oral health standard based health-oriented concept and minimum intervention concept. You can understand biofilm-related diseases such as dental caries and periodontal disease and treatment and prevention as well as clinical skills based health behavior.

## Attainment Objectives

You should achieve following assignments:(1) Acquisition of the fundamental knowledge and skills for standard precaution(2) Acquisition of communication skills(3) Acquisition of risk assessment by saliva- or bacterial tests(4) Acquisition of oral health instruction skills based on health-psychology(5) Acquisition of re-calcification strategy(6) Acquisition of community-based health practice along their life stage

## Core Curriculum Item

Core Curriculum	Contents
D-3-2-3	歯周疾患の病因と病態を理解している。
D-3-2-4	口腔細菌、プラーク(口腔バイオフィルム)及び歯石を理解している。
D-5-1-1	主な歯科疾患(齲蝕、歯周疾患、不正咬合)の予防を理解している。
D-5-1-2	齲蝕予防における予防填塞及びフッ化物の応用方法を理解している。
D-5-1-4	ライフステージに応じた歯科疾患の予防を理解している。
D-5-2-3-2	歯周疾患の検査法、診断及び治療方針(メンテナンスを含む)を理解している。
E-2-1-1-2	医療面接における基本的なコミュニケーションができる。( )
PS-09	患者安全と感染対策を理解している。
SO-04	社会や地域における歯科医療の現状を理解し、口腔の健康を通じて全身の健康の増進の活動に積極的に参加できる。

## Reference Books

Title	Author	Publisher
Handbook of Practical Preventive Dentistry 2004		Ishiyaku Publishers
Preventive Periodontology 2007		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	50%
oral presentations	30%

# Basic Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	ANSAI TOSHIHIRO							
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO							

Evaluation item	Ratio
discussion	20%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					Microsoft Teams
1~2	Standard precaution You will learn basic knowledge and skills of standard precaution.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
3~4	Disinfectant and classification of Spaulding You will learn basic knowledge kinds of disinfectant and classification of Spaulding.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
5~6	Basic strategy of prevention of infection You will learn basic strategy of prevention of infection.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
7~10	Medical communication You will learn basic knowledge and skills of medical communication.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
11~15	WHO Oral Survey method and method of calibration You will learn the WHO Oral Survey method and method of calibration.	Lecture and Practice	邵 仁浩	Pre- and post-reading of textbook	Microsoft Teams
16~20	Diagnosis and clinical devises of dental caries and periodontal disease You will learn up-to-date diagnosis and devices for dental caries and periodontal diseases.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
21~24	Diagnosis techniques using non-invasive samples including saliva You will learn basic knowledge of up-to-date diagnostic techniques using non-invasive samples like saliva.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams

# Basic Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	ANSAI TOSHIHIRO							
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25 ~ 29	Non-smoking health guidance based on behavioral science You will learn health guidance strategy of preventing smoking.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
30 ~ 34	Assessment in clinical epidemiology You will learn basic knowledge of various assessment in epidemiological study.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
35 ~ 38	Basic fluoride application I (water fluoridation) You will learn basic fluoride application such as water fluoridation.	Lecture and Practice	片岡 正太	Pre- and post-reading of textbook	Microsoft Teams
39 ~ 41	Basic fluoride application II (topical fluoridation) You will learn basic fluoride application such as topical fluoridation.	Lecture and Practice	片岡 正太	Pre- and post-reading of textbook	Microsoft Teams
42 ~ 45	Theory and clinical practice of oral biofilm You will learn basic theory and clinical practice regarding oral biofilm.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
46 ~ 50	Theory and clinical practice of re-mineralization technique You will learn basic theory and clinical practice regarding re-mineralization of teeth.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
51 ~ 55	Health/social support according to their life stage I You will learn basic strategy of health/social support in school and work place.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
56 ~ 60	Health/social support according to their life stage II You will learn basic strategy of health/social support of the elderly.	Lecture and Practice	安細 敏弘	pre- and post-reading of textbook	Microsoft Teams



# Advanced Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

## Course Description

【Language】 Japanese You can understand community system to support health strategy for community-dwelling population in the medical care, nursing care, and health care. Also, you can learn the knowledge and clinical skills based health behavior and health-oriented guidance.

## Attainment Objectives

You should achieve following assignments:(1) Acquisition of the fundamental knowledge regarding the system and roles of medical care, nursing care, and health care in community(2) Acquisition of the role of system of comprehensive care for elderly(3) Acquisition of health instruction and clinical skills based on behavioral psychology(4) Acquisition of health oriented program construction according to their life stage(5) Acquisition of clinical skills to promote oral health and medical support at emergency

## Core Curriculum Item

Core Curriculum	Contents
C-1-3-3	医療、保健、福祉、介護における多職種連携と歯科医師の役割を理解している。
C-1-3-4	医療や介護をはじめとする他職種、他業種や他の医療機関との連携を行うための手続きとコミュニケーション(適切な略語などを含む)を理解している。
C-4-3-1	地域、職場及び各ライフステージの保健医療施策の背景と概要を理解している。
C-4-3-6	地域包括ケアシステムをはじめとする、地域における医療・保健・福祉・介護の連携を理解している。
C-4-3-8	災害時の歯科医療の必要性を理解している。
C-5-3	プライマリヘルスケアとヘルスプロモーションを理解している。
S0-03	医療、保健、福祉、介護とそれを取り巻く社会環境を理解している。
S0-05	地域医療において、各種制度に基づく歯科医師の果たす役割を自覚し、行動できる。
S0-06	災害時における歯科医師の役割を理解している。

## Reference Books

Title	Author	Publisher
Community-based medicine 2009		Igakushoin
Behavioral Medicine A Guide for Clinical Practice, 3rd Ed. 2010		Medical Sci. Int

# Advanced Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	ANSAI TOSHIHIRO							
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO							

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	50%
oral presentations	30%
discussion	20%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					Microsoft Teams
1~4	Outline of Community based oral health strategy I You will learn the knowledge regarding current status and roles of medical care, nursing care, and health care.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
5~8	Outline of Community based oral health strategy II You will learn the knowledge regarding the primary care as basic concept of medical care, nursing care, and health care.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
9~12	Outline of Community based oral health system I You will learn the knowledge regarding the system and roles of human resources, medical institutions, and local government.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
13~16	Outline of Community based oral health system II You will learn the knowledge regarding the system and roles of nursing care, health and welfare.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
17~20	Outline of Community based oral health system III You will learn the knowledge regarding the system and roles of community comprehensive care.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams

# Advanced Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	ANSAI TOSHIHIRO							
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
21 ~ 24	Outline of Community based oral health system I You will learn the knowledge regarding the health guidance strategy and health support based on health promotion.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
25 ~ 28	Outline of practical health guidance strategy I You will learn the knowledge regarding the concept and skills of health-communication.	Lecture and Practice	邵 仁浩	Pre- and post-reading of textbook	Microsoft Teams
29 ~ 32	Outline of practical health guidance strategy II You will learn the knowledge regarding basic concept of health behavioral psychology and behavioral science.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
33 ~ 36	Details of practical health guidance strategy I You will learn the knowledge regarding the dietary education, eating behavior, and health support.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
37 ~ 41	Details of practical health guidance strategy II You will learn the knowledge regarding the non-smoking guidance program and health support.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
42 ~ 45	Health support / health guidance according to their life stage I You will learn the knowledge regarding health support/ guidance from maternal and child care stage to school / puberty stage.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams

# Advanced Studies in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
46 ~ 48	Health support / health guidance according to their life stage II You will learn the knowledge regarding health support/ guidance in adults stage including health guidance from adults and occupational field to elderly/care stage.	Lecture and Practice	角田 聡子	Pre- and post-reading of textbook	Microsoft Teams
49 ~ 54	Multi-professional collaboration in Community You will learn the knowledge and practice home-care in the community.	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams
55 ~ 58	Details of perioperative period in Hospital You will learn the knowledge and practice perioperative care in the hospital.	Lecture and Practice	片岡 正太	Pre- and post-reading of textbook	Microsoft Teams
59 ~ 60	Oral health support at emergency You will learn the knowledge regarding the practical skills of oral health support program at emergency	Lecture and Practice	安細 敏弘	Pre- and post-reading of textbook	Microsoft Teams

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

## Course Description

【Language】 Japanese This course deals with epidemiological and basic statistical knowledge to conduct oral health research. The aim of this course is to help students acquire an understanding of principles and methodologies of epidemiology by lectures, and an understanding of biostatistical concepts by analyzing data, using the statistical software.

## Attainment Objectives

By the end of the course, students should be able to do following;(1) Describe and explain the roles and relationships between epidemiology and biostatistics in the prevention of disease and the improvement of health.(2) Describe and explain methodologies of descriptive epidemiology for identifying problems and establishing hypotheses.(3) Describe and explain methodologies of analytical epidemiology for clarifying risk and protector factors of diseases.(4) Describe and explain the concept of confounding.(5) Conduct statistical analyses using the statistical software SPSS and R.

## Core Curriculum Item

Core Curriculum	Contents
C-6-2-1	確率変数とその分布、統計的推測(推定と検定)の原理と方法を理解している。
C-6-2-4	調査方法と統計的分析法を理解している。
PS-04	疫学と予防を理解している。

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
reports	40%
presentations	40%
Debates	20%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Epidemiological theory 1 - Variables and probability distribution You will learn variables and probability distribution.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Epidemiological theory 2 - Group comparison and significance level. You will learn basic concept of group comparison and significance level.	Lecture	角田 聡子	Learning material will be distributed in advance.	Microsoft Teams
3	Epidemiological theory 3 - Multiple comparison. You will learn various multiple comparison methods and essential points for use.	Lecture	角田 聡子	Learning material will be distributed in advance.	Microsoft Teams
4	Epidemiological theory 4 - Bias and confounding. You will learn controlling methods of bias and confounding factors such as CBC based on designing research.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
5	Epidemiological theory 5 - EBM and research design. You will learn 5 steps of EBM and research question, category of clinical research design, and international rules.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
6	Health care service evaluation in oral health care policy. You will learn health care service evaluation methods including effects, efficacy, and benefit in oral health care policy based on concrete examples.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
7	Oral health care data analysis 1 - summary statistics. You will learn summary statistics, using the statistical software SPSS.	Lecture	角田 聡子	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Oral health care data analysis 2 - Univariate analysis You will learn Univariate analysis, using the statistical software SPSS.	Practice	角田 聡子	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
9	Oral health care data analysis 3 - Association and regression model You will learn association and regression model, using the statistical software SPSS.	Practice	角田 聡子	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
10	Oral health care data analysis 4 - Control of confounding You will learn control of confounding and interaction, using the statistical software SPSS.	Practice	邵 仁浩	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
11	Oral health care data analysis 5 - Cox's proportional hazard model You will learn Cox's proportional hazard model, using the statistical software SPSS.	Practice	邵 仁浩	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
12	Bayesian statistics I You will learn a concept and basic points of Bayesian statistics including the comparison with the Fisher statistics.	Practice	片岡 正太	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
13	Bayesian statistics II You will learn basic concept of the Bayesian inference and MCMC (Markov chain Monte Carlo) methods.	Practice	片岡 正太	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams

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subject code:212073

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA, SOH INHO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	Bayesian statistics III You will learn application of the Bayesian statistics using R and basic skills to use the Stan and Rstan.	Lecture	片岡 正太	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
15	Research hypothesis presentation Give a presentation of formulating the research hypothesis of your interesting theme.	Practice	安細 敏弘	Submit a report after the lecture.	Microsoft Teams



# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	2~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KATAOKA SYOUTA						

## Course Description

【Language】 Japanese High-level scientific report is demanded. This course is designed for students who have basic statistical and epidemiological knowledge to conduct oral health research. The aim of this course is (1) to learn practical reporting skill for research preparation and scientific paper writing based on information provided by statistical analysis, and (2) to archive the practical skills for scientific presentation and writing the papers.

## Attainment Objectives

You should achieve following assignments;(1) Acquisition of effective data reporting methods in health science.(2) Acquisition of basic and advanced reporting methods for values and descriptive statistics.(3) Acquisition of effective way for presenting data using tables and figures.(4) Acquisition of effective presentation skills for research results in health science.

## Core Curriculum Item

Core Curriculum	Contents
C-2-7	各自の興味に応じて科学的研究に積極的に参加できる。
RE	科学的探究(Research)/社会に適応する医学を創造していくために、医学・医療の発展のための歯学研究の重要性を理解し、科学的・批判的思考を身に付けながら学術・研究活動に関与していく。
RE-02	研究の基礎となる科学的理論や方法論を身に付ける。
RE-06	科学的考察に基づいて、研究発表を行うことができる。

## Textbooks

Title	Author	Publisher
Prepared text		

## Reference Books

Title	Author	Publisher
How to Write, Publish, & Present in the Health Sciences	Amer College of Physicians	Thomas A. Lang
International rules for epidemiological and clinical studies	Garr Reynolds	New Riders Press

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports	40%
Presentations	40%
Debates	20%

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KATAOKA SYOUTA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					Microsoft Teams
1	Structure of scientific article and basic skills to write article You will learn structure of scientific article and basic skills to write article.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
2	How to make effective tables and figures essential for article making You will learn basic skills for making effective tables and figures.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
3	Skills to summarize discussion and conclusions You will learn basic concept and skills to summarize discussion and conclusions.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
4	Process to submit article and skill for response for comments You will learn process to submit article and skill for response for comments.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
5	Uniform requirements for manuscripts submitted to scientific journals You will learn uniform requirements for manuscripts submitted to scientific journals: writing and editing for publication.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
6, 7	Basic skills for preparation for academic meeting You will learn basic skills for preparation for academic meeting.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams

# Practice in Community Oral Health

Course Affiliation	the Faculty of Dentistry		Grades	2 ~ 3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KATAOKA SYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8, 9	Presentation methods in health science 1 You will learn effective way for poster presentation.	Lecture	片岡 正太	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
10, 11	Presentation methods in health science 2 You will learn effective way for oral presentation.	Practice	片岡 正太	Learning material will be distributed in advance.	Microsoft Teams
12, 13	How to write the application of research funding You will learn how to find research funding and apply to it effectively.	Practice	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams
14	Guideline for medical research ethics and IRB including points to write application of IRB You will learn guideline for research ethics and IRB including how to write application of IRB.	Practice	安細 敏弘	Learning material will be distributed in advance. Submit a report after the lecture.	Microsoft Teams
15	Summary Feedback for the presentation and debates. Introduce outstanding poster and oral presentations for reference of future research.	Lecture	安細 敏弘	Learning material will be distributed in advance.	Microsoft Teams

# Current Topics in Community Oral Health

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	ANSAI TOSHIHIRO						
Instructor(s)	ANSAI TOSHIHIRO, KAKUTA SATOKO, KATAOKA SYOUTA						

## Course Description

【Language】 Japanese and English You can learn and study how to read any up-to-date scientific articles, write articles and make presentation regarding any outcomes to understand the knowledge and scientific significance in preventive/ oral health, public health, clinical nutrition and epidemiological research

## Attainment Objectives

To understand the contents of scientific articles, and acquire the skills for exploring any scientific evidence, and learn how to make presentation and write articles of any outcomes.

## Core Curriculum Item

Core Curriculum	Contents
C-2-7	各自の興味に応じて科学的研究に積極的に参加できる。
RE-02	研究の基礎となる科学的理論や方法論を身に付ける。
RE-06	科学的考察に基づいて、研究発表を行うことができる。

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentations	50%
Discussion	30%
Assessment	20%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	To understand the background, contents, and perspective of article interested in every time	Introduction of evidence and discussion (Microsoft Teams)	安細 敏弘 角田 聡子 片岡 正太	Preparing any needed handouts and slides for participants	Microsoft Teams

# Internal Medicine for Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	NAKAMICHI IKUO							
Instructor(s)	NAKAMICHI IKUO							

## Course Description

To improve dental practice, it is important to understand the impact of medical problems on dentistry. In this course, systemic diseases will be discussed using videos. After learning how to diagnose and treat common diseases, pathophysiology will provide a new perspective on clinical dentistry. Pathophysiological considerations, including cell biology and immunology, may enhance the doctoral thesis.

## Attainment Objectives

1. Understand etiology, diagnosis and therapy of common systemic disease.
2. Understand systemic disease's physiology that affects the dental practice.
3. Prevent systemic disease's exacerbation that is due to dental practice.

## Textbooks

Title	Author	Publisher
Discussion after watching the lecture video.		

## Reference Books

Title	Author	Publisher
(Japanese textbook)		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Discussion and presentation	100%

## Etc

Please feel free to email us with any questions.

Remote lectures for public absences are available using Microsoft Teams.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Circulation	Discussion	中道 郁夫	Reading books	その他
2	Blood	Discussion	中道 郁夫	Reading books	その他
3	Respiration	Discussion	中道 郁夫	Reading books	その他
4	Digestion	Discussion	中道 郁夫	Reading books	その他

2024年度

subject code:212081

# Internal Medicine for Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	NAKAMICHI IKUO							
Instructor(s)	NAKAMICHI IKUO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Metabolism	Discussion	中道 郁夫	Reading books	その他
6	Renal function	Discussion	中道 郁夫	Reading books	その他
7	Neurology	Discussion	中道 郁夫	Reading books	その他
8	Mental disorder	Discussion	中道 郁夫	Reading books	その他
9	Immunology	Discussion	中道 郁夫	Reading books	その他
10	Oncology	Discussion	中道 郁夫	Reading books	その他

# Diagnosis and Treatment of Hypertension

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUHARA MASAYO						
Instructor(s)	FUKUHARA MASAYO						

## Course Description

【Language】 Japanese Hypertension is one of the most common diseases in Japan. Many dental patients have hypertension. In this course "Diagnosis and Treatment of Hypertension", you learn the evaluation of hypertension and target organ damage. Furthermore, you learn the treatment of hypertension and the perioperative blood pressure management. The course is especially recommended to graduate students, who specialize oral surgery and dental anesthesia.

## Attainment Objectives

You should achieve following assignments;

- To explain the mechanism of blood pressure regulation.
- To explain the evaluation of target organ damage due to hypertension.
- To explain target organ damage of hypertension (stroke, ischemic heart disease, chronic kidney disease).
- To explain the types and characteristics of antihypertensive drugs.
- To explain the characteristics and treatment of hypertension in the elderly.
- To explain the treatment of hypertension in the patients with diabetes or metabolic syndrome.
- To explain blood pressure changes during dental treatment.
- To practice the perioperative blood pressure management.

## Textbooks

Title	Author	Publisher
The Japanese Society of Hypertension Guidelines for the Management of Hypertension 2019		JSH

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
discussion and presentation	100%

# Diagnosis and Treatment of Hypertension

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUHARA MASAYO						
Instructor(s)	FUKUHARA MASAYO						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction and epidemiology of hypertension. Measurement and clinical evaluation of blood pressure.	Lecture Practice	福原 正代	Text Keywords: epidemiology of hypertension, vital signs	その他
2	Mechanism of blood pressure regulation: Neural and humoral regulation of blood pressure. Blood pressure changes during dental treatment.	Lecture Practice	福原 正代	Text Keywords: blood pressure regulation, blood pressure fluctuation	その他
3	Hypertension and target organ damage. Clinical evaluation of target organ damage I: Urinalysis and blood test. Fundus examination.	Lecture Practice	福原 正代	Text Keywords: target organ damage	その他
4	Clinical evaluation of target organ damage II: Electrocardiogram and chest X-ray. Pulse wave velocity. Basic principles of ultrasonography.	Lecture Practice	福原 正代	Text	その他
5	Clinical evaluation of target organ damage III: Carotid ultrasonography Echocardiography	Lecture Practice	福原 正代	Text	その他
6	Clinical evaluation of target organ damage IV: Carotid ultrasonography . Echocardiography . Abdominal ultrasonography.	Lecture Practice	福原 正代	Text	その他
7	Principles of treatment for hypertension: Lifestyle modifications.	Lecture Practice	福原 正代	Text	その他



# Diagnosis and Treatment of Hypertension

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	FUKUHARA MASAYO						
Instructor(s)	FUKUHARA MASAYO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Treatment with antihypertensive drugs. Treatment of resistant hypertension.	Lecture Practice	福原 正代	Text	その他
9	Hypertension complicated by other diseases:Diabetes.Metabolic syndrome.Sleep apnea syndrome.	Lecture Practice	福原 正代	Text	その他
10	Hypertension in the elderly.Hypertension and dementia.	Lecture Practice	福原 正代	Text	その他
11	Perioperative blood pressure management.	Lecture Practice	福原 正代	Text	その他
12	Case conference I	Lecture Discussion	福原 正代	Text Clinical cases	その他
13	Case conference II	Lecture Discussion	福原 正代	Text Clinical cases	その他
14	Case conference III	Lecture Discussion	福原 正代	Text Clinical cases	その他
15	Case conference IV	Lecture Discussion	福原 正代	Text Clinical cases	その他

# Introduction of Internal Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 3 grades	Semester	Spring	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKUHARA MASAYO							
Instructor(s)	FUKUHARA MASAYO							

## Course Description

【Language】 Japanese. In this course "Introduction of Internal Medicine", you read the book "Internal Medicine for Dentists" and acquire fundamental knowledge of the internal medicine which dentists need.

## Attainment Objectives

You should achieve following assignments;

- To explain the introduction of medical diagnostics.
- To explain the cardiovascular disease.
- To explain the respiratory disease.
- To explain the digestive diseases.
- To explain the metabolic and endocrine disorders.
- To explain the neuromuscular disease.
- To explain the blood disease.
- To explain the renal disease.
- To explain the collagen disease.
- To explain the elderly medicine.

## Textbooks

Title	Author	Publisher
Internal Medicine for Dentists		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
discussion and presentation	45%
test	55%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	The fundamental knowledge of the internal medicine:Diagnosis, medical interview, physical examination, medical record description, vital signs, laboratory tests.	Lecture and discussion Test	福原 正代	Keywords: medical examination, symptoms	

# Introduction of Internal Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUHARA MASAYO						
Instructor(s)	FUKUHARA MASAYO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Respiratory disease	Lecture and discussion Test	福原 正代	Keywords: Chronic obstructive pulmonary disease (COPD), bronchial asthma	
3	Endocrine disease	Lecture and discussion Test	福原 正代	Keywords: thyroid disease, adrenal disease	
4	Cardiovascular disease 1	Lecture and discussion Test	福原 正代	myocardial infarction, angina pectoris, heart failure	
5	Cardiovascular disease 2	Lecture and discussion Test	福原 正代	Keywords: Infective endocarditis, hypertension, arrhythmia	
6	Gastrointestinal disease	Lecture and discussion Test	福原 正代	Keywords: gastric ulcer, needlestick injury, hepatitis, liver cirrhosis	
7	Malignant tumor	Lecture and discussion Test	福原 正代	Keywords: lung cancer, stomach cancer, colon cancer	
8	Metabolic diseases	Lecture and discussion Test	福原 正代	Keywords: diabetes mellitus	
9	Kidney disease	Lecture and discussion Test	福原 正代	Keywords: infusion, chronic kidney disease, renal failure	
10	Blood disease	Lecture and discussion Test	福原 正代	Keywords: anemia, leukemia, thrombocytopenic purpura, hemophilia	

# Introduction of Internal Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	FUKUHARA MASAYO						
Instructor(s)	FUKUHARA MASAYO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Neuromuscular disease	Lecture and discussion Test	福原 正代	Keywords: cardiovascular disease, dementia, epilepsy, Parkinson's disease	
12	Autoimmune disease	Lecture and discussion Test	福原 正代	Keywords: rheumatoid arthritis, systemic lupus erythematosus, Sjogren's syndrome, Behcet's disease, allergy	
13	Elderly medicine	Lecture and discussion Test	福原 正代	Keywords: elderly, aging	
14	Infection	Lecture and discussion Test	福原 正代	Keywords: hepatitis, bacterial change phenomenon, AIDS	
15	Dental treatment for patients with medical disorders	Lecture and discussion Test	福原 正代	Keywords: Dental treatment for patients with medical disorders	

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Course Description

To acquire comprehensive levels of knowledge, technique, and skill for continued management by taking into consideration physical and mental growth and development in childhood for guidance to normal permanent dentition.

## Attainment Objectives

1. Gain ability to provide treatment to pediatric patients.
2. Gain ability to treat dental caries.
3. Gain ability to provide protective care and health guidance.
4. Gain ability to treat dental injuries.
5. Gain ability to perform surgical treatment.
6. Gain ability to provide dental treatment for uncooperative or handicapped children.
7. Gain ability to deal with occlusal development.

## Textbooks

Title	Author	Publisher
Textbook of Pediatric Stomatology	Tetsuo Shirakawa et al.	Ishiyaku Pub, Inc.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Tests using Teams (Evaluation sheet will be distributed to the students.)	30%
Case presentation using Teams (Evaluation sheet will be distributed to the students.)	30%
Test	40%

## Etc

[office hours]

If necessary, contact instructors by e-mail.

Koji Watanabe or Ikuko Nishida

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子		その他
1,2	Medical care interview II	Practical training Role play	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Medical care interview Mental and physical growth of children 【review】 The contents of the lecture	その他
3,4	Behavior modification therapy for pedodontic patients I	Practical training Role play	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Mental and physical growth of children Behavior modification therapy 【review】 The contents of the lecture	その他
5,6	Radiography I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagnostic imaging for pedodontic cases 【review】 The contents of the lecture	その他
7,8	Impression taking	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Developmental growth of oral cavity 【review】 The contents of the lecture	その他 臨床実習_病院

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9,10	Drafting of the treatment plan You learn a diagnosis, treatment strategy while standing on a medical interview, an Xray photograph, the treatment plan using the study model about the drafting of the treatment plan	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagnosis and treatment strategy 【review】 The contents of the lecture	その他
11,12	Oral examination 1 Discussion Case presentation	Examination	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Review of the training 【review】 The contents of the lecture	その他
13,14	Local anesthesia I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Procedure of local anesthesia 【review】 The contents of the lecture	その他 臨床実習_病院
15,16	Exclusion of moisture with rubber dam	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Exclusion of moisture with rubber dam 【review】 The contents of the lecture	その他 臨床実習_病院
17,18	Crown restoration for primary teeth I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Characteristics of primary teeth 【review】 The contents of the lecture	その他 臨床実習_病院

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
19,20	Crown restoration for immature permanent teeth I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Characteristics of immature permanent teeth 【review】 The contents of the lecture	その他 臨床実習_病院
21,22	Inlay restoration of the deciduous teeth	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Inlay restoration of the deciduous teeth 【review】 The contents of the lecture	その他 臨床実習_病院
23,24	Preformed crown restoration of the deciduous teeth	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Preformed crown restoration Casting crown restoration 【review】 The contents of the lecture	その他 臨床実習_病院
25,26	Pulp capping of deciduous tooth and the immature permanent tooth	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Pulp capping 【review】 The contents of the lecture	その他 臨床実習_病院
27,28	Pulpotomy to deciduous tooth	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Pulpotomy 【review】 The contents of the lecture	その他 臨床実習_病院



# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
29,30	Pulpectomy、 Infection Root Canal Treatment、 Root Canal Filling	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Pulpectomy Infected root canal treatment Root canal filling 【review】 The contents of the lecture	その他 臨床実習_病院
31,32	Oral examination 2 Discussion	Oral examination	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Review of the training 【review】 The contents of the lecture	その他
33,34	A diagonois and measures of periodontal disease	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Periodontal disease of the infant period diagnosis and measures of periodontal disease 【review】 The contents of the lecture	その他
35,36	Diagnosis of the dental trauma	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagonois Fixing method Prognosis 【review】 The contents of the lecture	その他
37,38	Tooth extraction I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagnosis Tooth extraction 【review】 The contents of the lecture	その他 臨床実習_病院

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
39,40	Resolution measure	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagnosis Fenestration Incision 【review】 The contents of the lecture	その他 臨床実習_病院
41,42	Oral examination 3 Discussion	Oral examination	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Review of the training 【review】 The contents of the lecture	その他
43,44	Preventive treatment	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Pit and fissure sealant 【review】 The contents of the lecture	その他 臨床実習_病院
45,46	Preventive treatment II	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Preventive treatment Health guidance 【review】 The contents of the lecture	その他 臨床実習_病院
47,48	Treatment of apprehensive child	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Restraining Nitrous oxide and oxygen inhalation sedation 【review】 The contents of the lecture	その他 臨床実習_病院

# Pediatric Dentistry (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
49,50	The Denture guidance diagnosis and explanation method to a protector	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Diagnosis Treatment plan and explanation 【review】 The contents of the lecture	その他
51,52	Preparation of appliances for occlusal guidance I	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Space maintenance 【review】 The contents of the lecture	その他 診療室_病院
53,54	Preparation of appliances for occlusal guidance II	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Space regainer 【review】 The contents of the lecture	その他 診療室_病院
55,56	Dental treatment of the child with a disability	Practical training	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Child with disability 【review】 The contents of the lecture	その他 臨床実習_病院
57,58	Oral examination 4 Discussion	Oral examination	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Review of the practical training 【review】 The contents of the lecture	その他
59,60	Case presentation Examination for accreditation	Case presentation Test	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	【preparation】 Review of the practical training 【review】 The contents of the lecture	その他

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Course Description

To acquire comprehensive levels of knowledge, technique, and skill for continued management by taking into consideration physical and mental growth and development in childhood for guidance to normal permanent dentition.

## Attainment Objectives

1. Gain ability to provide treatment to pediatric patients.
2. Gain ability to treat dental caries.
3. Gain ability to provide protective care and health guidance.
4. Gain ability to treat dental injuries.
5. Gain ability to perform surgical treatment.
6. Gain ability to provide dental treatment for uncooperative or handicapped children.
7. Gain ability to deal with occlusal development.
8. Gain ability to provide basic treatment for the oral cavity as a single unit.
9. Gain ability to practice continuous management by taking growth into consideration.

## Textbooks

Title	Author	Publisher
Pediatric Dentistry	Shirakawa T. Iimura M. Fukumoto S.	Fukumoto S. Ishiyaku Publishers, Inc.

## Reference Books

Title	Author	Publisher
Textbook of Pediatric Stomatology	Asada Y., et al.	Gakkenshoin Ltd.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Case presentation (Evaluation sheet will be distributed to the students.)	30%
Oral examination (Evaluation sheet will be distributed to the students.)	30%
Teast	40%

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Etc

[office hours]

If necessary, contact instructors by e-mail.

Koji Watanabe or Ikuko Nishida

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			西田 郁子 渡辺 幸嗣		臨床実習_病院 診療室_病院
1,2	Medical care interview II	Practical training Role play	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Medical care interview ・ Adjacent area of medical science <b>【review】</b> The contents of the lecture	診療室_病院
3,4	Behavior modification therapy for pedodontic patients II	Practical training Role play	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Mental and physical growth of children-Behavior modification therapy <b>【review】</b> The contents of the lecture	診療室_病院
5,6	Radiography II	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Diagnostic imaging for pedodontic cases <b>【review】</b> The contents of the lecture	診療室_病院

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7,8	Oral roentgenography	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Developmental growth of oral cavity in children <b>【review】</b> The contents of the lecture	診療室_病院
9,10	Whole-body management	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Pharmacotherapy Systemic illness <b>【review】</b> The contents of the lecture	診療室_病院
11,12	Oral examination 1 Discussion Case presentation	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> Review of practical training <b>【review】</b> The contents of the lecture	その他
13,14	Local anesthesia II	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Complications <b>【review】</b> The contents of the lecture	診療室_病院
15,16	Crown restoration for primary teeth I	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> ・ Characteristics of primary teeth ・ Resin jacket crown <b>【review】</b> The contents of the lecture	診療室_病院

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
17,18	Crown restoration in child patients	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Crown restoration ・ Continued management <b>【review】</b> The contents of the lecture	診療室_病院
19,20	Temporary indirect pulp capping for immature permanent teeth	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Immature permanent teeth ・ Temporary indirect pulp capping <b>【review】</b> The contents of the lecture	診療室_病院
21,22	Endodontic treatment for immature permanent teeth	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Immature permanent teeth ・ Endodontic treatment <b>【review】</b> The contents of the lecture	診療室_病院
23,24	Diagnosis and treatment for acute symptoms of diseases of the pulp, apex, and periodontium	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Acute symptom ・ Diagnosis and treatment <b>【review】</b> The contents of the lecture	診療室_病院

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	Diagnosis and treatment for tooth discoloration	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Tooth discoloration ・ Diagnosis and treatment <b>【review】</b> The contents of the lecture	診療室_病院
27,28	Study how to deal with intractable cases of diseases of the pulp, apex, and periodontium in light of deciduous and immature permanent tooth characteristics, indications, and operative procedures.	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Intractable cases ・ Diagnosis and treatment <b>【review】</b> The contents of the lecture	診療室_病院
29,30	Oral examination 2 Discussion	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> Review of practical training <b>【review】</b> The contents of the lecture	その他
31,32	Study continuing management of periodontal diseases in child patients in light of the characteristics of periodontal diseases occurring in childhood.	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook ・ Periodontal surgery ・ Continuing management <b>【review】</b> The contents of the lecture	診療室_病院



# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
33,34	Fixation techniques for injured teeth Study fixation methods for mixed dentition period in light of fixation techniques used for injured teeth.	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook <ul style="list-style-type: none"> <li>• Diagnosis</li> <li>• Fixation technique</li> <li>• Prognosis</li> </ul> <b>【review】</b> The contents of the lecture	診療室_病院
35,36	Treatment of injured teeth Study reimplantation techniques in light of related indications. Practical training	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook <ul style="list-style-type: none"> <li>• Injured teeth</li> <li>• Reimplantation</li> <li>• Orthodontic extrusion</li> </ul> <b>【review】</b> The contents of the lecture	診療室_病院
37,38	Tooth extraction II Study tooth extraction methods in light of examination findings and diagnosis of impacted supernumerary teeth.	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook <ul style="list-style-type: none"> <li>• Extraction methods</li> <li>• Impacted supernumerary teeth</li> </ul> <b>【review】</b> The contents of the lecture	診療室_病院
39,40	Surgical procedures Study surgical procedures for child patients in light of diagnosis and treatment of cysts, tumors, and soft tissue disease.	Practical training	西田 郁子 渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook <ul style="list-style-type: none"> <li>• Surgical procedures</li> </ul> <b>【review】</b> The contents of the lecture	診療室_病院

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
41,42	Oral examination 3 Discussion	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 Review of practical training 【review】 The contents of the lecture	その他
43,44			西田 郁子 渡辺 幸嗣		診療室_病院
45,46	Preparation of appliances for occlusal guidance Study methods used for manufacturing a Muh-shield by taking into consideration the indications.	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ Muh-shield 【review】 The contents of the lecture	診療室_病院
47,48	Muscle function training	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ Muscle function training 【review】 The contents of the lecture	診療室_病院
49,50	Dental therapy for disabled child patients II Study how to cope with dental therapy for disabled children in light of characteristics of the related disease	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ Disabled children ・ Behavior control ・ Dental therapy 【review】 The contents of the lecture	診療室_病院

# Pediatric Dentistry (Advanced Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIKAWA KAZUMASA							
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
51,52	Study methods of dental therapy performed under general anesthesia by taking into consideration the characteristics and general health of child patients. Practical training	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ General anesthesia 【review】 The contents of the lecture	診療室_病院
53,54	Study intraoral management by taking developmental stage into consideration. Practical training	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ Developmental stages- intraoral management 【review】 The contents of the lecture	診療室_病院
55,56	Study maternal and child health guidance in light of prevention for pregnant women and feeding instructions for children.	Practical training	西田 郁子 渡辺 幸嗣	【preparation】 confirmation of the textbook ・ Pregnancy factors ・ Maternal and child health care 【review】 The contents of the lecture	診療室_病院
57,58	Oral examination 4 Discussion	Discussion Practical training	西田 郁子 渡辺 幸嗣	【preparation】 Review of practical training 【review】 The contents of the lecture	その他
59,60	Case presentation Examination for accreditation	Presentation Test	西田 郁子 渡辺 幸嗣	【preparation】 Review of practical training 【review】 The contents of the lecture	その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Course Description

For providing comprehensive pedodontic treatment, lectures on topics ranging from basic medicine to the latest state-of-the-art therapies are given by lead instructors. The students then organize and analyze related studies, and make a presentation.

## Attainment Objectives

1. Deepen knowledge regarding clinical pedodontic care in general and ability to understand it.
2. Understand basic medicine (anatomy, histology, etc.) in order to conduct clinical pedodontic practice.
3. Master methods needed to prepare materials for both presentation and clinical practice.
4. Gain ability to collect and organize appropriate research articles and analyze them.

## Textbooks

Title	Author	Publisher
Pediatric Dentistry	Shirakawa T. Inuma M. Fukumoto S.	Ishiyaku Pub, Inc.

## Reference Books

Title	Author	Publisher
Textbook of Pediatric Stomatology	Asada Y., et al.	Gakkenshoin Ltd.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Average of test scores of (1) and (2)	100%

## Etc

[office hours]

If necessary, contact instructors by e-mail.

Koji Watanabe or Ikuko Nishida

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms
		西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子		その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation	Lecture	渡辺 幸嗣	<b>【preparation】</b> confirmation of the textbook Outline of pediatric dentistry <b>【review】</b> The contents of the lecture	その他
2	Growth of teeth and the dentition	Lecture	藤田 優子	<b>【preparation】</b> Case report, commentary of the topics ・Tooth development <b>【review】</b> The contents of the lecture	その他
3	Mechanism of the teeth eruption	Lecture	渡辺 幸嗣	<b>【preparation】</b> Case report, commentary of the topics ・Tooth eruption <b>【review】</b> The contents of the lecture	その他
4	Endodontic treatment of the deciduous tooth	Lecture	佐伯 桂	<b>【preparation】</b> Case report, commentary of the topics ・Endodontics for deciduous teeth <b>【review】</b> The contents of the lecture	その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture No.	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
5	Endodontic treatment of the immature permanent tooth	Lecture	西田 郁子	<b>【preparation】</b> Case report, commentary of the topics ・ Endodontics for immature permanent teeth <b>【review】</b> The contents of the lecture	その他
6	Teeth trauma of the childhood	Lecture	西田 郁子	<b>【preparation】</b> Case report, commentary of the topics ・ Trauma <b>【review】</b> The contents of the lecture	その他
7	Space Maintenance	Lecture	藤田 優子	<b>【preparation】</b> Case report, commentary of the topics ・ Space maintenance <b>【review】</b> The contents of the lecture	その他
8	Active Denture Guidance	Lecture	佐伯 桂	<b>【preparation】</b> Case report, commentary of the topics ・ Active Denture Guidance <b>【review】</b> The contents of the lecture	その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9	Coronal restoration of deciduous tooth and the early permanent tooth	Lecture	西田 郁子	<b>【preparation】</b> Case report, commentary of the topics ・ Coronal restoration of deciduous and immature permanent tooth <b>【review】</b> The contents of the lecture	その他
10	Dental treatment of the child with a disability	Lecture	渡辺 幸嗣	<b>【preparation】</b> Case report, commentary of the topic ・ disability <b>【review】</b> The contents of the lecture	その他
11	Correspondence to trauma teeth of the childhood	Lecture	西田 郁子	<b>【preparation】</b> Case report, commentary of the topics ・ Trauma <b>【review】</b> The contents of the lecture	その他
12	Surgical treatment of children (I)	Lecture	渡辺 幸嗣	<b>【preparation】</b> Case report, commentary of the topics ・ Surgery <b>【review】</b> The contents of the lecture	その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture No.	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13	Surgical treatment of children (II)	Lecture	西田 郁子	<b>【preparation】</b> Case report, commentary of the topics ・ Surgery <b>【review】</b> The contents of the lecture	その他
14	General Discussion	Lecture	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	<b>【preparation】</b> Case report, commentary of the topics about pediatric dentistry <b>【review】</b> The contents of the lecture	その他
15	Test	Test	藤田 優子	<b>【preparation】</b> Case report, commentary of the topics about pediatric dentistry <b>【review】</b> The contents of the lecture	その他



# Developmental Stomatognathic Function Science (C)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Course Description

Read published studies to increase understanding of the latest research trends in pedodontics and those related to bone morphometry. Conduct debriefing and discussion sessions regarding the content and progress status of each study, and present seminars by osteologists in other basic medicine fields.

## Attainment Objectives

1. Improve the ability to read studies written in English.
2. Gain ability to understand the content of published studies.
3. Improve the capability to comment regarding research activates.
4. Gain ability to understand the trend and background of the study, and enhance knowledge.
5. Enhance knowledge by obtaining the latest information in regard to pedodontics and bone morphometry.

## Textbooks

Title	Author	Publisher
Pediatric Dentistry	Shirakawa T. Inuma M. Fukumoto S.	Ishiyaku Publishers, Inc.

## Reference Books

Title	Author	Publisher
Textbook of Pediatric Stomatology	Asada Y., et al.	Gakkenshoin Ltd.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Average score of presentation and report (Evaluation sheet will be distributed to the students.)	100%

## Etc

[office hours]

If necessary, contact instructors by e-mail.

Koji Watanabe or Ikuko Nishida

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms

2024年度

subject code:212094

# Developmental Stomatognathic Function Science (C)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	By taking into consideration the background of the study, contents of recent reports in the field of pedodontics and those related to bone morphometry, and the results of studies performed in related fields, gain ability to understand the application of those findings to both research and clinical practice.	Discussion and commentary of academic articles.	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	<b>【preparation】</b> Read original Articles and get knowledge on the pediatric dentistry. <b>【review】</b> The contents of the lecture	その他

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

## Course Description

Read published studies to improve understanding on the latest research trends in pedodontics, especially on occlusal nurturing. In practicals of making devices for occlusal guidance, the instructors will show demonstrations before the students practice the procedure. Conduct debriefing and discussion sessions regarding the content and progress status of each study, and present seminars by osteologists in other basic medicine fields.

## Attainment Objectives

1. Improve the ability to read studies written in English.
2. Obtain information and knowledge on pedodontics and orthodontics.
3. Learn making devices for occlusal guidance through lectures and practicals.

## Textbooks

Title	Author	Publisher
Basic and clinical Practical in Pedodontics	Maki K, Fujita Y, Saeki K	Ishiyaku Bub, Inc.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Presentation (50%) and reports (50%). Evaluation sheet will be distributed to the students.	100%

## Etc

[office hours]

If necessary, contact instructors by e-mail.

Koji Watanabe or Ikuko Nishida

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms

2024年度

subject code:212095

# Developmental Stomatognathic Function Science

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIKAWA KAZUMASA						
Instructor(s)	MORIKAWA KAZUMASA, NISHIDA IKUKO, SAEKI KATSURA, FUJITA YUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Taking into consideration the latest information of the studies on pedodontics, orthodontics, and their related fields, the students will learn how to apply it in their studies and clinical practices.	Discussion and Commentary on academic articles.	西田 郁子 渡辺 幸嗣 佐伯 桂 藤田 優子	<b>【preparation】</b> Commentary on the topics in the field of pediatric dentistry.・ Outline of Pedodontics <b>【review】</b> The contents of the lecture	その他

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Course Description

【Language】 Japanese You will master the basic knowledge of Orofacial orthodontics through understanding about planning and implementing of clinical research.

## Attainment Objectives

You should achieve following assignments.

1. Analysis of the various information required for diagnosis, can be summed up
- .2. To understand the biological and bio-mechanical fundamentals required for orthodontic treatment.
3. Analysis and evaluation of Orofacial function.
4. To understand the indications and mechanism of action of orthodontic appliances.
5. To understand the physiological and pathological problems with jaw deformities, cleft lip and cleft palate.
6. To understand the biology of bone and soft tissue.
7. To understand the principle of the dentition and occlusion of Craniofacial growth and development.
8. To understand and implement of the occlusion with development concepts.
9. To understand the pathogenesis of congenital diseases.
10. To understand the materials of orthodontic.

## Reference Books

Title	Author	Publisher
Contemporary Orthodontics, 6th Edition	W. R. Profitt	Mosby
Basics of head X-ray standard	K. Miyashita	Quintessence
The latest orthodontic atlas	N. Inoue	Ishiyaku publishers
Orthodontics, 6th Edition	J. Iida et al.	Ishiyaku publishers
Orthodontic clinical series 1 "malocclusion"	Susami T., Chugo T.	Ishiyaku publishers
Orthodontic clinical series 2 "malocclusion"	Yamauchi K., Sakuta M.	Ishiyaku publishers
Orthodontic clinical series 3 "open bite"	Kawada T., Ozeki T.	Ishiyaku publishers

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Title	Author	Publisher
Orthodontic clinical series 4 "crowding"	Matsumoto M., Nakagawa H.	Ishiyaku publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Judgments by the Tests.	80%
After the lecture to the exam (exam and lab).	20%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					診療室_病院
1	Preparation of diagnostic materials, impression, creating a gnathostatic model, Cephalometric tracing, Model analysis, Cephalometric analysis. You will master the method of the evaluation skills based on basic diagnostic data.	Lecture Practice	白川 智彦	Review of reference books and handouts	診療室_病院
2	Diagnostics, Tooth extraction, Model set-up, Treatment planning, Orthodontic appliance. You will master basic treatment planning and treatment methods skills based on basic diagnostic.	Lecture Practice	水原 正博	Review of reference books and handouts	診療室_病院

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Diagnostic imaging of the CT and MRI You will learn the relevant cases and imaging, based on the basic diagnostic imaging.	Lecture Practice	白川 智彦	Review of reference books and handouts	診療室_病院
4	Orofacial function, jaw movement, chewing, biting, chewing efficiency, Temporomandibular disorders. You will master the method of the evaluation skills about basic Orofacial function tests, methods, results based on the relevance of cases.	Lecture	白川 智彦	Review of reference books and handouts	診療室_病院
5	Orthodontic force and tooth movement, Anchorage, Biologic control of tooth movement, Orthodontic implants You will master the principles of tooth movement and learn the orthotic devices.	Lecture	白川 智彦	Review of reference books and handouts	診療室_病院
6	Tissue reactions and orthodontic force You will learn about tooth movement and periodontal tissue reactions caused by orthodontic treatment which include root resorption, the reactions of blood flow in the periodontal ligament and hyaline.	Lecture	黒石 加代子	Review of reference books and handouts	診療室_病院
7	Orthopedic force and reactions. You will learn about the reaction and growth change of the bone caused by orthopedic force which include growth of cartilages and growth of bone sutures.	Lecture	黒石 加代子	Review of reference books and handouts	診療室_病院

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Bone metabolism, Bone biology, Molecular cell biology You will learn about the bone metabolism based on work on the orthodontic tooth movement periodontal tissue cells.	Lecture	黒石 加代子	Review of reference books and handouts	診療室_病院
9	Materials science on orthodontic materials You will learn about the characteristics of the materials required for orthodontic treatment and its selection	Lecture	黒石 加代子	Review of reference books and handouts	診療室_病院
10	Each orthodontic appliance usage and mechanisms of action You will learn about the basic orthodontic structure and mechanism of action, indications, considerations.	Lecture	水原 正博	Review of reference books and handouts	診療室_病院
11	Multibracket technique You will learn about multibracket structure and active orthodontic treatment	Lecture Practice	郡司掛 香織	Review of reference books and handouts	診療室_病院
12	Orthodontic treatment for facial deformity You will learn about surgical orthodontic treatment based on facial deformity for therapeutic purpose, indications, treatment procedures.	Lecture	郡司掛 香織	Review of reference books and handouts	診療室_病院
13	Malocclusion due to congenital anomalies You will learn about malocclusion due to congenital anomalies, which include causes, systemic findings and malocclusion.	Lecture	郡司掛 香織	Review of reference books and handouts	診療室_病院



# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	Orthopedic treatment with presurgical nasopalveolar molding and bone graft for patient of cleft lip and palate. You will learn about secular orthodontic treatment for cleft lip and palate and learn growth and development.	Lecture	水原 正博	Review of reference books and handouts	診療室_病院
15	Retention and retainers (Removable, fixed). You will learn about various types of retainers and static treatment based on physiological and orthodontic treatment.	Lecture	郡司掛 香織	Review of reference books and handouts	診療室_病院
16	Myofunctional therapy (MFT). You will learn about prevention and treatment and the effects of bad habit to individual dental arch.	Lecture	川元 龍夫	Review of reference books and handouts	診療室_病院
17	Dentition and occlusion, and Craniofacial growth and development. You will learn about Craniofacial growth and development, tooth, dentition and occlusion, normal growth and development.	Lecture	水原 正博	Review of reference books and handouts	診療室_病院
18	Growth and development with orthodontic treatment. You will learn about various types of malocclusion and secular treatment based on the growth and development.	Lecture	川元 龍夫	Review of reference books and handouts	診療室_病院
19	Occlusion with development concepts. You will learn about Occlusion with development based on secular growth and development, malocclusion.	Lecture	川元 龍夫	Review of reference books and handouts	診療室_病院

2024年度

subject code:212101



# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
20	A comprehensive dental treatment You will learn about team approach with overall treatment for oral.	Lecture	川元 龍夫	Review of reference books and handouts	診療室_病院

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Course Description

【Language】 Japanese You will learn about the optimal materials needed for clinical research and analysis. You will learn about the basic orthodontic appliances and the mechanism of reaction.

## Attainment Objectives

You should achieve following assignments.

1. To understand about taking materials for clinical research.
2. To understand the mechanism of reaction of the orthodontic treatment, can be constructed.
3. To understand the Orofacial function and analysis and evaluation.
4. To get ability of creating the materials for the presentation and utilization.

## Reference Books

Title	Author	Publisher
The latest orthodontic atlas	N. Inoue	ishiyaku publishers inc
Contemporary Orthodontics, 6th Edition	William R. Proffit	Mosby

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Judgements by all of the instructors.	100%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms
				診療室_病院

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Preparation of diagnostic materials (Oral photo, Facial photo) You will master the method of the diagnostic material taking skills with oral photo and facial photo.	Practice	水原 正博	Preparation for a basic practice manual, The latest orthodontic atlas	診療室_病院
2	Preparation of diagnostic materials (impression, gnathostatic model) You will master the method of impression and taking diagnostic materials for creating a gnathostatic model based on the technique of snap impression using alginate impression material and face bow instrument.	Practice	黒石 加代子	Preparation for a basic practice manual, The latest orthodontic atlas	診療室_病院
3	Preparation of diagnostic materials (Cephalometric tracing, Cephalometric analysis, model analysis) You will master taking diagnostic materials based on cephalometric tracing, cephalometric analysis, model analysis.	Practice	黒石 加代子	Preparation for a basic practice manual, The latest orthodontic atlas	診療室_病院
4	Orofacial function and analysis and evaluation You will learn basic Orofacial function inspection equipment based on its usage method and analysis data.	Practice	黒石 加代子	Preparation for a basic practice manual, The latest orthodontic atlas	診療室_病院
5	Diagnostics, Tooth extraction, Model set-up, Treatment planning, Orthodontic appliance You will master basic treatment planning and treatment methods skills based on basic diagnostic.	Practice	水原 正博	Preparation for a basic practice manual, The latest orthodontic atlas	診療室_病院

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	PresentationBased on the usage of digital data capture and PowerPoint, Photo shop, learn to create a presentation.	Practice	白川 智彦	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
7	Basic practice (Lingual arch)You will master the technique of the lingual arch and method of adjustment.	Practice	白川 智彦	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
8	Basic practice (Lingual arch)You will master the technique of the lingual arch and method of adjustment.	Practice	白川 智彦	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
9	Basic practice (Activator)You will learn the method of construction bite and functional orthodontic appliances and method of adjustment.	Practice	水原 正博	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
10	Basic practice (Activator)You will learn the method of construction bite and functional orthodontic appliances and method of adjustment.	Practice	郡司掛 香織	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
11	Basic practice (Retainer)You will learn about Begg type retainer and method of adjustment.	Practice	郡司掛 香織	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
12	Basic practice (Retainer)You will learn about Begg type retainer and method of adjustment.	Practice	郡司掛 香織	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院
13	Analysis and evaluation of the treatment effectYou will learn orthodontic treatment by considering the analysis and evaluation of the treatment effect.	Practice	川元 龍夫	Preparation for a basic practice manual,The latest orthodontic atlas	診療室_病院

2024年度

subject code:212102

# Orthodontics (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	Analysis and evaluation of growth and development You will learn orthodontic treatment by considering the growth and development.	Practice	川元 龍夫	Preparation for a clinical manual	診療室_病院
15	Orthodontic materials and movement of the tooth You will learn orthodontic treatment by considering the orthodontic materials and movement of the tooth.	Practice	川元 龍夫	Preparation for a clinical manual	診療室_病院

# Orthodontics (Typodont exercise)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Course Description

【Language】 Japanese

To understand the mechanics of proper tooth movement and performed on typodont.

## Attainment Objectives

You should achieve following assignments.

1. To understand relationships of tooth movement to orthodontic force.
2. To understand the frictional resistance of wires and brackets.
3. To understand the relationship of forces to moments.
4. To understand necessity of anchorage about intramaxillary anchorage, intermaxillary anchorage, extraoral anchorage.
5. To understand the properties of the wire.

## Reference Books

Title	Author	Publisher
Contemporary orthodontics	W. R. Profitt	Mosby
The latest orthodontic atlas	N. Inoue	ishiyaku publishers inc
Common Sense Mechanics	Thomas. Mulligan	
Biomechanics in Orthodontics	Ram S., Ph.D. Nanda	Quintessence

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of the instructor for each step. Present each steps and discuss.	100%

# Orthodontics (Typodont exercise)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
					診療室_病院
1	Preparation of Typodont 1You will master the method of Multibracket therapy through brackets bonding, brackets positioning for full metal tooth and preparation of the molar band, electrical soldering.	Practice	黒石 加代子	Typodont syllabus preparation and review	診療室_病院
2	Preparation of Typodont 1You will master the method of Multibracket therapy through brackets bonding, brackets positioning for full metal tooth and preparation of the molar band, electrical soldering.	Practice	黒石 加代子	Typodont syllabus preparation and review	診療室_病院
3	Preparation of Typodont 1You will master the method of Multibracket therapy through brackets bonding, brackets positioning for full metal tooth and preparation of the molar band, electrical soldering.	Practice	黒石 加代子	Typodont syllabus preparation and review	診療室_病院
4	Wire bending 1Learn about standard edgewise arch wire morphology and bending round wire.	Practice	白川 智彦	Typodont syllabus preparation and review	診療室_病院
5	Wire bending 2Learn about standard edgewise rectangular wire and bend.	Practice	白川 智彦	Typodont syllabus preparation and review	診療室_病院



# Orthodontics (Typodont exercise)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Wire bending 3Learn about the adjustment of the arch wire and bending.	Practice	白川 智彦	Typodont syllabus preparation and review	診療室_病院
7	Typodont 1 (leveling)You will learn the early changes of malocclusion by multibracket system based on physiological responses.	Practice	水原 正博	Typodont syllabus preparation and review	診療室_病院
8	Typodont 2 (leveling)You will learn the early changes of malocclusion by multibracket system based on physiological responses.	Practice	水原 正博	Typodont syllabus preparation and review	診療室_病院
9	Typodont 3 (Canine tooth retraction)You will learn the purpose of distal movement of canine tooth and the method and considerations.	Practice	水原 正博	Typodont syllabus preparation and review	診療室_病院
10	Typodont 3 (Canine tooth retraction)You will learn the purpose of distal movement of canine tooth and the method and considerations.	Practice	郡司掛 香織	Typodont syllabus preparation and review	診療室_病院
11	Typodont 5 (Incisors retraction)You will learn distal movement of incisors of multibracket method based on high need presence about reinforced anchorage, incisor torque control, arch width control.	Practice	郡司掛 香織	Typodont syllabus preparation and review	診療室_病院
12	Typodont 5 (Incisors retraction)You will learn distal movement of incisors of multibracket method based on high need presence about reinforced anchorage, incisor torque control, arch width control.	Practice	郡司掛 香織	Typodont syllabus preparation and review	診療室_病院

2024年度

subject code:212103

# Orthodontics (Typodont exercise)

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13	Typodont 7 (Ideal arch, Finish) You will learn to establish a normal occlusion based on physiological and orthodontic equipment	Practice	川元 龍夫	Typodont syllabus preparation and review	診療室_病院
14	Typodont 7 (Ideal arch, Finish) You will learn to establish a normal occlusion based on physiological and orthodontic equipment	Practice	川元 龍夫	Typodont syllabus preparation and review	診療室_病院
15	Typodont presentation (Course description) To understand the multi-bracket system method by describing the progress of the whole for typodont practice.	Presentation	川元 龍夫	Typodont syllabus preparation and review	診療室_病院

# Orthodontics (Clinical training)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	30	Credits	1	
Responsible Instructor	KAWAMOTO TATSUO							
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO							

## Course Description

【Language】 Japanese

Carry out the treatment to the end from the start of treatment on the basis of the basic knowledge and skills that you learn in the first year. To update the knowledge and skills for the planning of clinical research.

## Attainment Objectives

You should achieve following assignments.

1. To get ability of communicate effectively with patients.
2. Analysis of the various information needed for diagnosis, can be summed up.
3. To understand the biological and bio-mechanical fundamentals required for orthodontic treatment.
4. To get ability of analysis for changes in treatment and apply to the treatment step.
5. Analysis and evaluation of the treatment mechanism.

## Reference Books

Title	Author	Publisher
Contemporary orthodontics	W. R. Profit	
Common Sense Mechanics	Thomas. Mulligan	

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of the instructor for each step. Present each steps and discuss.	100%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

# Orthodontics (Clinical training)

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	30	Credits	1	
Responsible Instructor	KAWAMOTO TATSUO							
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO							

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Preparation of diagnostic materials (Oral photo, Facial photo, impression, gnathostatic model) You will master the diagnostic material taking skills based on the technique of taking oral photo and facial photo by digital cameras, snap impression using alginate impression and face bow instrument, creating a gnathostatic model about patients.	Lecture practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院
2	Preparation of diagnostic materials (Cephalometric tracing, Cephalometric analysis, model analysis) You will master taking diagnostic materials based on cephalometric tracing, cephalometric analysis, model analysis about patients.	Lecture practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院
3	Analysis and evaluation of Orofacial function (chewing, occlusion, breathing) You will learn Orofacial function by considering the evaluation of chewing, occlusion, breathing.	Lecture practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院
4~5	Diagnostics, Presentation You will master basic treatment planning, treatment methods skills, and creating the presentation based on basic diagnostic and the usage of digital data capture and PowerPoint, Photo shop, learn to create a presentation about patients.	Lecture practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院

2024年度

subject code:212104

# Orthodontics (Clinical training)

Course Affiliation	the Faculty of Dentistry		Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	30	Credits	1
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6~12	Orthodontic materials and movement of the tooth You will learn orthodontic treatment by considering the orthodontic materials and movement of the tooth about patients.	Lectures practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院
13~15	Analysis and evaluation of the treatment effect, growth and development You will learn orthodontic treatment by considering the evaluation of treatment effect, growth and development about patients.	Lectures practice	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summary of each steps from diagnosis to end of treatment	診療室_病院

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Course Description

【Language】 Japanese

You will learn about the organization and analysis of related documents of your research. You have to do oral presentation about your research. You will consider about the method of research.

## Attainment Objectives

You should achieve following assignments.

1. To get ability of creating the materials for the presentation and utilization.
2. To get ability of analysis and collect information for research.
3. To get ability of consider methodology of research.
4. To get ability of collecting data.

## Reference Books

Title	Author	Publisher
Title Author Publisher Contemporary Orthodontics, 6th Edition	William R. Proffit	Mosby
Color atlas X-ray anatomy and cephalometric analysis	K. Miyashita	Quintessence
Orthodontics Current Principles & Techniques	T.M.Graber	ELSEVIER/MOSBY

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Summary background research for their research.	50%
The protocol for research.	50%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1~3	Literature search and organize You will learn about research based on literature search and how to organize research.	Lectures seminars	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	The use of the Internet, PubMed Understanding of the usage, usage of File maker	診療室_病院
4~7	Background of the research and literature summary You will learn about research based on literature search and how to organize research.	Exercises and small group seminars	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Preparation for the consolidation of the literature using literature using PubMed for your collect	診療室_病院
8~9	Biology, genetics, molecular cell and orthodontic treatment You will learn the research through orthodontic treatment information based on genetics and molecular cell biology.	Exercises and small group seminars	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Preparation for the consolidation of the literature using literature using PubMed for your collect	診療室_病院
10~12	Discussion of the research methodology You will learn how to appeal your research topics through the result of research.	Exercises and small group seminars	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	PowerPoint Preparation of presentation	診療室_病院
13~15	Literature Review (Related to domestic and foreign paper summarization) You will learn how to make discussion of paper through related domestic and international paper.	Exercises and small group seminars	川元 龍夫 郡司掛 香織 黒石 加代子 水原 正博 白川 智彦	Summarization of domestic and international related to the theme of your article	診療室_病院

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	60	Credits	4	
Responsible Instructor	KAWAMOTO TATSUO							
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO							

## Course Description

【Language】 Japanese

Organize the collected documents and information, analyzes the presentation. Consider the method of research. Make presentations and article submission.

## Attainment Objectives

You should achieve following assignments.

1. To understand the significance of Orofacial function and occlusion with development concept.
2. To understand the biological and bio-mechanical fundamentals required for orthodontic treatment.
3. To get ability of creating the materials for the presentation and utilization.
4. To get ability of analyzsis and collect information for research.
5. To get ability of considering the methodology of research.
6. To get ability of writing the article and submitting.

## Reference Books

Title	Author	Publisher
Contemporary Orthodontics, 6th Edition	W. R. Proffitt	Mosby
Comprehensive Cleft Care	Joseph Losee, Richard E. Kirschner	CRC Press
Atlas of Orthodontic Treatment for Patients with Birth Defects	Takayuki Kuroda, Kimie Ohyama	Needham Press, Inc.
New atlas of congenital anomaly	T. Kajii	Nanzando Publishing
Contemporary Treatmnet of Dentofacial Deformity	W.R.Proffit	Mosby
Gorlin's Syndrome of the Head and Neck	Hennekam/Krantz/Allanson	Oxford University



# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluate the progress of the research.	100%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~2	Orofacial function and occlusion with development concept. You will learn the history of occlusion by understanding the basics of Orofacial function.	Lectureseminar	郡司掛 香織	Reviewhandouts	診療室_病院
3~4	Developments of Orofacial Function and Orthodontics researchYou will learn to understand the basic and clinical research related to orthodontic correction of consensus.	Lectureseminar	郡司掛 香織	Review of 1 grade lectures	診療室_病院
5~6	Histological changes during experimental tooth movementYou will learn about reaction of teeth and periodontal tissue by orthodontic tooth movement.	Lectureseminar	水原 正博	Review of 1 grade lectures	診療室_病院
7~8	Mechanics of tooth movementYou will learn about tooth movement which include Tipping, Bodily movement, Intrusion, Extrusion, Rotation, Torque.	Lectureseminar	郡司掛 香織	Typodontsyllabus	診療室_病院

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9 ~ 10	Biology, Molecular cell biology, Genetics and Orthodontic treatment To understand the basic science, to learn the need for orthodontic treatment.	Lectureseminar	水原 正博	Review of first year lectures	診療室_病院
11 ~ 13	Background of the research and literature research You need to presentation of the academic background of your research.	Lectureseminar	黒石 加代子	Create a Power point on each research, individually	診療室_病院
14 ~ 16	Presentation of the background of the research and literature research You need to presentation of your research (Research presses etc. ).	Lectureseminar	黒石 加代子	Create a Power point on each research, individually	診療室_病院
17 ~ 19	Methodology for the research You will learn about the methodology of your research based on literature search and gathered information.	Lectureseminar	白川 智彦	Create a Power point on each research, individually	診療室_病院
20 ~ 22	Announcement of research methodology You will learn about presentation of the methodology of your research based on fabrication of research methods, figures and tables using Power point.	Lectureseminar	白川 智彦	Create a Power point on each research, individually	診療室_病院
23 ~ 24	Data collection analysis presentation The analysis of data collected for research presentation.	Lectureseminar	水原 正博	Create a Power point on each research, individually	診療室_病院
25 ~ 26	Meeting presentations and media creation You have to present your research in the form of oral or poster proceedings at academic exhibits (No. 1).	Lectureseminar	川元 龍夫	Create a Power point on each research, individually	診療室_病院

2024年度

subject code:212106

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4	
Responsible Instructor	KAWAMOTO TATSUO							
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
27 ~ 28	Meeting presentations and media creation You have to present your research in the form of oral or poster proceedings at academic exhibits (No. 2).	Lecture seminar	川元 龍夫	Create a Power point on each research, individually	診療室_病院
29 ~ 30	Write an article and submit You will learn about the proper method of writing an article to understand the guidelines of the journal.	Lecture seminar	川元 龍夫	Review journals submission guideline	診療室_病院

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 grade	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Course Description

【Language】 Japanese

Understand the relationship between occlusion and orthodontics (related to research) through chewing, swallowing and respiratory function. Also consider the cause of the risk which include root resorption and pain associated with treatment.

## Attainment Objectives

You should achieve following assignments.

1. To get ability of evaluating the respiratory function.
2. To clarify and to understand the relationship between activity of masticatory muscle EMG and occlusal sound.
3. To clarify and to understand the relationship between mouth breathing and bite if training.
4. To clarify and to understand the regulation of bone metabolism through the trigeminal ganglion.
5. To clarify and to understand the elucidation of the mechanism of periodontal tissue osteoactivin.
6. To clarify and understand the friction on the wire between the brackets.

## Reference Books

Title	Author	Publisher
Contemporary Orthodontics, 6th Edition	William R. Proffit	Mosby
Orthodontics Current Principles & Techniques	T.M.Grabner	ELSEVIER/MOSBY

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Evaluation of a research protocol	100%

## Etc

Student consultation: Any time (e-Mail)

Remote response due to the equivalent of official leave: Consultation with the responsible instructor when such circumstances arise.

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 grade	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~3	Orofacial function You will learn about the Orofacial function based on growth and development.	Lecture	白川 智彦	Review handouts	診療室_病院
4~6	Biological study on the optimal orthodontic force (1)You will learn about the biological study of orthodontic periodontal tissue cells of the bone resorption and mechanism based on optimal orthodontic forces.	Exercises and small group seminars	水原 正博	One-year review of the next lecture	診療室_病院
7~8	Tooth movement and bone remodeling You will learn about the orthodontic tooth movement during bone remodeling based on functions of periodontal ligament fibroblast cells, osteoclasts.	Exercises and small group seminars	黒石 加代子	A perusal of related papers	診療室_病院
9	Tooth movement and bone remodeling You will learn about the orthodontic tooth movement during bone remodeling, based on functions of osteoblasts.	Exercises and small group seminars	黒石 加代子	A perusal of related papers	診療室_病院
10~12	Evaluation of masticatory function You will learn about the necessity of the Orthodontic treatment to understand the basics of the masticatory function	Exercises and small group seminars	郡司掛 香織	A perusal of related papers	診療室_病院
13	Regulation of bone metabolism through the trigeminal ganglion You will learn about the relationship of the nervous system and bone metabolism	Exercises and small group seminars	川元 龍夫	A perusal of related papers	診療室_病院

2024年度

subject code:212107

# Orofacial Function and Orthodontics

Course Affiliation	the Faculty of Dentistry			Grades	2 grade	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAWAMOTO TATSUO						
Instructor(s)	KAWAMOTO TATSUO, GUNJIKAKE KAORI, KUROISHI KAYOKO, MIZUHARA MASAHIRO, SHIRAKAWA TOMOHIKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14 ~ 15	Mechanism of reaction of bone metabolism in periodontal tissue You will learn about bone metabolism in periodontal tissue and the bone formation mechanism of traction side during orthodontic tooth movement based on the mechanism of reaction and osteoactivin on periodontal ligament fibroblast cells in bone formation factors.	Exercises and small group seminars	川元 龍夫	A perusal of related papers	診療室_病院

# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	MORIMOTO YASUHIRO							
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN							
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU							

## Course Description

You can study the diagnostic methods using six hundred teaching files in our department and in fact produce the imaging diagnostic reports on the respective case. After then, you can understand the important and essential points on the respective case based on the explanations on the case by the instructors. At the same time, you can study and appropriately comprehend the pathological findings on the respective case through the textbook "Contemporary Oral and Maxillofacial Pathology". In imaging interpretation of the respective case, you should use "CT, MRI in head and neck" and "Handbook of diagnostic imaging in head and neck" as the textbook.

## Attainment Objectives

To understand the diagnostic methods for many kinds of lesions in oral and maxillofacial regions through imaging findings on dental X-ray radiographs, panoramic radiographs, CT, MRI, ultrasonography, and 18F-FDG-PET-CT. At the same time, you should comprehend the usefulness of the judgment based on together with the medical interview of patients, anthroposcopy, and the palpation for the lesion in imaging diagnosis of the many kind of lesion in oral and maxillofacial regions.

## Reference Books

Title	Author	Publisher
Head and Neck Imaging 3rd edition 1996		
CT, MRI in head and neck, Handbook of diagnostic imaging in head and neck		
Contemporary Oral and Maxillofacial Pathology		
Basic radiology		
Oral Anatomy		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentations	50%

# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Evaluation item	Ratio
Oral examinations	50%

## Etc

【Office Hours】 Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬		
1,2	Diagnosis of 20 teeth-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
3,4	Diagnosis of 20 teeth and jaw-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
5,6	Diagnosis of 20 periodontal lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
7,8	Diagnosis of 20 periodontal and jaw-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	



# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9,10	Diagnosis of 20 oral mucosa-related lesions in 600 cased teaching files I	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
11,12	Diagnosis of 20 oral mucosa-related lesions in 600 cased teaching files II	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
13,14	Diagnosis of 20 parapharyngeal space-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
15,16	Diagnosis of 20 carotid and perivertebral space-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
17,18	Diagnosis of 20 larynx and pharynx-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
19,20	Diagnosis of 20 sublingual space-related lesions in 600 cased teaching files I	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
21,22	Diagnosis of 20 sublingual space-related lesions in 600 cased teaching files II	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	
23,24	Diagnosis of 20 submandibular space-related lesions in 600 cased teaching files I	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍瞬 西村 瞬	Pre- and post-reading of textbook	

# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	Diagnosis of 20 submandibular space-related lesions in 600 cased teaching files II	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
27,28	Diagnosis of 20 submandibular and sublingual spaces-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
29,30	Diagnosis of 20 masticator space-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
31,32	Diagnosis of 20 maxillary sinus-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
33,34	Diagnosis of 20 TMJ-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
35,36	Diagnosis of 20 maxilla and mandible-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
37,38	Diagnosis of 20 retropharyngeal space-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
39,40	Diagnosis of 20 parapharyngeal and retropharyngeal spaces-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
41,42	Diagnosis of 20 pharynx and masticator space-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
43,44	Diagnosis of 20 pharynx-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
45,46	Diagnosis of 20 lymph nodes-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
47,48	Diagnosis of 20 cystic masses in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
49,50	Diagnosis of 20 salivary glands-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
51,52	Diagnosis of 20 thyroid and parathyroid glands-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
53,54	Diagnosis of 20 base of skull and temporal bone-related lesions in 600 cased teaching files	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
55,56	Diagnosis for 20 kinds of diseases in oral and maxillofacial regions I	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
57,58	Diagnosis for 20 kinds of diseases in oral and maxillofacial regions II	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
59,60	Diagnosis for 20 kinds of diseases in oral and maxillofacial regions III	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Conference of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

## Course Description

You can learn and study the imaging diagnostic method for many kind of diseases in oral and maxillofacial regions through the representative textbook "Head and Neck Imaging 3rd edition" by Som, Curtin et al

## Attainment Objectives

To understand of imaging findings on many kind of diseases in oral and maxillofacial regions through the representative textbook "Head and Neck Imaging 3rd edition" by Som, Curtin et al

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentation	50%
Oral examination	50%

## Etc

**【Office Hours】** Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
1~15	A reading circle of "Head and Neck Imaging"	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook "Head and Neck Imaging 3rd edition"	

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	60	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						

## Course Description

Firstly, you can sufficiently review the oral anatomy and the oral pathology. After then, you can learn the basic imaging diagnosis, the basic radiobiology, and the basic radiological physics. As the form of the present subject, you will present the respective content in front of our professors after the respective tutotrial study, and the professor in charge of the respective content will precisely explain it

## Attainment Objectives

To perfectly comprehend the basic oral anatomy and oral pathology. To understand the basic imaging principles, technique of many kinds of imaging modalities, imaging diagnostic interpretation, and the basic radiobiology.

## Reference Books

Title	Author	Publisher
Head and Neck Imaging 3rd edition		
MRI in head and neck, Handbook of diagnostic imaging in head and neck		
Contemporary Oral and Maxillofacial Pathology		
Basic radiology		
Oral Anatomy		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentations	50%
Oral examinations	50%

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						

## Etc

【Office Hours】 Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	History of Radiology, Physics of radiation	Lecture and Practice		Pre- and post-reading of textbook	
2	Radiation chemistry	Lecture and Practice		Pre- and post-reading of textbook	
3	Basic radiobiology	Lecture and Practice		Pre- and post-reading of textbook	
4	Basic radiation measurement methods I			Pre- and post-reading of textbook	
5	Basic radiation measurement methods II	Lecture and Practice		Pre- and post-reading of textbook	
6	Radiation-related laws and ordinances	Lecture and Practice		Pre- and post-reading of textbook	
7	Medical image engineering	Lecture and Practice		Pre- and post-reading of textbook	
8	Image storage translation, reproduction, and transfer	Lecture and Practice		Pre- and post-reading of textbook	
9	Reviews of basic radiology from 1 to 8.	Lecture and Practice		Pre- and post-reading of textbook	
10	Imaging technique for many kinds of diseases in oral and maxillofacial regions I (Mainly Dental and Panoramic radiographs)	Lecture and Practice		Pre- and post-reading of textbook	

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Imaging technique for many kinds of diseases in oral and maxillofacial regions I (Mainly X-ray CT scans)	Lecture and Practice		Pre- and post-reading of textbook	
12	Imaging technique for many kinds of diseases in oral and maxillofacial regions I (Mainly MRI)	Lecture and Practice		Pre- and post-reading of textbook	
13	Imaging technique for many kinds of diseases in oral and maxillofacial regions I (Mainly Ultrasonography)	Lecture and Practice		Pre- and post-reading of textbook	
14	Imaging technique for many kinds of diseases in oral and maxillofacial regions I (Mainly Scintigraphy)	Lecture and Practice		Pre- and post-reading of textbook	
15	Reviews of imaging techniques from 10 to 14.	Lecture and Practice		Pre- and post-reading of textbook	
16	Diagnosis for many kinds of diseases in oral and maxillofacial regions I (Mainly maxillary sinus-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
17	Diagnosis for many kinds of diseases in oral and maxillofacial regions II (Mainly TMJ-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
18	Diagnosis for many kinds of diseases in oral and maxillofacial regions III (Mainly Maxilla and mandible-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
19	Diagnosis for many kinds of diseases in oral and maxillofacial regions IV (Mainly Parapharyngeal, Masticator, and Carotid space-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	



# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
20	Diagnosis for many kinds of diseases in oral and maxillofacial regions V (Mainly Retoropharyngeal, Perivertebral, Sublingual, and Submandibular space-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
21	Diagnosis for many kinds of diseases in oral and maxillofacial regions VI (Mainly Oropharynx-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
22	Diagnosis for many kinds of diseases in oral and maxillofacial regions VII (Mainly Epipharynx, Hypopharynx, Larynx-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
23	Diagnosis for many kinds of diseases in oral and maxillofacial regions VII (Mainly Lymph nodes-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
24	Diagnosis for many kinds of diseases in oral and maxillofacial regions VIII (Mainly Cystic masses)	Lecture and Practice		Pre- and post-reading of textbook	
25	Diagnosis for many kinds of diseases in oral and maxillofacial regions IX (Mainly Salivary glands-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
26	Diagnosis for many kinds of diseases in oral and maxillofacial regions IX (Mainly Thyroid and Parathyroid glands-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	
27	Diagnosis for many kinds of diseases in oral and maxillofacial regions X (Mainly Base of skull and Temporary bone-related diseases)	Lecture and Practice		Pre- and post-reading of textbook	

2024年度

subject code:212113

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
28	Review of diagnosis for many kinds of diseases in oral and maxillofacial regions from 16 to 27	Lecture and Practice		Pre- and post-reading of textbook	
29	Interventional Radiology for many kinds of diseases in maxillofacial regions	Lecture and Practice		Pre- and post-reading of textbook	
30	Radiotherapy for oral cancers	Lecture and Practice		Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

## Course Description

You can learn the applied imaging diagnosis, the applied radiobiology, and the applied radiological physics based on your knowledge through Basic Dental Radiology.

## Attainment Objectives

To understand the applied imaging diagnosis, the applied radiobiology, and the applied radiological physics.

## Reference Books

Title	Author	Publisher
Basic Radiology		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentation	50%
Oral examination	50%

## Etc

【Office Hours】 Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	The examinations of radiation protection supervisor I and II	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	History of Radiology, Physics of radiation I	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
3	Physics of radiation II	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
4	Radioisotope	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
5	Basic radiation measurement methods	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
6	Radiation control	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
7	Radiation protection	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
8	Radiation-related laws and ordinances I	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
9	Radiation-related laws and ordinances II	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Radiobiology	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
11	Radiation chemistry I	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
12	Radiation chemistry II	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
13	Review I (Compound questions)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
14	Review II (Compound questions)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
15	Review III (Compound questions)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

## Course Description

You can study and examine many kinds of the recent imaging diagnostic investigations based on your knowledge through Basic Dental Radiology.

## Attainment Objectives

You can basically and specially operate the CT scan and MRI system, and can take photographs of CT images and MRI. In addition, you can easily use the special software on analysis of CT and MRI imaging data in attached workstation. Moreover, you can apply the analytical software "SPSS" on imaging data analysis.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentation	50%
Oral examination	50%

## Etc

**【Office Hours】** Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Imaging techniques and analysis of conventional X-ray CT scans	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
2	Imaging techniques and analysis of CT angiography	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	Data analysis using statistical analytical software SPSS (I)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
4	Imaging techniques and analysis of conventional MRI (I)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
5	Imaging techniques and analysis of conventional MRI (II)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
6	Imaging techniques and analysis of conventional MRI (III)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
7	Imaging analysis for Dynamic MR sialography (I)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
8	Imaging analysis for Dynamic MR sialography (II)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
9	Imaging analysis for Functional MRI (I)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
10	Imaging analysis for Functional MRI (II)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	

# Practice of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Imaging analysis for Functional MRI (III)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
12	Imaging analysis for MR angiography (I)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
13	Imaging analysis for MR angiography (II)	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
14	Data analysis using statistical analytical software SPSS (II)	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
15	Review from 1 to 14	Lecture and Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	



# A reading circle on Oral and Maxillofacial Radiolo

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

## Course Description

You can learn and study the imaging diagnostic method for many kind of diseases in oral and maxillofacial regions through the representative textbook "Head and Neck Imaging 3rd edition" by Som, Curtin et al

## Attainment Objectives

To understand of imaging findings on many kind of diseases in oral and maxillofacial regions through the representative textbook "Head and Neck Imaging 3rd edition" by Som, Curtin et al

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentation	50%
Oral examiantion	50%

## Etc

**【Office Hours】** Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	A reading circle of "Head and Neck Imaging"	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook "Head and Neck Imaging 3rd edition"	

# Basic treatment strategy of Oral and Maxillofacial

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASAOKI						
Instructor(s)	SASAGURI MASAOKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

## Course Description

【Language】 English and Japanese To acquire basic treatment skills and strategies of Oral and Maxillofacial Surgery including systemic management for hospitalized patients.

## Attainment Objectives

- 1.To acquire the basic skills of minor oral surgery
- 2.To acquire the basic knowledge of major oral and maxillofacial surgery
- 3.To acquire the basic skills of pre- and post- operative management for oral surgery
4. To acquire the basic skills of systemic management for hospitalized patients
- 5.To acquire the basic skills of management for medical emergency

## Textbooks

Title	Author	Publisher
Contemporary Oral and Maxillofacial Surgery	Mosby	

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
case presentations and oral/paper examinations	30%
report	30%
test	40%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Uncomplicated exodontia	Practice	森岡 政彦	Preparation and review of text books	
3,4	Preparation and review of text books	Practice	三次 翔	Preparation and review of text books	

# Basic treatment strategy of Oral and Maxillofacial

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5,6	Management of impacted teeth	Practice	三次 翔	Preparation and review of text books	
7,8	Oral examination 1	Case presentation and oral examination	笹栗 正明 森岡 政彦	Case presentation and oral examination	
9,10	Surgical management of cysts of the jaws	Practice	福田 晃	Preparation and review of text books	
11,12	Periapical surgery	Practice	高橋 理 森岡 政彦	Preparation and review of text books	
13,14	Surgical management of jaw tumors	Practice	高橋 理	Preparation and review of text books	
15,16	Preprosthetic surgery	Practice	福田 晃	Preparation and review of text books	
17,18	Prevention of surgical site infection	Practice	柳沼 樹	Preparation and review of text books	
19,20	Oral examination 2	Case presentation and oral examination	笹栗 正明 森岡 政彦	Preparation of case presentation	
21,22	Preparation for orthognathic surgery	Practice	田部 士郎	Preparation and review of text books	
23,24	Surgical management of jaw deformities	Practice	土生 学 森岡 政彦	Preparation and review of text books	
25,26	Postsurgical management of orthognathic surgery	Practice	高橋 理	Preparation and review of text books	
27,28	Oral examination 3	Case presentation and oral examination	笹栗 正明	Preparation of case presentation	
29,30	Principles of anti-cancer chemotherapy for oral cancer	Practice	福田 晃	Preparation and review of text books	

# Basic treatment strategy of Oral and Maxillofacial

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASAOKI						
Instructor(s)	SASAGURI MASAOKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
31,32	Principles of irradiation therapy for oral cancer	Practice	原口 和也	Preparation and review of text books	
33,34	Surgical management of oral cancer	Practice	原口 和也	Preparation and review of text books	
35,36	Surgical reconstruction of oro-facial region	Practice	田部 士郎	Preparation and review of text books	
37,38	Postsurgical management of oral cancer patients	Practice	田部 士郎	Preparation and review of text books	
39,40	Principles of terminal care for oral cancer patients	Practice	福田 晃	Preparation and review of text books	
41,42	Oral examination 4	Case presentation and oral examination	森岡 政彦	Preparation of case presentation	
43,44	Surgical management of temporomandibular disorders	Practice	田部 士郎	Preparation and review of text books	
45,46	Preparation for cleft lip and palate (CLP) surgery	Practice	土生 学	Preparation and review of text books	
47,48	Postsurgical management of CLP patients	Practice	土生 学	Preparation and review of text books	
49,50	Surgical management of CLP	Practice	笹栗 正明	Preparation and review of text books	
51,52	Oral examination 5	Case presentation and oral examination	笹栗 正明	Preparation of case presentation	
53,54	Intravenous sedation for oral surgery	Practice	柳沼 樹	Preparation and review of text books	
55,56	General anesthesia for oral surgery	Practice	柳沼 樹	Preparation and review of text books	
57,58	Management of medical emergenc	Practice	柳沼 樹	Preparation and review of text books	

2024年度

subject code:212121

# Basic treatment strategy of Oral and Maxillofacial

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
59,60	Oral examination 6	Case presentation and oral examination	笹栗 正明	Preparation of case presentation	

# Basic diagnostic strategy of Oral and Maxillofacia

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

## Course Description

【Language】 English and Japanese To acquire basic treatment skills and strategies of Oral and Maxillofacial Surgery including systemic management for hospitalized patients.

## Attainment Objectives

- 1.To acquire the basic skills of minor oral surgery
- 2.To acquire the basic knowledge of major oral and maxillofacial surgery
- 3.To acquire the basic skills of pre- and post- operative management for oral surgery
4. To acquire the basic skills of systemic management for hospitalized patients
- 5.To acquire the basic skills of management for medical emergency

## Textbooks

Title	Author	Publisher
Contemporary Oral and Maxillofacial Surgery		Mosby

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
case presentations and oral/paper examinations	30%
report	30%
test	40%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Medical interview	Practice	三次 翔	Preparation and review of text books	
3,4	Clinical laboratory test 1;Blood test, biochemical test	Practice	三次 翔	Preparation and review of text books	

# Basic diagnostic strategy of Oral and Maxillofacia

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	SASAGURI MASA AKI							
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5,6	Clinical laboratory test 2; Immunochemical blood test	Practice	田部 士郎	Preparation and review of text books	
7,8	Image reading of computed tomography	Practice	高橋 理 森岡 政彦	Preparation and review of text books	
9,10	Image reading of magnetic resonance image	Practice	高橋 理	Preparation and review of text books	
11,12	Image reading of ultrasound examination	Practice	高橋 理	Preparation and review of text books	
13,14	Selection of the optimal modalities for various diseases	Practice	福田 晃	Preparation and review of text books	
15,16	Analysis of the collected data and diagnosis	Practice	田部 士郎	Preparation and review of text books	
17,18	Oral examination 1	Case presentation and oral examination	森岡 政彦	Preparation of case presentation	
19,20	Pathological characteristics of mucous membrane diseases	Practice	福田 晃	Preparation and review of text books	
21,22	Clinical characteristics of mucous membrane diseases	Practice	福田 晃	Preparation and review of text books	
23,24	Basic strategy for diagnosis of mucous membrane diseases	Practice	福田 晃	Preparation and review of text books	
25,26	Diagnosis of odontogenic infection	Practice	田部 士郎	Preparation and review of text books	
27,28	Management of odontogenic infection	Practice	田部 士郎	Preparation and review of text books	
29,30	Diagnosis of temporomandibular disorders	Practice	土生 学 森岡 政彦	Preparation and review of text books	
31,32	Principles of management of temporomandibular disorders	Practice	土生 学	Preparation and review of text books	

# Basic diagnostic strategy of Oral and Maxillofacia

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
33,34	Diagnosis of oral psychosomatic disorders	Practice	笹栗 正明 森岡 政彦	Preparation and review of text books	
35,36	Principles of management of oral psychosomatic disorders	Practice	笹栗 正明	Preparation and review of text books	
37,38	Oral examination 2	Case presentation and oral examination	笹栗 正明	Preparation of case presentation	
39,40	Dental management of the patients with diabetes mellitus	Practice	森岡 政彦	Preparation and review of text books	
41,42	Dental management of the patients with cardiovascular disorders	Practice	土生 学	Preparation and review of text books	
43,44	Dental management of the patients under anticoagulant therapy	Practice	原口 和也	Preparation and review of text books	
45,46	Dental management of the patients with liver and kidney diseases	Practice	柳沼 樹	Preparation and review of text books	
47,48	Dental management of the patients under bisphosphonate therapy	Practice	原口 和也	Preparation and review of text books	
49,50	Dental management of medically compromised host	Practice	柳沼 樹	Preparation and review of text books	
51,52	Oral examination 3	Case presentation and oral examination	森岡 政彦 笹栗 正明	Preparation of case presentation	
53,54	Medical and dental ethics	Practice	柳沼 樹	Preparation and review of text books	
55,56	Medical record writing based on problem oriented system	Practice	柳沼 樹	Preparation and review of text books	



2024年度

subject code:212122

# Basic diagnostic strategy of Oral and Maxillofacia

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
57,58	Oral examination 4	Case presentation and oral examination	笹栗 正明	Preparation of case presentation	
59,60	Final test of basic diagnosis course	Paper examination	笹栗 正明	Paper examination	

# Oral and Maxillofacial Surgery 1(Pathology and dis

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU,						

## Course Description

【Language】 English and Japanese To acquire the basic knowledge of various disease models in orofacial region

## Attainment Objectives

- 1.To acquire the basic skills of histopathological specimens
- 2.To acquire the basic skills of immunohistopathological staining
- 3.To acquire the knowledge of osteonecrosis model induced by bisphosphonate
- 4.To acquire the knowledge of arthritis model of temporomandibular joint
- 5.To acquire the knowledge of transplanted cancer model

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
practice outcome and oral examination	50%
test	50%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Processing of histopathological specimens 1: from tissue fixation to embedding	Lecture and practice	高橋 理	Preparation and review of text book	
2	Processing of histopathological specimens 2: decalcification and slicing	Lecture and practice	田部 士郎	Preparation and review of text book	
3	Processing of histopathological specimens 3: H-E staining	Lecture and practice	田部 士郎	Preparation and review of text book	
4	Immunohistopathological staining 1:undecalcified specimens	Lecture and practice	福田 晃	Preparation and review of text book	

# Oral and Maxillofacial Surgery 1(Pathology and dis

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU,						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Immunohistopathological staining 2: decalcified specimens	Lecture and practice	福田 晃	Preparation and review of text book	
6	Arthritis model of the temporomandibular joint: the impact and the mechanisms	Lecture and practice	原口 和也	Preparation and review of text book	
7	Histopathological findings of the arthritis model	lecture	土生 学	Preparation and review of text book	
8	Model of bisphosphonate related osteonecrosis of the jaw : the impact and the mechanisms	lecture	土生 学	Preparation and review of text book	
9	BRONJ model on osteoporotic animals: the impact and the mechanisms	lecture	笹栗 正明	Preparation and review of text book	
10	Histopathological findings of the BRONJ model	lecture	森岡 政彦	Preparation and review of text book	
11	Immunohistopathological findings of the BRONJ model	lecture	森岡 政彦	Preparation and review of text book	
12	Development of treatment methods using BRONJ models	lecture	柳沼 樹	Preparation and review of text book	
13	Transplanted cancer: the impact and the mechanisms	lecture	三次 翔	Preparation and review of text book	
14	Histopathological findings of the transplanted cancer	lecture	柳沼 樹	Preparation and review of text book	
15	Oral examination	Oral examination	笹栗 正明	Preparation of research presentation	

# Oral and Maxillofacial Surgery 2 (Drug and gene in

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

## Course Description

【Language】 English and Japanese To acquire the skills of electroporation and sonoporation

## Attainment Objectives

- 1.To acquire the basic skills of cell culture
- 2.To acquire the basic skills of microorganisms culture
- 3.To acquire the basic skills of DNA management
4. To acquire the basic skills of electroporation and sonoporation
- 5.To acquire the basic analyzing methods

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
practice outcome and oral examination	50%
test	50%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	cell culture 1: aseptic processing	Lecture and practice	高橋 理 森岡 政彦	Preparation and review of text book	
2,3	Cell culture 2: subcultivation	Lecture and practice	原口 和也 森岡 政彦 柳沼 樹	Preparation and review of text book	
4	Bacterial culture	Lecture and practice	三次 翔 柳沼 樹	Preparation and review of text book	
5,6	Extraction of DNA	Lecture and practice	田部 士郎	Preparation and review of text book	
7	Electroporation	Lecture and practice	土生 学 森岡 政彦	Preparation and review of text book	

# Oral and Maxillofacial Surgery 2 (Drug and gene in

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASAOKI						
Instructor(s)	SASAGURI MASAOKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Sonoporation	Lecture and practice	田部 士郎	Preparation and review of text book	
9,10	Analyzing method 1: polymerase chain reaction	Lecture and practice	福田 晃	Preparation and review of text book	
11,12	Analyzing method 2: western blotting and ELISA	Lecture and practice	福田 晃 柳沼 樹	Preparation and review of text book	
13,14	Analyzing method 3: flowcytometry	Lecture and practice	笹栗 正明 柳沼 樹	Preparation and review of text book	
15	Oral examination	Oral examination	笹栗 正明	Preparation of research presentation	

# Oral and Maxillofacial Surgery 3 (Conferences)

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASA AKI						
Instructor(s)	SASAGURI MASA AKI, HABU MANABU, TAKAHASHI OSAMU, MITSUGI SYOU, TABE SHIROU, HARAGUCHI KAZUYA, MORIOKA MASAHIKO, YAGINUMA TATSUKI, FUKUDA HIKARU						

## Course Description

【Language】 English and Japanese Case conference, Research conference, Circle reading of English text book of OMFS, Attending to team approach conference

## Attainment Objectives

- 1.To improve reading comprehension of English literature
2. Deep understanding of researches
3. To improve critical view for researches
4. To understand background or trend of researches
5. To understand researches of interdisciplinary area

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
presentation	100%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	Back ground and future scope of individual researches and clinical cases	Conference presentation	笹栗 正明 土生 学 高橋 理 三次 翔 田部 士郎 原口 和也 森岡 政彦 柳沼 樹 福田 晃	Research of related articles	

# Oral Medicine (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, HAYAKAWA MANA						

## Course Description

The purpose of oral medicine is not only to examine the oral cavity of a dental patient, but also diagnose and treat oral disease in consideration of the patient's systemic backgrounds. Oral Medicine is the discipline of dentistry with the internal medical approach. We will study about the basic way of thinking of oral medicine.

## Attainment Objectives

1. You can diagnose and treat oral disease in consideration of systemic disease. 2. You can understand the effects that oral disease can affect to systemic status and systemic disease can affect to oral disease, when you treat the patient of oral disease with systemic disease. 3. You can understand the medical relationship and team medicine between medical doctors, co-staff and other related people.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral Surgery (Japanese)	Kanemitsu Shirasuna, Kogo Mikihiko ed	Ishiyaku Publishers, Inc
Oral Medicine (Japanese)	Genyuki Yamane, Miki o Kusama, Hideaki Kubota, Seiji Nakamura	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report after each lecture (1*4points) 1st-15th	60%
portfolios (1*4points) 1st-10th	40%

# Oral Medicine (Basic Course)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, HAYAKAWA MANA						

## Etc

Student consultation: From Monday to Friday : 17:00~

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1	General statements of Oral Medicine, diagnoses of Oral Medicine. You will study the diagnoses and treatments of oral disease with internal medical approach. And you can study the relationship between oral and systemic disease.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
2	Treatment and diagnoses of disease of oral mucosa. You will study about the structure of Oral mucosa. And you can study about the characteristics, symptom, diagnoses and treatments of disease of oral mucosa.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
3	Treatment and diagnoses of temporomandibular disease. You will study the function and structure of temporomandibular joint, classification of temporomandibular disease, and differential diagnoses.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
4	Treatment and diagnoses of Dry Mouth. You will study the classification, symptom, differential diagnosis and treatment of Dry Mouth.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	



# Oral Medicine (Basic Course)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, HAYAKAWA MANA						

Lecture No.	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Treatment and diagnoses of oral psychosomatic disease. You will study the classification, symptom, differential diagnosis and treatment of oral psychosomatic disease.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
6	Treatments of Oro-facial pain and taste disorder. You will study the diagnoses and treatment plan of Oro-facial pain and taste disorder.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
7	General principles of antibiotic therapy. You will study the classification, characteristics and usage of antibiotic therapy.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
8	Practical managements of arthrocentesis of TMJ. You will study about arthrocentesis of TMJ	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
9	Perioperative oral management on patients of cancer. You will study about the significance of perioperative oral management on patients of cancer and practical techniques of management.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
10	Non-surgical treatment of Oral cancer. You will study about non-surgical treatment of oral malignancy such as chemotherapy, immunotherapy and so on.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine (Basic Course)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Oral treatment of cardiovascular disease and respiratory patients. You will study about the important points about oral treatment of cardiovascular and respiratory disease patients.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
12	Oral treatment of metabolism, endocrinology and gynecological diseases patients. You will study about the important points about oral treatment of metabolism, endocrinology and gynecological diseases patients.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
13	Oral treatment of digestive, urological diseases patients. You will study about the important points about the oral treatment of digestive, urological diseases patients.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
14	Oral treatment of blood, autoimmune disease patients. You will study about the important points about the oral treatment of blood, autoimmune disease patients.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
15	Medical cooperation/ Summary You will study about clinic, hospital collaboration, medical collaboration, medical-dental collaboration multidisciplinary collaboration and consultation for the purpose of team medicine.	Lecture	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	120	Credits	4	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

## Course Description

【Language】 English and Japanese In this course, you will practice basic skills about oral mucosal disease, temporomandibular disorders cancer, orofacial pain and dry mouth. Under the management by Supervisors, you will carry out simulation training and clinical practice, and acquire fundamental knowledge as well as skills for a specialist in the area of oral medicine.

## Attainment Objectives

To acquire fundamental knowledge and skills about oral mucosal disease, temporomandibular disorders and dry mouth. You should achieve following assignments; • Construction of good relationship with patients and stuffs • Collection of clinical cases • Acquisition of skills about oral mucosal disease, temporomandibular disorders cancer, orofacial pain and dry mouth.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral Surgery (Japanese)	Kanemitsu Shirasuna, Kogo Mikihiko ed	Ishiyaku Publishers, Inc
Oral Medicine (Japanese)	Genyuki Yamane, Miki o Kusama, Seiji Nakamura, Hideaki Kubota	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report after each lecture (1*4points) 1st-15th	60%
portfolios (1*4points) 1st-10th	40%

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Etc

Student consultation: From Monday to Friday : 17:00~

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1,2	Oral mucosal diseases1You will learn clinical diagnostic reasoning.(1)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook10 case	
3,4	Oral mucosal diseases2You will learn clinical diagnostic reasoning.(2)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
5,6	Oral mucosal diseases3You will learn clinical diagnostic reasoning.(3)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
7,8	Oral mucosal diseases4You will learn treatment for oral mucosal disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9,10	Temporomandibular disorder1You will learn clinical diagnostic reasoning. (1)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook 10case	
11,12	Temporomandibular disorder2You will learn clinical diagnostic reasoning. (2)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5case	
13,14	Temporomandibular disorder3You will learn clinical diagnostic reasoning. (3)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
15,16	Temporomandibular disorder4You will learn treatment for TMD.( physical therapy)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
17,18	Temporomandibular disorder5You will learn treatment for TMD.( splint therapy)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
19,20	Temporomandibular disorder6You will learn treatment for TMD.( manipulation)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
21,22	Temporomandibular disorder7You will learn treatment for TMD.(arthrocentesis)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
23,24	Temporomandibular disorder8You will learn treatment for TMD.(surgical operation)	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
25,26	Dislocation of the temporomandibular joint1 You will learn conservative treatment.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
27,28	Dislocation of the temporomandibular joint2You will learn surgical operation.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
29,30	Tumor of the temporomandibular jointYou will learn surgical operation.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
31,32	Dry mouth1You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	120	Credits	4	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
33,34	Dry mouth2 You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
35,36	Dry mouth3 You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
37,38	Dry mouth4 You will learn treatment for dry mouth.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook5 case	
39,40	Oral psychosomatic disease 1 You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook3 case	
41,42	Oral psychosomatic disease 2 You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
43,44	Oral psychosomatic disease 3 You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
45,46	Oral psychosomatic disease 4You will learn treatment for oral psychosomatic disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
47,48	Orofacial pain1You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
49,50	Orofacial pain2You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
51,52	Orofacial pain3You will learn clinical diagnostic reasoning.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
53,54	Orofacial pain4You will learn treatment for orofacial pain.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
55,56	Chemotherapy You will learn chemotherapy for oral cancer.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	



# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
57,58	Radiation therapy You will learn radiation therapy for oral cancer.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	
59,60	Chemoradiation therapy You will learn chemoradiation therapy for oral cancer	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 西牟田 文香 坂口 修 早川 真奈	Pre reading of literature and textbook1 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Course Description

【Language】 English and Japanese In this course, you will practice basic skills about oral treatment of the patients with systemic disease. Under the management by Supervisors, you will carry out simulation training and clinical practice, and acquire fundamental knowledge as well as skills for a specialist in the area of oral medicine.

## Attainment Objectives

To acquire fundamental knowledge and skills about oral treatment of the patients with systemic disease. .You should achieve following assignments; • Construction of good relationship with patients and stuffs • Collection of clinical cases • Acquisition of skills about oral treatment of the patients with systemic disease.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral and maxillofacial surgery	Shirasuna K., kogou M.	Ishiyaku Published
Oral Medicine	Genyuki Yamane, Miki o Kusama, Hideaki Kubota, Seiji Nakamura	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
case presentation	60%
report	40%

## Etc

Student consultation: From Monday to Friday : 17:00~

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1,2	Hypertension You will learn oral treatment for patients with hypertension.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
3,4	Heart disease You will learn oral treatment for patients with heart disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
5,6	Respiratory disease You will learn oral treatment for patients with respiratory disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
7,8	Diabetes mellitus You will learn oral treatment for patients with diabetes mellitus.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
9,10	Gynecological disease - pregnant women You will learn oral treatment for patients with gynecological disease and pregnant women.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	60	Credits	2	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11,12	Hemodyscrasia You will learn oral treatment for patients with hemodyscrasia.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
13,14	Autoimmune disease You will learn oral treatment for patients with autoimmune disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
15,16	Hepatic disease You will learn oral treatment for patients with hepatic disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
17,18	Renal disease You will learn oral treatment for patients with renal disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
19,20	Orthopedic disorder You will learn oral treatment for patients with orthopedic disorder.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
21,22	Neurological disease You will learn oral treatment for patients with neurological disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	60	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
23,24	Neurosurgical disease You will learn oral treatment for patients with neurosurgical disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
25,26	Otorhinolaryngological disease You will learn oral treatment for patients with otorhinolaryngological disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
27,28	Infection You will learn oral treatment for patients with infection.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook2 case	
29,30	Dermatological disease You will learn oral treatment for patients with dermatological disease.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Iwanaga Otani Tsurushima Sakaguchi Tanaka Nishimuta Pre reading of literature and textbook2 case	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Practice	Total time	60	Credits	2	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

## Course Description

Learn medical cooperation through practical training.

## Attainment Objectives

Understand medical cooperation and team medical care with people in related occupations, including doctors in other departments.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral Surgery (Japanese)	Kanemitsu Shirasuna, Kogo Mikihiko ed	Ishiyaku Publishers, Inc
Oral Medicine	Genyuki Yamane, Miki o Kusama, Hideaki Kubota, Seiji Nakamura	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Presentation	60%
Report	40%

## Etc

contact: From Monday to Friday : 17:00 ~ Ohtani T.

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1,2,3,4	Hospital and hospital cooperation You will learn the hospital and hospital cooperation.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
5,6	Medical Consultation You will learn about the consultation.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
7,8	Medical and dental cooperation You will learn the medical and dental cooperation.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
9,10	Multidisciplinary collaboration You will learn the collaboration with doctors.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
11,12	Multidisciplinary collaboration You will learn the collaboration with nurses.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Practice	Total time	60	Credits	2	
Responsible Instructor	YOSHIOKA IZUMI							
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13,14	Multidisciplinary collaboration You will learn the collaboration with registered dietitians.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
15,16	Multidisciplinary collaboration You will learn about the collaboration with dental hygienists.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
17,18	Multidisciplinary collaboration You will learn about the collaboration with medical social workers.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
19,20	Multidisciplinary collaboration You will learn the collaboration with personal care workers.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
21,22	Multidisciplinary collaboration You will learn the collaboration with medical assistants.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
23,24	Perioperative oral management of cancer patients 1 You will learn the oral management of the patient with cancer undergoing chemotherapy.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	



# Oral Medicine (Advanced Course )

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	60	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	Perioperative oral management of cancer patients 2 You will learn the oral management of patient with cancer undergoing radiation therapy.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
27,28	Oral management of patient taking Anti-resorptive agents. You will learn the oral management of patient taking Anti-resorptive agents.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
29,30	The treatment of Anti-resorptive agents-related Osteonecrosis of the Jaw. You will learn treatment of Anti-resorptive agents-related Osteonecrosis of the Jaw.	Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		

# Oral Medicine (Jaw Deformity)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Course Description

【Language】 English and Japanese In this course, you will get knowledge and practice basic skills about the research of jaw deformity.

## Attainment Objectives

You should understand following subjects;1. The methods of analysis and evaluation about the form of jaw deformity.2. The methods of analysis and evaluation about the function of jaw deformity.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral and Maxillofacial Surgery	Kanemitsu Shirasuna, Kogo Mikihiko ed	Ishiyaku Publishers, Inc.
Oral Medicine	Genyuki Yamane, Miki o Kusama, Hideaki Kubota, Seiji Nakamura	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
reports after the lectures (4x15)	60%
assignments (4x10)	40%

# Oral Medicine (Jaw Deformity)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1	Survey of jaw deformities You will learn about the trends of jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
2	Inspection of jaw de- formities You will learn about the trends of jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
3	Analysis of jaw defomities You will learn about the analysis of jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
4	Preoperative assessment of jaw deformities. You will learn about the Pre- -operative assessment.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
5	Preoperative association of jaw deformities. You will learn about the pre- -operative association.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine (Jaw Deformity)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Medical cooperation of jaw deformities. You will learn about the medical cooperation.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
7	Orthognatic surgery You will learn about the orthognatic surgery.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
8	Post-operative assessment of jaw deformities. You will learn about the post-operative assessment.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
9	Evaluation of the masticatory function you will learn about the Evaluation of the masticatory function.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
10	Psychological evaluation of patients with jaw deformities. You will learn about the psychological evaluation of patients with jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
11	Respiratory function of patients with jaw deformities. you will learn about the relationship between respiratory function and jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine (Jaw Deformity)

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Articulation function of patients with jaw deformities. You will learn about the relationship between articulation function and jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
13	Digestive function of patients with jaw deformities. You will learn about the relationship between digestive function and jaw deformities	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
14	Three-dimensional evaluation of jaw deformities. You will learn about three-dimensional evaluation of jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
15	Genetic features of patients with jaw deformities. You will learn about genetic features of patients with jaw deformities.	Lectures and Seminars	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Course Description

【Language】 English and Japanese In this course, you will learn fundamental knowledge as well as skills for research in the area of oral surgery. Under the management by Supervisors, you will carry out simulation training and clinical practice.

## Attainment Objectives

You should achieve acquisition of skills for research in the area of oral surgery.

## Textbooks

Title	Author	Publisher
handout distribution		

## Reference Books

Title	Author	Publisher
Oral Surgery (Japanese)	Kanemitsu Shirasuna, Kogo Mikihiko ed	Ishiyaku Publishers
Oral Medicine (Japanese)	Genyuki Yamane, Miki o Kusama, Hideaki Kubota, Seiji Nakamura	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report after each lecture (1st -15th, 1x4 points)	60%
submission of exercises (1st - 10th, 1x4 points)	40%

## Etc

Student consultation: From Monday to Friday : 17:00~  
Email is accepted at any time.

# Oral Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈		
1	Bone augmentation research You will learn the trend of bone augmentation research.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
2	Distraction osteogenesis of animal jaw You will learn the distraction osteogenesis of animal jaw.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
3	The animal models of sinus lift You will learn the animal models of sinus lift.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
4	The animal models of graft You will learn the animal models of bone graft.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
5	Manufacturing method of hard tissue specimen You will learn the manufacturing method of hard tissue specimen.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Oral Medicine

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Oral mucosal diseases research You will learn oral mucosal diseases research.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
7	The sampling method of oral mucosal diseases You will learn the sampling method of oral mucosal diseases.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
8	The immunologic mechanism of oral mucosal diseases You will learn immunologic mechanism of oral mucosal diseases.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
9	The xerostomia model animal You will learn preparing animal models of xerostomia.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
10	The metal allergy model animal You will learn preparing animal models of metal allergy.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
11	Temporomandibular joint disorders research You will learn the trend of temporomandibular joint disorders research.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	



# Oral Medicine

Course Affiliation	the Faculty of Dentistry		Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	YOSHIOKA IZUMI						
Instructor(s)	YOSHIOKA IZUMI, YOSHIGA DAIGO, OTANI TAISHI, TSURUSHIMA HIROKI, SAKAGUCHI OSAMU, NISHIMUTA FUMIKA, HAYAKAWA MANA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Temporomandibular arthritis model animal You will learn preparing the animal models of temporomandibular arthritis	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
13	The sampling method of temporomandibular joint synovial fluids You will learn the sampling method of temporomandibular joint synovial fluids.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
14	The analysis method of temporomandibular joint synovial fluids You will learn the analysis method of temporomandibular joint synovial fluids.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	
15	The measurement procedure of temporomandibular joint pain threshold You will learn the measurement procedure of temporomandibular joint pain threshold.	Lecture, Practice	吉岡 泉 吉賀 大午 大谷 泰志 鶴島 弘基 坂口 修 西牟田 文香 早川 真奈	Pre reading of literature and textbook	

# Dental Anesthesiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	SAGO TEPPEI							
Instructor(s)	SAGO TEPPEI							

## Course Description

歯科における治療行為は生体にとって侵害刺激である。この刺激が何らかの理由により痛覚過敏症や触覚過敏を起こすことがある。また、歯科治療後に顔面部の麻痺や三叉神経痛、顎関節症などの併発を起こすこともある。また、歯性疼痛が原因でうつ症状を来すこともある。これらの疾患患者では通常の歯科的対応では治療困難なことが多い。そこで、これら歯科の顎・顔面部の神経疾患（急性・慢性疼痛や麻痺）の原因、機構、対応を学ぶ。

## Attainment Objectives

1. 患者 - 歯科医師間の良好な関係を作れる情報収集の技法を理解できる。
2. 良好な病診連携ができる。
3. 顎顔面部の疼痛の種類を説明できる。
4. 顎顔面部の疼痛の発生機序を説明できる。
5. 顎顔面部の疼痛の制御機構を説明・実施できる。
6. 顎顔面部の麻痺の種類、発生機序、対応法を説明できる。
7. 救急処置の基本を身につける。

## Textbooks

Title	Author	Publisher
口腔顔面痛の診断と治療ガイドブック 第3版	日本口腔顔面痛学会編	医歯薬出版株式会社

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
抄読会の発表	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1			左合 徹平		
2			左合 徹平		
3			左合 徹平		
4			左合 徹平		
5			左合 徹平		
6			左合 徹平		
7			左合 徹平		
8			左合 徹平		
9			左合 徹平		
10			左合 徹平		
11			左合 徹平		
12			左合 徹平		

2024年度

subject code:212142

# Dental Anesthesiology

Course Affiliation	the Faculty of Dentistry			Grades	2 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	SAGO TEPPEI							
Instructor(s)	SAGO TEPPEI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13			左合 徹平		
14			左合 徹平		
15			左合 徹平		

# Oral Care and Rehabilitation (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and practice	Total time	120	Credits	4	
Responsible Instructor	KUBOTA JUNPEI							
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI							

## Course Description

【Language】 English and Japanese You will carry out examinations for dysphagia, and learn procedures and effects of rehabilitation and diagnosis for rehabilitation prescription including precise functional exercise.

## Attainment Objectives

You should achieve following assignments;1.Understanding the dysphagia type2.Practicing rehabilitation for dysphagia3.Choice of modified diet for dysphagic persons4.Correspondence for functional prosthesis dental treatment for dysphagia

## Textbooks

Title	Author	Publisher
Dysphagia Rehabilitation for Dental Students	Yoshiharu Mukai	Ishiyaku Publishers

## Reference Books

Title	Author	Publisher
Taberu kinou no shougai	Yoshihiro Kaneko	Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
examinations and unit certification test	70%
report including mini tests	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Normal development mechanism of eating and swallowing(developmental disability, elderly)	Lecture	久保田 潤平	development mechanism of eating and swallowing	
3,4	Oral care for dysphagic persons	Practice	久保田 潤平	Training for oral function	

# Oral Care and Rehabilitation (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5,6	Functional assessment of eating and swallowing; Inquiry, Interviews of medical history	Lecture	久保田 潤平	Functional assessment of eating and swallowing	
7,8	Functional assessment of eating and swallowing; Screening	Practice	久保田 潤平	RSST, MWST, coughing test, FT	
9,10	Examination1	Oral examination	久保田 潤平	Feedback	
11,12	Breathing and Coughing exercise	Practice	久保田 潤平	Breathing and Coughing exercise	
13,14	Open and close mouth exercises; Exercise for trismus; Exercise for closed failure	Practice	久保田 潤平	Open and close mouth exercises	
15,16	Exercise for perioral muscle and tongue muscle 1; Lip closure exercise, the method of vangede	Practice	久保田 潤平	Lip closure exercise	
17,18	Exercise for perioral muscle and tongue muscle 2; Buccal exercise, the method of vangede, tongue exercise	Practice	久保田 潤平	Buccal exercise	
19,20	Exercise for perioral muscle and tongue muscle 3; Soft palate elevation exercise	Practice	久保田 潤平	Soft palate elevation exercise	
21,22	Exercise for perioral muscle and tongue muscle 4; Tongue exercise, elevation exercise of tongue dorsum and apex of tongue	Practice	久保田 潤平	Tongue exercise, elevation exercise of tongue dorsum and apex of tongue	
23,24	Chewing and infeed exercise	Practice	久保田 潤平	Chewing and infeed exercise	
25,26	Exercises of swallowing; Thermal tactile stimulation	Practice	久保田 潤平	Thermal tactile stimulation	

# Oral Care and Rehabilitation (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
27,28	Exercises of swallowing; Tongue recession exercise, Tongue holding maneuver	Practice	唐木 純一	Tongue recession exercise, Tongue holding maneuver	
29,30	Exercises of swallowing; Shaker exercises	Practice	唐木 純一	Shaker exercises	
31,32	Neck relaxation; Neck range of motion expanding exercise, stretch of larynx muscles	Practice	唐木 純一	Neck range of motion expanding exercise	
33,34	Acquisition of the swallowing procedure; Mendelson maneuver Use of Biofeedback	Practice	唐木 純一	Mendelson maneuver	
35,36	Compensatory swallowing neck rotation swallowing, multiple swallowing, alternate swallowing	Practice	唐木 純一	neck rotation swallowing, multiple swallowing, alternate swallowing	
37,38	Examination2	Oral examination	唐木 純一	Feedback	
39,40	Operation of naso pharyngo laryngoscope	Practice	久保田 潤平	Naso pharyngo laryngoscope	
41,42	Exploration of dysphagia by naso pharyngo laryngoscope	Practice	久保田 潤平	diagnose of naso pharyngo laryngoscope	
43,44	Procedure of videofluoroscopic examination of swallowing	Lecture	久保田 潤平	Videofluoroscopic examination of swallowing	
45,46	Modification of imitation foods for videofluoroscopic examination of swallowing	Practice	久保田 潤平	barium allergy	
47,48	Manufacture of palatal augmentation prosthesis(PAP)1; Impression , manufacture of wire clasp	Practice	多田 葉子	wire clasp	

2024年度

subject code:212161

# Oral Care and Rehabilitation (Basic)

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson and practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
49,50	Manufacture of PAP2; Adjustment of tongue contact surface form	Practice	多田 葉子	Palatal Augmentation Prosthesis (PAP)	
51,52	Adjustment of PAP; Set and adjustment	Practice	多田 葉子	Adjustment of PAP	
53,54	Manufacture of palatal Lift prosthesis (PLP)1 ; Impression , manufacture of wire clasp	Practice	多田 葉子	Impression for manufacture of PLP	
55,56	Manufacture of PLP 2 ;	Practice	多田 葉子	important points for manufacture of PLP	
57,58	Adjustment of PLP; Set and adjustment	Practice	多田 葉子	Adjustment of PLP	
59,60	Review, Examination3, unit certification test	Examination	久保田 潤平	Feedback	

# Oral Care and Rehabilitation (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Course Description

【Language】 English and Japanese You will learn dental treatment, oral care, and guidance in consideration of systemic disorders of elderly. You will learn to repair and adjust denture in consideration of dysphagic persons. You will learn how to examination and guidance with understanding Chinese medicine.

## Attainment Objectives

You should achieve following assignments:1.Evaluation of systemic condition of elderly, evaluation of intraoral and perioral condition2.Oral care and oral functional exercise in consideration of systemic disorders of elderly3.Dental treatment with Chinese medicine in consideration of systemic disorders of elderly4.Health guidance by basic skill of tongue diagnosis5.Homebound treatment for bedridden elderly6. To repair and adjust denture in consideration of dysphagic persons.

## Textbooks

Title	Author	Publisher
Materials will be presented and distributed		

## Reference Books

Title	Author	Publisher
Traditional Chinese medicine for dentistry	Yasuaki Kakinoki	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
examination and unit certification test	70%
report including mini tests	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.



# Oral Care and Rehabilitation (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1,2	Evaluation of QOL (Quality Of Life) and ADL (Activities Of Daily Living) Evaluation of vital signs	Practice	久保田 潤平	QOL and ADL	
3,4	Mental test and depression test	Practice	久保田 潤平	depression	
5,6	Evaluation of perioral muscle; Muscle related occlusion, mimic, and facial muscle	Practice	久保田 潤平	How to use Muscle hardness meter	
7,8	Evaluation of muscle related oral function; Neck and shoulder	Practice	久保田 潤平	anatomy of muscle related oral function	
9,10	Taste test	Practice	久保田 潤平	Taste test	
11,12	Evaluation of sense of intraoral and face	Practice	唐木 純一	sensory receptor	
13,14	Saliva secretion test; Evaluation of resting saliva Spitting method	Practice	唐木 純一	Watte method Sialometer method	
15,16	Saliva secretion test; Evaluation of Saxon test and gum test	Practice	唐木 純一	Saxon test Gum test	
17,18	Saliva secretion and distribution test; Evaluation by saliva wetness tester	Practice	唐木 純一	Saliva wetness tester	
19,20	Physical inspection of saliva: Viscometer (ultrasonic type and rotation type) Spinnability measuring instrument	Practice	唐木 純一	Spinnability measuring instrument	
21,22	Halitosis measurement and evaluation by oral chroma	Practice	唐木 純一	How to use Oral chroma	
23,24	Examination 1	Oral examination	久保田 潤平	Feedback	

# Oral Care and Rehabilitation (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
25,26	Improvement of oral function:Structural oral care and functional oral care	Practice	久保田 潤平	Basic oral care skill	
27,28	Improvement of oral function:Oral care using liquid and gel type oral moisturizer	Practice	久保田 潤平	Oral moisturizers	
29,30	Basic oral care skill for bedridden elderly	Practice	久保田 潤平	mouth cleaning for elderly	
31,32	Evaluation of oral mucosal disease:Recode by intraoral camera	Practice	久保田 潤平	Basic skill of intraoral camera	
33,34	Evaluation of oral mucosa and tongue mucosa:Western and Chinese medical evaluation and diagnosis	Practice	久保田 潤平	Evaluation of oral mucosa	
35,36	Basic skill of tongue diagnosis	Practice	久保田 潤平	Basic skill of tongue diagnosis	
37,38	Choice of Chinese medicine by tongue diagnosis(1)	Practice	久保田 潤平	Chinese medicine for drymouth	
39,40	Choice of Chinese medicine by tongue diagnosis(2)	Practice	久保田 潤平	Chinese medicine for burning mouth syndrome	
41,42	Choice of Chinese medicine by tongue diagnosis(3)	Practice	久保田 潤平	Chinese medicine for tooth ache	
43,44	Guidance of health, life, and dietary by tongue diagnosis	Practice	久保田 潤平	Guidance of health by tongue diagnosis	
45,46	Examination2	Oral Examination	久保田 潤平	Feedback	
47,48	Preparation of homebound treatment	Practice	多田 葉子	Understanding of instrument	

2024年度

subject code:212162

# Oral Care and Rehabilitation (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Practice	Total time	120	Credits	4
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
49,50	Choice of homebound treatment instrument	Practice	多田 葉子	Understanding of instrument for homebound treatment	
51,52	Basic skill of homebound treatment with water(assistant)	Practice	多田 葉子	VacuumSyringe	
53,54	Basic skill of homebound treatment with water(surgeon)	Practice	多田 葉子	EngineTurbine	
55,56	Denture repair for bedridden elderly	Practice	多田 葉子	Denture adjustment	
57,58	Denture adjustment for bedridden elderly	Practice	多田 葉子	PLP adjustment	
59,60	Review, Examination3, Unit certification test	Examination	久保田 潤平	Feedback	

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Course Description

【Language】English and Japanese You will understand the research about geriatric dentistry and dysphagia rehabilitation. You will learn method of assessment, treatment, and exercise.

## Attainment Objectives

You should achieve following assignments and increase the ability of understanding the research. 1. Understanding the basic geriatric dentistry 2. Understanding the basic dysphagia rehabilitation 3. Increasing the ability of evaluate the research of clinical and basic

## Textbooks

Title	Author	Publisher
Materials will be presented and distributed		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
quality of presentation	70%
before Learning Task (Searching and perusal relevant papers)	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~15	You will understand future prospect by searching and evaluating the literature related geriatric dentistry and oral care and rehabilitation.	Clinical lectures, Seminar, Reading papers	久保田 潤平 多田 葉子 唐木 純一	Searching and perusal relevant papers	

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Course Description

【English and Japanese】 You will understand basic integrative medicine related study of dental treatment for elderly and geriatric dentistry. You will learn method of assessment, treatment, and exercise. You will learn action of Chinese medicine, and mechanism of action. You will learn method to apply for dental clinical of tongue diagnosis. You will understand Chinese medicine and western medicine for dental treatment of elderly and learn knowledge to practice integrative medicine. You will learn the research of clinical and basic related integrative medicine.

## Attainment Objectives

You should achieve following assignments and increases the ability of understanding the research.;1.Understanding the basic integrative medicine 2.Understanding the basic Chinese medicine and western medicine3.Understanding the basic complementary and alternative medicine, and applying clinical 4. Increasing the ability of evaluate the research of clinical and basic

## Textbooks

Title	Author	Publisher
Materials will be presented and distributed		

## Reference Books

Title	Author	Publisher
Traditional Chinese medicine for dentistry	Yasuaki Kakinoki	Nagasue shoten

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
quality of presentation	70%
before Learning Task (Searching and perusal relevant papers)	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.

2024年度

subject code:212164

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI ,TADA YOUKO ,KARAKI JUNICHI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	You will understand future prospect by searching and evaluating the literature related integrative medicine and Chinese medicine and western medicine.	Clinical lectures, Exercises, Semina	久保田 潤平 多田 葉子 唐木 純一	Searching and perusal relevant papers	

# Geriatric and Special Needs Dentistry (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Course Description

【English and Japanese】 You will understand particularity of dental treatment and oral care for elderly and special needs. You will learn method of assessment, treatment, and oral care. Especially, you should learn knowledge to practice homebound treatment and rehabilitation for bedridden elderly. You will learn knowledge to practice dental treatment and rehabilitation for special needs, and dental treatment for patients who complain of psychogenic.

## Attainment Objectives

You should achieve following assignments and increase the ability of understanding the research.;1.Understanding the geriatric dentistry 2.Understanding the clinical states and systemic disease of elderly and disability3.Understanding the dental treatment of patients who complain of psychogenic general malaise 4. Increasing the ability of evaluate the research of clinical and basic about geriatric and special needs dentistry, and psychosomatic medicine.

## Textbooks

Title	Author	Publisher
Materials will be presented and distributed		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
quality of presentation	70%
before Learning Task (Searching and perusal relevant papers)	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.

2024年度

subject code:212165

# Geriatric and Special Needs Dentistry (Advanced)

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI ,TADA YOUKO ,KARAKI JUNICHI						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 ~ 15	You will understand future prospect, by searching and evaluating the literature. You will search latest knowledge and study: homebound treatment and oral care for elderly, dental treatment and rehabilitation for disability, and psychosomatic medicine.	Clinical lectures, Exercises, Seminar	久保田 潤平 多田 葉子 唐木 純一	Searching and perusal relevant papers	



# Dysphagia diagnosis and management

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

## Course Description

Students will learn the basics of feeding and swallowing rehabilitation through lectures and exercises, including the techniques for actual examination and diagnosis.

## Attainment Objectives

1) To be able to explain the mechanism of feeding and swallowing. 2) To be able to explain the causes of dysphagia. 3) Explain the diagnosis and examination of feeding and swallowing disorders. 4) Explain the diagnosis and examination of dysphagia. 5) Perform endoscopic examination. (5) To be able to perform endoscopic examination.

## Textbooks

Title	Author	Publisher
Dysphagia Rehabilitation for Dental Students	Yoshiharu Mukai	Ishiyaku Publishers

## Reference Books

Title	Author	Publisher
Taberu kinou no shougai	Yoshihiro Kaneko	Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report including mini tests	70%
practical skill test	30%

## Etc

Questions and comments will be accepted before and after the lecture or by e-mail.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1.2	Fundamentals of Swallowing	Lecture	久保田 潤平	Five-phase model of feeding and swallowing, process model	
3.4	Development of eating and swallowing function	Lecture	多田 葉子	Developmental process of feeding and swallowing	

# Dysphagia diagnosis and management

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KUBOTA JUNPEI						
Instructor(s)	KUBOTA JUNPEI, TADA YOUKO, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5.6	Causes of dysphagia	Lecture	唐木 純一	Causes of dysphagia	
7.8	Diagnosis of dysphagia	Lecture	久保田 潤平	Screening Tests, VF, VE	
9	Treatment of dysphagia 1	Lecture	多田 葉子	Training using/not using food	
10.11	Treatment of dysphagia 2	Practice	久保田 潤平 多田 葉子 唐木 純一	Training not using food	
12.13	Treatment of dysphagia 3	Practice	久保田 潤平 多田 葉子 唐木 純一	Training using food	
14.15	Videofluoroscopic examination of swallowing	Practice	久保田 潤平 多田 葉子 唐木 純一	Structure of the pharynx, Handling of endoscopes	

# Advanced Lecture

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	SETA YUUJI							
Instructor(s)	SETA YUUJI							

## Course Description

【Language】 English and Japanese We invite researchers who are at the forefront, and they give the graduate school students current topics.

## Attainment Objectives

1. You can obtain the knowledge the current topics of the specialized area of each speaker.
2. You can understand the background of the study, motivation for the research, the results and discussion of the research.
3. You can consider and respond to the development of the future research.
4. You can use the content of lectures in your own research project.
5. Participate in academic conferences and conferences and have a question and answer session

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
attendance and report	100%

## Etc

The lecture format (face-to-face/web) will be posted on this page as soon as it is confirmed. Please note that the lecture format is subject to change.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			大学院研究科長		
1	Decline in oral function in elderly people				
2	State-of-the-art of digital technologies for dental materials and devices				
3	Significance of mastication and its impact on health				
4	I will introduce the classification of chronic pain and its mechanisms.				

# Advanced Lecture

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	SETA YUUJI							
Instructor(s)	SETA YUUJI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Elucidation of the pathological condition and the prospect of translational research for masticatory muscle tendon-aponeurosis hyperplasia				
6	Transcriptional regulation of bone and cartilage development				
7	How to conduct dental field research and introduction to research cases				
8	Practice and Future of Evidence Based Clinical Preventive Dentistry				
9	Identification of Oral Disease Genes				
10	Relationship among mastication, respiration and learning/memory: An update				
11	MRI and CT of the oral and maxillofacial region: What the researchers and clinicians need to know.				
12	An introduction to principal component analysis				
13	Feasible Applicability of Bioresorbable Plate Systems in Oral-Maxillofacial Surgery and the Frontier of Relevant Translational Research				
14	Oral health in occupational health				
15	Bacterial Predatory Bacteria as Potential New 'Living Antimicrobial Agents'				

# Molecular Biological Morphology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	16	Credits	1
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

## Course Description

【Language】 English and Japanese This course deals with the basis of fundamental morphological analysis. It also enhances the development of students' skill in carrying out a morphological experiment.

## Attainment Objectives

The goals of this course are to (1) be able to understand morphological analysis, (2) be able to prepare tissue section (3) be able to carry out immunohistochemistry (4) be able to carry out in situ hybridization

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Usual performance score in the lab	10%
Experimental performance in the lab	90%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction What is morphological analysis	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
2	Preparing method of tissue section (1): Fixation	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
3	Preparing method of tissue section (2): Embedding tissue	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
4	Preparing method of tissue section (3): Sectioning tissue	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

2024年度

subject code:213011

# Molecular Biological Morphology

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	16	Credits	1
Responsible Instructor	SETA YUUJI						
Instructor(s)	SETA YUUJI, TOYONO TAKASHI, KATAOKA SHINJI, MATSUYAMA KAE						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Immunohistochemistry (1): Apply first antibody	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
6	Immunohistochemistry (2): Apply second antibody	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
7	in situ hybridization (1): Probe preparation	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	
8	in situ hybridization (2): Pre-treatment of section and antibody visualization of digoxigenin	Lecture Practice	瀬田 祐司 豊野 孝 片岡 真司 松山 佳永	Review of lecture	

# Molecular Biology Training Program

Course Affiliation	the Faculty of Dentistry		Grades	1~3 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson and seminar	Total time	20	Credits	1
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA, KOKABU SYOUITIROU, Addison William						

## Course Description

Molecular biology pertains to the study of living systems at the molecular level, especially DNA and RNA, and provides a background for further work in the rapidly expanding areas of genomics, cell biology, biotechnology, microbiology, diagnostics, and therapeutics. Molecular biology methods are used extensively in modern day drug discovery, research and development, and diagnostics. This course is intended for personnel who are seeking basic-level molecular biology training. This course will focus on selected aspects of molecular biology that provides principles for understanding the structure and functional relationships of molecular biology techniques including RNA isolation, cDNA synthesis (RT-PCR) and the preparation of whole cell lysates from cell and Western blotting.

## Attainment Objectives

1. Graduates of this program will be able to explain and discuss how processes are integrated at the molecular level to create a functional eukaryotic cell.
2. Graduates of this program will be able to prepare RNA and protein from cells.
3. Graduates of this program will have experience in and be able to perform RT-PCR and Western blotting.

## Core Curriculum Item

Core Curriculum	Contents
A-1-1-2	分子の成り立ちと生体構成分子に関する化学的性質を理解している。
A-1-2-1	アミノ酸とタンパク質の構造、機能及び代謝を理解している。
A-1-3-1	メンデルの法則や遺伝子型と表現型の関係を理解している。
A-1-3-2	核酸、遺伝子及び染色体の構造と機能を理解している。
A-1-3-3	デオキシリボ核酸(DNA)複製と修復、DNAからリボ核酸(RNA)への転写、タンパク質合成に至る翻訳を含む遺伝情報の発現及び調節を理解している。
A-1-3-4	遺伝性疾患の発生機序を理解している。
A-1-3-5	遺伝子解析や遺伝子工学技術を理解している。
A-1-3-6	染色体分析とDNA配列決定を含むゲノム解析技術を理解している。

## Textbooks

Title	Author	Publisher
What is necessary is to use the experimental protocols in our laboratory.		

## Reference Books

Title	Author	Publisher
What is necessary is to use the experimental protocols in our laboratory.		

# Molecular Biology Training Program

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	20	Credits	1
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA, KOKABU SYOUITIROU, Addison William						

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination	100%

## Etc

We accept your visit at any time at our office in the 10th floor of main building.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1, 2	Western blotting #1 Osteoblasts were treated with BMP and then prepared whole cell lysates.	Lecture and Practice	松原 琢磨	Prepare for the protocol of preparation of whole cell lysates.	その他
3, 4	Western blotting #2 SDS-PAGE, Transfer, Blocking, and Incubation with primary antibody.	Lecture and Practice	松原 琢磨	Prepare for the principal of Western blotting	その他
5, 6	Western blotting #3 Incubation with secondary antibody and Detection. RT-PCR #1 Osteoblasts were treated with BMP and then prepared total RNA.	Lecture and Practice	松原 琢磨	Prepare for the protocol of preparation of Total RNA.	その他
7, 8	RT-PCR #2 cDNA synthesis and perform PCR	Lecture and Practice	古株 彰一郎	Prepare for the principal of RT-PCR	その他
9, 10	RT-PCR #3 Agarose gel electrophoresis	Lecture and Practice	Addison William	Review what was learned	その他



# Molecular Biology Training Program

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	20	Credits	1
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA,KOKABU SYOUITIROU,Addison William						

## Course Description

Molecular biology pertains to the study of living systems at the molecular level, especially DNA and RNA, and provides a background for further work in the rapidly expanding areas of genomics, cell biology, biotechnology, microbiology, diagnostics, and therapeutics. Molecular biology methods are used extensively in modern day drug discovery, research and development, and diagnostics. This course is intended for personnel who are seeking middle-level molecular biology training. This course will focus on selected aspects of molecular biology that provides principles for understanding the structure and functional relationships of molecular biology techniques including gene transfection, detection method of tagged-protein and luciferase assay.

## Attainment Objectives

1. Graduates of this program will be able to explain the principal of (reporter) gene transfection and how to detect of expression transfected genes in the cells.
2. Graduates of this program will have experience in and be able to detect tagged-protein.
3. Graduates of this program will have experience in and be able to perform luciferase assay.

## Core Curriculum Item

Core Curriculum	Contents
A-1-1-2	分子の成り立ちと生体構成分子に関する化学的性質を理解している。
A-1-2-1	アミノ酸とタンパク質の構造、機能及び代謝を理解している。
A-1-2-5	酵素の機能と調節、主な代謝異常を理解している。
A-1-3-2	核酸、遺伝子及び染色体の構造と機能を理解している。
A-1-3-3	デオキシリボ核酸(DNA)複製と修復、DNAからリボ核酸(RNA)への転写、タンパク質合成に至る翻訳を含む遺伝情報の発現及び調節を理解している。
A-1-3-4	遺伝性疾患の発生機序を理解している。
A-1-3-5	遺伝子解析や遺伝子工学技術を理解している。
A-1-3-6	染色体分析とDNA配列決定を含むゲノム解析技術を理解している。

## Textbooks

Title	Author	Publisher
Please select any book of reference if you want.		

## Reference Books

Title	Author	Publisher
Please select any book of reference if you want.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
oral examination	0%

# Molecular Biology Training Program

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Mehods	Lesson and seminar	Total time	20	Credits	1
Responsible Instructor	MATSUBARA TAKUMA						
Instructor(s)	MATSUBARA TAKUMA,KOKABU SYOUITIROU,Addison William						

## Etc

We accept your visit at any time at our office in the 10th floor of main building.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1, 2	1. Lecture about gene transfection, including principals, fusion-protein and detection. 2. Transfection of FLAG or V5-tagged genes into cells.	Lecture andPractice	古株 彰一郎	The principal of gene transfection	その他
3, 4	Perform Luciferase assay.	Lecture andPractice	Addison William	The principal of Luciferase assay	その他
5, 6	Detection of tagged-protein by Western blotting.	Lecture andPractice	松原 琢磨	The protocol of Western blotting	その他
7, 8	Transfection of GFP-fused protein into cells.	Lecture andPractice	松原 琢磨	The principal of GFP-fused protein	その他
9, 10	Observation of GFP-expressing protein using fluorescence microscope	Lecture andPractice	松原 琢磨	Review what was learned	その他

# Neurophysiological Techniques

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	16	Credits	1
Responsible Instructor	ONO KENTAROU						
Instructor(s)	ONO KENTAROU, NAKATOMI CHIHIRO, HSU CHIACHIEN						

## Course Description

【Language】 English and Japanese In this course, you will practice basic skills about makings of cell and tissue preparations, patch-clamp recording and evaluations of pain inductions in animal experiments.

## Attainment Objectives

1. To develop techniques of cell and tissue preparations
2. To understand how to record electrical signals from neurons
3. To understand how to evaluate pain in experimental animals

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	100%

## Etc

Question Time: Anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~8	Making of cell and tissue preparations. Patch-clamp recording Measurements of pain-related behaviors	Practice		Review of practices	

# Imaging technique and its analysis

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

## Course Description

You can learn the imaging techniques and analytical methods of CT, dental CBCT, MRI, and ultrasonography.

## Attainment Objectives

To comprehend the imaging techniques and analytical methods of CT, dental CBCT, MRI, and ultrasonography.

## Reference Books

Title	Author	Publisher
Instruction manuals of CT, CBCT, MRI, and US		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	60%
Oral presentation	40%

## Etc

【Office Hours】 Before and after lectures or by e-mail. Questions may be asked at any time in the clinic room of the Department of Dental Radiology on the 3rd floor of the hospital and in the laboratory of the Department of Dental Radiology on the 11th floor of the hospital.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬		

# Imaging technique and its analysis

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, MATSUMOTO SHINOBU, NISHIMURA SHUN						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO, ODA MASAFUMI, WAKASUGI NAO, NISHIMURA SHUN, MATSUMOTO SHINOBU						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1~3	Imaging techniques and analytical methods of CT	Practice	森本 泰宏 小田 昌史 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
4, 5	Imaging techniques and analytical methods of dental CBCT	Practice	小田 昌史 森本 泰宏 若杉 奈緒 松本 忍 西村 瞬	Pre- and post-reading of textbook	
6, 7	Imaging techniques and analytical methods of basic MRI	Practice	若杉 奈緒 森本 泰宏 小田 昌史 松本 忍 西村 瞬	Pre- and post-reading of textbook	
8~12	Imaging techniques and analytical methods of newest MRI such as Dynamic MR and functional MRI	Practice	西村 瞬 森本 泰宏 小田 昌史 若杉 奈緒 松本 忍	Pre- and post-reading of textbook	
13~15	Imaging techniques and analytical methods of basic and newest US such as Color Doppler technique and elastography	Practice	松本 忍 森本 泰宏 小田 昌史 若杉 奈緒 西村 瞬	Pre- and post-reading of textbook	

# Brain Science for Eating Behavior

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	YOSHINO KENICHI							
Instructor(s)	YOSHINO KENICHI							

## Course Description

The purpose of this course is to lecture on the role of main area in brain involved in the higher human brain function.

## Attainment Objectives

The ability to describe:(1) the difference of feeding behavior between human and animal based on neural science;(2) the higher brain function regarding the eating behavior;(3) the effects of oral function on general physical function by the nervous system;

## Reference Books

Title	Author	Publisher
Principles of Neural Science, Fifth Edition	Aut. Kandel ER, Schwartz JH, Jessell TM Siegelbaum SA, Hudspeth AJ.	

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
after-action report	100%

## Etc

Dr. Yoshino: weekday 9:00-17:00

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			吉野 賢一		Moodle
1	Feeding behavior in human	e-learning	吉野 賢一	after-action report	Moodle
2	Cognitive stage: input of information	e-learning	吉野 賢一	after-action report	Moodle
3	Cognitive stage: processing of information	e-learning	吉野 賢一	after-action report	Moodle

# Brain Science for Eating Behavior

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	YOSHINO KENICHI							
Instructor(s)	YOSHINO KENICHI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Cognitive stage: integration of information	e-learning	吉野 賢一	after-action report	Moodle
5	Cognitive stage: cognitive function for target	e-learning	吉野 賢一	after-action report	Moodle
6	Cognitive stage: selection of action	e-learning	吉野 賢一	after-action report	Moodle
7	Cognitive stage: preparatory for movement	e-learning	吉野 賢一	after-action report	Moodle
8	Cognitive stage: initiation and control of movement	e-learning	吉野 賢一	after-action report	Moodle
9	Preparatory stage: initiation of jaw-movement	e-learning	吉野 賢一	after-action report	Moodle
10	Preparatory stage: control of jaw-movement	e-learning	吉野 賢一	after-action report	Moodle
11	Preparatory stage: processing of information	e-learning	吉野 賢一	after-action report	Moodle
12	Preparatory stage: integration of information	e-learning	吉野 賢一	after-action report	Moodle
13	Lingual stage	e-learning	吉野 賢一	after-action report	Moodle
14	Pharyngeal stage	e-learning	吉野 賢一	after-action report	Moodle
15	Esophageal stage	e-learning	吉野 賢一	after-action report	Moodle

# Practice of Appropriate Dental Treatment in Health

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

## Course Description

You confirm the various rules of dental treatment in health care insurance system and master skills to apply to clinical cases.

## Attainment Objectives

1. You can explain the outline of dental treatment in health care insurance system.
2. You can practice the calculation rules of dental treatment in health care insurance system.

## Textbooks

Title	Author	Publisher
Interpretation of Dental Fee Points		Social Insurance Institute

## Reference Books

Title	Author	Publisher
You practice in your patient's case.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Understanding degree	50%
Applicability	50%

## Etc

We accept your visit at any time at our office in 3rd floor of main building.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			福泉 隆喜		
1	You confirm the various rules of dental treatment in health care insurance system and master skills to apply to clinical cases.	Practice	福泉 隆喜	Pre- and post-reading of textbook	



2024年度

subject code:213062

# Practice of Appropriate Dental Treatment in Health

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	FUKUIZUMI TAKAKI						
Instructor(s)	FUKUIZUMI TAKAKI						

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
2 ~ 15	Graduate students will learn how to properly provide insurance treatment through exercises based on specific cases experienced in actual clinical practice. Through these exercises, students will acquire the skills to calculate reimbursement appropriately and efficiently, as well as the ability to apply these skills to similar cases.	Case studies and discussions	福泉 隆喜	Read in detail the "Interpretation of Dental Fee Points" in the section related to each case.	

# Theory of Statistical Analysis

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKAI YASUNARI							
Instructor(s)	FUKAI YASUNARI							

## Course Description

You will understand the theory of statistical analysis through examples.

## Attainment Objectives

You can use statistical methods.

You can understand the theory of statistical analysis.

## Core Curriculum Item

Core Curriculum	Contents
C-6-2-1	確率変数とその分布、統計的推測(推定と検定)の原理と方法を理解している。

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	100%

## Etc

You bring a calculator that is able to calculate square roots.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Probability theory (1)	Lecture	深井 康成	Review of lecture	3 1 2 講義室
2	Probability theory (2)	Lecture	深井 康成	Review of lecture	3 1 2 講義室
3	Probability theory (3)	Lecture	深井 康成	Review of lecture	3 1 2 講義室
4	Probability theory (4)	Lecture	深井 康成	Review of lecture	3 1 2 講義室
5	Probability theory (5)	Lecture	深井 康成	Review of lecture	3 1 2 講義室
6	Statistical terminology	Lecture	深井 康成	Review of lecture	3 1 2 講義室
7	Statistical estimation	Lecture	深井 康成	Review of lecture	3 1 2 講義室

# Theory of Statistical Analysis

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	FUKAI YASUNARI							
Instructor(s)	FUKAI YASUNARI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Testing of statistical hypothesis (1) terminology	Lecture	深井 康成	Review of lecture	3 1 2 講義室
9	Testing of statistical hypothesis (2) Hypothesis test for the population mean	Lecture	深井 康成	Review of lecture	3 1 2 講義室
10	Testing of statistical hypothesis (3) Test of proportion	Lecture	深井 康成	Review of lecture	3 1 2 講義室
11	Testing of statistical hypothesis (4) Sign test	Lecture	深井 康成	Review of lecture	3 1 2 講義室
12	Testing of statistical hypothesis (5) Rank sum test	Lecture	深井 康成	Review of lecture	3 1 2 講義室
13	Testing of statistical hypothesis (6) Test of goodness of fit, test of independence	Lecture	深井 康成	Review of lecture	3 1 2 講義室
14	Testing of statistical hypothesis (7) Fisher's exact test	Lecture	深井 康成	Review of lecture	3 1 2 講義室
15	Testing of statistical hypothesis (8) Hypothesis test for the population correlation coefficient	Lecture	深井 康成	Review of lecture	3 1 2 講義室

# Academic English for Research Purposes

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Seminar	Total time	30	Credits	2
Responsible Instructor	KAIHOU YASUOMI						
Instructor(s)	KAIHOU YASUOMI						

## Course Description

This course mainly focuses on developing writing skills required at postgraduate level. The course also places an emphasis on increasing students' vocabulary. Furthermore, in the course students work on online materials both in and out of the classroom.

## Attainment Objectives

By the end of the course, students should:

- learn to write a well-organized paragraph
- learn to write a well-structured essay
- learn to write an abstract of an article
- learn 1,000 new words
- cultivate the habit of using English

## Textbooks

Title	Author	Publisher
The information about the materials used in this course will be provided in the first session.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Assignments	70%
Online materials	30%

## Etc

Online materials students use are going to be chosen based on their needs.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Orientation Vocabulary Size Test	Seminar		Online materials	

# Academic English for Research Purposes

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Seminar	Total time	30	Credits	2
Responsible Instructor	KAIHOU YASUOMI						
Instructor(s)	KAIHOU YASUOMI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Freewriting The Organization of a Paragraph Online Materials	Seminar		Make an Outline. Review Online Materials	
3	How to Write a Paragraph (Theme 1) Online Materials	Seminar		Review Online Materials	
4	How to Write a Paragraph (Theme 1) Online Materials	Seminar		Make an Outline. Review Online Materials	
5	How to Write a Paragraph (Theme 2) Online Materials	Seminar		Review Online Materials	
6	How to Write a Paragraph (Theme 2) Online Materials	Seminar		Make an Outline. Review Online Materials	
7	How to Write an Essay (Theme 1) Online Materials	Seminar		Review Online Materials	
8	How to Write an Essay (Theme 1) Online Materials	Seminar		Make an Outline. Review Online Materials	
9	How to Write an Essay (Theme 2) Online Materials	Seminar		Review Online Materials	
10	How to Write an Essay (Theme 2) Online Materials	Seminar		Make an Outline. Review Online Materials	
11	How to Write an Essay (Theme 3) Online Materials	Seminar		Review Online Materials	
12	How to Write an Essay (Theme 3) Online Materials	Seminar		Review Online Materials	
13	How to Write an Abstract of an Article Online Materials	Seminar		Review Online Materials	
14	How to Write an Abstract of an Article Online Materials	Seminar		Review Online Materials	

2024年度

subject code:213066



# Academic English for Research Purposes

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Seminar	Total time	30	Credits	2	
Responsible Instructor	KAIHOU YASUOMI							
Instructor(s)	KAIHOU YASUOMI							

Lecture	Contents	Methods	Instructor	before-and-after Learning	Lecture rooms
15	How to Write an Abstract of an Article Online Materials	Seminar		Review Online Materials	

# Advanced Bioanalytical Chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	TAKENAKA SHIGEORI						
Instructor(s)	TAKENAKA SHIGEORI						

## Course Description

Analytical Chemistry is positioned as indispensable science in the all of studying areas. In this lecture, basic analytical chemistry will be reviewed with addition of the cutting edge technology connected with analytical chemistry. Since this lecture is stand at engineer English one, attendance should understand technical word in English.

## Attainment Objectives

Participant should understand how contribute the following subjects in Analytical Chemistry.1) Thermodynamics2) Kinetics3) Equilibrium4) Quantum chemistry5) Statistical thermodynamics6) Electrochemistry7) Group theory

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
-	100%

## Etc

Participants should review topics after lecture every times using the related text books and/or references. Teacher noticed the topic of next lecture and participants should search the important point of the topic

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Ion equilibrium and acid-base reaction in an aqueous solution	Lecture		Homework of previously lecture	
2	Complex formation and Chelate titration	Lecture		Homework of previously lecture	
3	Solid-liquid equilibrium and ion exchange reaction	Lecture		Homework of previously lecture	
4	Distribution equilibrium and extraction	Lecture		Homework of previously lecture	
5	Redox reaction	Lecture		Homework of previously lecture	

# Advanced Bioanalytical Chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	TAKENAKA SHIGEORI						
Instructor(s)	TAKENAKA SHIGEORI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Electrochemical measurement using electrode	Lecture		Homework of previously lecture	
7	Chromatography and electrophoresis	Lecture		Homework of previously lecture	
8	Interaction of material and light	Lecture		Homework of previously lecture	
9	Molecular spectroscopic analysis	Lecture		Homework of previously lecture	
10	Atomic spectroscopic analysis	Lecture		Homework of previously lecture	
11	X-ray crystal structure analysis	Lecture		Homework of previously lecture	
12	Analysis using a magnetism	Lecture		Homework of previously lecture	
13	Microscopic analysis	Lecture		Homework of previously lecture	
14	Thermal analysis, micro-area analysis, and chemical sensor	Lecture		Homework of previously lecture	
15	Labeling of proteins and nucleic acids	Lecture		Homework of previously lecture	



# Advanced Bioanalytical chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	SATO TETUJI						
Instructor(s)	SATO TETUJI						

## Course Description

【Language】 English and Japanese The aim of this course is to help students acquire an understanding of Chemical Biology from interaction analysis methods between small molecules and Nucleic Acid, or small molecules and Protein.

## Attainment Objectives

Upon completion of this course, students will be able to do the following:1. Learn about proteins, nucleic acids and enzymes2. Understand the principle of UV-Vis spectroscopy analysis, isothermal titration calorimetry, quartz crystal microbalance, surface plasmon resonance, circular polarization dichroism analysis, electrochemical measurement, atomic force microscope which are representative analytical methods3. How to handle data, and statistical analysis method.

## Reference Books

Title	Author	Publisher
Understanding Bioanalytical Chemistry-Principle and Applications-(2009)		Pub. Wiley

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
10 Contents × 10 points= 100 points.	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction to Biomolecules	Lecture		Homework of previously lecture	
2	Property of Protein, Nucleic Acid, and Enzyme	Lecture		Homework of previously lecture	
3	Applications of spectroscopy-1 (Binding analysis)	Lecture		Homework of previously lecture	
4	Applications of spectroscopy-2 (Kinetic analysis)	Lecture		Homework of previously lecture	

# Advanced Bioanalytical chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	SATO TETUJI						
Instructor(s)	SATO TETUJI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
5	Applications of spectroscopy-3 (Thermodynamic analysis)	Lecture		Homework of previously lecture	
6	Isothermal Titration Calorimetry	Lecture		Homework of previously lecture	
7	Quartz Crystal Microbalance	Lecture		Homework of previously lecture	
8	Surface Plasmon Resonance	Lecture		Homework of previously lecture	
9	Circular Dichroism Spectroscopy analysis	Lecture		Homework of previously lecture	
10	Electrochemical measurement (Diffusion process)	Lecture		Homework of previously lecture	
11	Electrochemical measurement (Adsorption process)-1	Lecture		Homework of previously lecture	
12	Electrochemical measurement (Adsorption process)-2	Lecture		Homework of previously lecture	
13	Atomic Force Microscope	Lecture		Homework of previously lecture	
14	Statistical analysis	Lecture		Homework of previously lecture	
15	Summary	Lecture		Homework of previously lecture	

# Advanced Intelligent System

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	KAMIYA						
Instructor(s)	KAMIYA						

## Course Description

To develop the advanced information processing instruments, it is necessary to understand hardware and software system. In this course, basic concepts of data structures and algorithms which is concerned image systems are lectured.

## Attainment Objectives

Upon completion of this course, students will be able to do the following:1) Demonstrate a familiarity with major algorithms and data structures2) Algorithmic design paradigms and its analysis3) Analyze the performance of algorithms.

## Textbooks

Title	Author	Publisher
Before starting this class, teacher posts or notices the text book with reference one.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
	60%

## Etc

Participants should review topics after lecture every times using the related text books and/or references.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction	Lecture		Homework of previously lecture	
2	What are the advanced intelligent systems	Lecture		Homework of previously lecture	
3	Medical engineering system	Lecture		Homework of previously lecture	

# Advanced Intelligent System

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	KAMIYA						
Instructor(s)	KAMIYA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Medical imaging system	Lecture		Homework of previously lecture	
5	Basic algorithms	Lecture		Homework of previously lecture	
6	Design and analysis of algorithms	Lecture		Homework of previously lecture	
7	Data structures	Lecture		Homework of previously lecture	
8	Basic data structures	Lecture		Homework of previously lecture	
9	Lists	Lecture		Homework of previously lecture	
10	Stacks, Queues	Lecture		Homework of previously lecture	
11	Trees	Lecture		Homework of previously lecture	
12	Search	Lecture		Homework of previously lecture	
13	Binary search and AVL trees	Lecture		Homework of previously lecture	
14	Graph	Lecture		Homework of previously lecture	
15	Summary	Lecture		Homework of previously lecture	

# Functional Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	MIYAZAKI TOSHIKI							
Instructor(s)	MIYAZAKI TOSHIKI							

## Course Description

This course deals with structure, design and development of biomaterials used for medical fields. Especially this course focuses on hard tissue repair such as bone and tooth. Ceramics, metals, polymers and composites materials for biomaterials will be introduced.

## Attainment Objectives

The attendee can explain chemical properties of biomaterials. The attendee can explain mechanical properties of biomaterials. The attendee can explain biological properties of biomaterials. The attendee can explain preparation of biomaterials.

## Textbooks

Title	Author	Publisher
Textbook is not used. Reference book is as follows.		

## Reference Books

Title	Author	Publisher
An Introduction to Bioceramics (2nd Edition)	L.L. Hench (ed.)	Imperial College Press, 2013
Bioceramics and their Clinical Applications	T. Kokubo (ed.)	Woodhead Publishing, 2008

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Midterm paper or final exam	100%

## Etc

Students should read English handout distributed by PDF file in advance.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	What is biomaterial?	Lecture		Review and preparation by text distributed in advance	

# Functional Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 3 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	MIYAZAKI TOSHIKI						
Instructor(s)	MIYAZAKI TOSHIKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Current development process and production of biomaterials	Lecture		Review and preparation by text distributed in advance	
3	Structure and function of bone	Lecture		Review and preparation by text distributed in advance	
4	Structure and function of tooth	Lecture		Review and preparation by text distributed in advance	
5	Interaction between biomaterial and body	Lecture		Review and preparation by text distributed in advance	
6	Cytotoxicity of various elements	Lecture		Review and preparation by text distributed in advance	
7	Ceramic biomaterials	Lecture		Review and preparation by text distributed in advance	
8	Ceramic biomaterials	Lecture		Review and preparation by text distributed in advance	
9	Composite biomaterials	Lecture		Review and preparation by text distributed in advance	
10	Metallic biomaterials	Lecture		Review and preparation by text distributed in advance	
11	Ceramics produced by living things	Lecture		Review and preparation by text distributed in advance	
12	Principle of biomimetic process	Lecture		Review and preparation by text distributed in advance	

2024年度

subject code:214015

# Functional Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 3 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	MIYAZAKI TOSHIKI						
Instructor(s)	MIYAZAKI TOSHIKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13	Development of biomaterials and environmental materials by biomimetic process	Lecture		Review and preparation by text distributed in advance	
14	Biomaterials for tissue engineering	Lecture		Review and preparation by text distributed in advance	
15	Biomaterials for cancer treatment	Lecture		Review	

# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring	
Subject	Choice	Mehods	Lesson	Total time	32	Credits	2	
Responsible Instructor	YAMADA HIROSHI							
Instructor(s)	YAMADA HIROSHI							

## Course Description

【Language】 Japanese A human body is subjected to external and internal forces, and some functions and behaviors of body components can be dealt as mechanical phenomena. By revealing the correlations between biological phenomena and mechanical factors, one can enhance healthy conditions and protect the body from disorders and diseases with an aid of engineering. This class introduces the methods in solid biomechanics to evaluate or analyze the structures, functions and responses of human body components to learn the mechanical characteristics of musculoskeletal and cardiovascular systems, etc. It also introduces some approaches to the body components with engineering discipline.

## Attainment Objectives

1. One can explain an overview of biomechanics and related fields. 2. One can calculate the force on the musculoskeletal system. 3. One can explain the mechanical characteristics and stress state of bones and teeth. 4. One can explain the stress relaxation and creep deformation of soft tissues. 5. One can explain the large deformation of soft tissues based on the concept of continuum mechanics. 6. One can explain the mechanical tests and the analyses of stress and strain by finite element method for biological tissues and cells.

## Textbooks

Title	Author	Publisher
Fundamentals of mechanics and biomechanics, in Japanese (ISBN 978-4-339-07230-3)	H. Yamada	

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
short reports in each class	40%
presentations and reports of investigations	60%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Overview of biomechanics	Lecture		preparation and review for the lectures and exercises.	



# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	32	Credits	2
Responsible Instructor	YAMADA HIROSHI						
Instructor(s)	YAMADA HIROSHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Mechanics of human body with microgravity	Lecture		preparation and review for the lectures and exercises.	
3	Mechanics in the musculoskeletal system	Lecture		preparation and review for the lectures and exercises.	
4	Infinitesimal deformation of hard tissues	Lecture		preparation and review for the lectures and exercises.	
5	Mechanics of bone and teeth	Lecture		preparation and review for the lectures and exercises.	
6	Viscoelasticity of soft tissues	Lecture		preparation and review for the lectures and exercises.	
7	Individual investigation for Lecture 1-6	Practice		preparation and review for the lectures and exercises.	
8	Presentation of an individual investigation for Lecture 1-6	Practice		preparation and review for the lectures and exercises.	
9	Mechanics of skeletal muscles	Lecture		preparation and review for the lectures and exercises.	
10	Large deformation of soft tissues	Lecture		preparation and review for the lectures and exercises.	
11	Cardiovascular mechanics	Lecture		preparation and review for the lectures and exercises.	
12	Cardiovascular mechanics	Lecture		preparation and review for the lectures and exercises.	

2024年度

subject code:214016

# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Mehods	Lesson	Total time	32	Credits	2
Responsible Instructor	YAMADA HIROSHI						
Instructor(s)	YAMADA HIROSHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
13	Dynamics in biological tissues	Lecture		preparation and review for the lectures and exercises.	
14	Mechanical tests and finite element analyses of tissues & cells	Lecture		preparation and review for the lectures and exercises.	
15	Individual investigation for Lecture 9-14	Practice		preparation and review for the lectures and exercises.	
16	Presentation of an individual investigation for Lecture 9-14	Practice		preparation and review for the lectures and exercises.	

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO (Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO						

## Course Description

You can review the basic radiology including radiological physics, radiological chemistry, radiological biology, radiological protection, and radiological management technology.

## Attainment Objectives

You understand the basic radiology including radiological physics, radiological chemistry, radiological biology, radiological protection, and radiological management technology.

## Reference Books

Title	Author	Publisher
Head and Neck Imaging 3rd edition		
Contemporary Oral and Maxillofacial Pathology		
Basic radiology		
Oral Anatomy		
MRI in head and neck, Handbook of diagnostic imaging in head and neck		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Oral presentation	50%
Oral examination	50%

## Etc

【Office Hours】 Before and after lectures or by e-mail.

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			森本 泰宏		
1	History of Radiology, Physics of radiation	Practice	森本 泰宏	Pre- and post-reading of textbook	
2	Radiation chemistry	Practice	森本 泰宏	Pre- and post-reading of textbook	
3	Basic radiobiology	Practice	森本 泰宏	Pre- and post-reading of textbook	
4	Basic radiation measurement methods I	Practice	森本 泰宏	Pre- and post-reading of textbook	
5	Basic radiation measurement methods II	Practice	森本 泰宏	Pre- and post-reading of textbook	
6	Radiation-related laws and ordinances (I)	Practice	森本 泰宏	Pre- and post-reading of textbook	
7	Medical image engineering	Practice	森本 泰宏	Pre- and post-reading of textbook	
8	Image storage translation, reproduction, and transfer	Practice	森本 泰宏	Pre- and post-reading of textbook	
9	Imaging techniques and analytical methods of CT and dental CBCT	Practice	森本 泰宏	Pre- and post-reading of textbook	
10	Imaging techniques and analytical methods of MRI	Practice	森本 泰宏	Pre- and post-reading of textbook	
11	Imaging techniques and analytical methods of US	Practice	森本 泰宏	Pre- and post-reading of textbook	
12	Nuclear Medicine	Practice	森本 泰宏	Pre- and post-reading of textbook	
13	Radiotherapy	Practice	森本 泰宏	Pre- and post-reading of textbook	

2024年度

subject code:214114

# Outline of Oral and Maxillofacial Radiology

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	MORIMOTO YASUHIRO						
Instructor(s)	MORIMOTO YASUHIRO						
	(Advisor of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Specialist of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO (Certified Dentists of Oral and Maxillofacial Radiology) MORIMOTO YASUHIRO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
14	Radiation-related laws and ordinances (II)	Practice	森本 泰宏	Pre- and post-reading of textbook	
15	Review	Practice	森本 泰宏	Pre- and post-reading of textbook	

# Oral and Maxillofacial Surgery

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASAOKI						
Instructor(s)	SASAGURI MASAOKI						

## Course Description

To acquire basic knowledge of Oral and Maxillofacial Surgery and the latest improvement of diagnosis and management of various lesions in this area. To learn the role of engineering skill and knowledge in regenerative medicine, innovative drug development, novel cancer therapy and so on.

## Attainment Objectives

To recognize the medical needs on diagnosis and treatment of Oral and Maxillofacial diseases.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
reports of the individual lectures	100%

## Etc

Student consultation at anytime

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
			笹栗 正明		
1	Embryology and anatomy of oral and maxillofacial region	Lecture	笹栗 正明	Reports of the individual lectures	
2	Congenital disorders	Lecture	笹栗 正明	Reports of the individual lectures	
3	Developmental disorders	Lecture	笹栗 正明	Reports of the individual lectures	
4	Jaw deformities	Lecture	笹栗 正明	Reports of the individual lectures	
5	Traumatology	Lecture	笹栗 正明	Reports of the individual lectures	
6	Infectious diseases	Lecture	笹栗 正明	Reports of the individual lectures	

2024年度

subject code:214115

# Oral and Maxillofacial Surgery

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	SASAGURI MASAOKI						
Instructor(s)	SASAGURI MASAOKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7	Benign tumors	Lecture	笹栗 正明	Reports of the individual lectures	
8	Malignant tumors (2)	Lecture	笹栗 正明	Reports of the individual lectures	
9	Temporomandibular disorders	Lecture	笹栗 正明	Reports of the individual lectures	
10	Temporomandibular disorders	Lecture	笹栗 正明	Reports of the individual lectures	
11	Mucous diseases	Lecture	笹栗 正明	Reports of the individual lectures	
12	Dental implantology	Lecture	笹栗 正明	Reports of the individual lectures	
13	Orofacial prosthesis	Lecture	笹栗 正明	Reports of the individual lectures	
14	Disinfection	Lecture	笹栗 正明	Reports of the individual lectures	
15	Summary	Lecture	笹栗 正明	-	

# Molecular Biology of Bone and Skeletal Muscle

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	KOKABU SYOUITIROU							
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William							

## Course Description

Sarcopenia and osteoporosis are characterized by decreased muscle protein or bone mass respectively that contributes to. In our aging society, the motor disability by sarcopenia and/or osteoporosis is social problem. So, we have to develop the novel methods to increase the bone and muscle mass. In this lecture, you will obtain the background and basic molecular experimental knowledge for regenerative medicine of bone and skeletal muscle.

## Attainment Objectives

You can explain the basic physiology and pathology of bone and skeletal muscle with the basic of bone and skeletal muscle experiments.

## Reference Books

Title	Author	Publisher
Please select any book of reference if you want.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	80%
Oral examination	20%

## Etc

You can visit us at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Handling of cultured cells and the proliferation of skeletal muscle cells	Lecture(Web or Face to Face)	古株 彰一郎	Prepare for the principal of cultured cells	
2	Evaluation of the proliferation of skeletal muscle cells	Lecture(Web or Face to Face)	Addison William	Prepare for the cell proliferation	
3	Differentiation of skeletal muscle cells	Lecture(Web or Face to Face)	Addison William	Prepare for the cell differentiation	



# Molecular Biology of Bone and Skeletal Muscle

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	KOKABU SYOUITIROU							
Instructor(s)	KOKABU SYOUITIROU, MATSUBARA TAKUMA, Addison William							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Evaluation of the differentiation of skeletal muscle cells	Lecture(Web or Face to Face)	Addison William	Prepare for skeletal muscle stem cells	
5	Skeletal muscle atrophy	Lecture(Web or Face to Face)	古株 彰一郎	Prepare for skeletal muscle atrophy	
6	Evaluation of the atrophy of skeletal muscle atrophy	Lecture(Web or Face to Face)	古株 彰一郎	Prepare for sarcopenia	
7	Harvest and culture of primary skeletal muscle stem cells	Lecture(Web or Face to Face)	Addison William	Prepare for primary cultured cells	
8	Differentiation of osteoblasts	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoblasts	
9	Evaluation of the differentiation of osteoblasts I	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoblast differentiation	
10	Evaluation of the differentiation of osteoblasts II	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoblast differentiation	
11	Harvest and culture of primary osteoblasts	Lecture(Web or Face to Face)	古株 彰一郎	Prepare for primary osteoblasts from calvarial bone	
12	Harvest and culture of primary bone marrow stromal cells	Lecture(Web or Face to Face)	古株 彰一郎	Prepare for primary bone marrow stromal cells	
13	Osteoclast differentiation	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoclast	
14	Evaluation of the differentiation of osteoclast I	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoclast differentiation	
15	Evaluation of the differentiation of osteoclast II	Lecture(Web or Face to Face)	松原 琢磨	Prepare for osteoclast differentiation	

# Molecular Biology for Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA						

## Course Description

You can obtain novel information and knowledge concerning life sciences for infection and immunity in molecular cell biology. This program also aims to introduce some of the currently developed medical-dental-engineering collaborative research on infectious diseases, and to develop human resources with a multifaceted viewpoint who will be responsible for the creation of health and medical technology seeds based on new mechanisms.

## Attainment Objectives

To obtain novel information and knowledge for

- Virulence factors responsible for infection
- Biofilm and quorum sensing system
- Oral infectious diseases
- Recognition and elimination of pathogens in immune system
- Cytokines and inflammatory mediators
- Pattern recognition receptors
- Role of immune cells in inflammatory response
- Host defense in oral lesion
- Diagnosis, prevention and treatment of infectious diseases
- Inflammasome
- Bone remodeling
- Interaction between bone metabolisms and immune system

## Textbooks

Title	Author	Publisher
Handout		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports	100%

## Etc

You can ask your study-counsel before or after the lectures. Email is available at any time.

# Molecular Biology for Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	ARIYOSHI WATARU							
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA							

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Molecular biology for pathogenic microbes : Fundamental knowledge of molecular biology and microbiology for studying infectious diseases	Lecture	山崎 亮太 有吉 涉	Pre-reading of handout	Moodle Microsoft Teams
2	Molecular biology for pathogenic microbes : Adhesion molecules and endotoxin of pathogenic bacteria	Lecture	山崎 亮太 有吉 涉	Pre-reading of handout	Moodle Microsoft Teams
3	Molecular biology for pathogenic microbes : Structure and functions of biofilm	Lecture	山崎 亮太 有吉 涉	Pre-reading of handout	Moodle Microsoft Teams
4	Molecular biology for pathogenic microbes : Virulence factors of oral bacteria	Lecture	山崎 亮太 有吉 涉	Pre-reading of handout	Moodle Microsoft Teams
5	Molecular biology for pathogenic microbes : Structure and functions of human microbiom	Lecture	山崎 亮太 有吉 涉	Pre-reading of handout Creating report	Moodle Microsoft Teams
6	Molecular biology for host defense against infection : Fundamental knowledge of molecular biology for studying immunology	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
7	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by innate immune system	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams

# Molecular Biology for Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
8	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by humoral immune system	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
9	Molecular biology for host defense against infection : Molecular mechanisms involved in antigen recognition and elimination by cell-mediated immune system	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
10	Molecular biology for host defense against infection : Host defense by saliva and immune system in oral lesion	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
11	Molecular biology for host defense against infection : Approach for diagnosis, prevention and treatment of infectious diseases	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
12	Molecular biology for host defense against infection : Molecular mechanisms involved in activation of inflammasome in inflammatory response	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout Creating report	Moodle Microsoft Teams
13	Inflammatory bone resorption : Molecular mechanisms involved in regulation of bone remodeling	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams
14	Inflammatory bone resorption : Regulation of immunomodulatory molecules in bone metabolisms	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout	Moodle Microsoft Teams

2024年度

subject code:214117



# Molecular Biology for Infectious Diseases

Course Affiliation	the Faculty of Dentistry			Grades	1 ~ 4 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	ARIYOSHI WATARU						
Instructor(s)	ARIYOSHI WATARU, YAMASAKI RYOUTA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
15	Inflammatory bone resorption : Osteoimmunological approach for treatment of inflammatory bone resorption	Lecture	有吉 涉 山崎 亮太	Pre-reading of handout  Creating report	Moodle Microsoft Teams

# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI, KARAKI JUNICHI						

## Course Description

【Language】 English and Japanese In this lecture, you will learn basic aspects of clinical research design. In addition, to develop practical skills in Evidence-Based Dentistry (EBD), you will conduct a literature search based on a question you derive from your own dental practice, and make a presentation after critical appraisal of the selected papers.

## Attainment Objectives

At the completion of this course, you will be able to:1. Formulate questions arising in clinical practice into research questions.2. Understand the outlines of clinical study design.3. Select appropriate clinical study designs.4. Critically appraise clinical research papers and structured abstracts.5. Practice Evidence-based Dentistry.

## Textbooks

Title	Author	Publisher
Introduction to Evidence-Based Dentistry		Nagasueshoten

## Reference Books

Title	Author	Publisher
Designing Clinical Research	Stephen B Hulley	Lippincott Williams & Wilkins
Guide to Practice-Based Research and Scientific Writing		Ishiyaku Publishers

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	60%
presentation	40%

## Etc

Prior to submitting the registration form, please contact the instructor (Kakulate N) and consult the course schedule. 【Office hour】 Before and after every class, or email at any time.

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Lecture	Lecture rooms

# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKUDATE NAOKI						
Instructor(s)	KAKUDATE NAOKI, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction to clinical research and EBD: You will learn about the definition of clinical research and EBD.	Lecture	角館 直樹	Definition of EBD/Level of evidence	3 1 2 講義室
2	Study design: You will learn about clinical research designs.	Lecture	角館 直樹	Clinical Research design/ Cross-sectional study, Case-control study, RCT, Meta-analysis	3 1 2 講義室
3	Concept of bias: You will learn about three major biases.	Lecture	角館 直樹	Concept of bias/Selection bias, information bias, confounding bias	3 1 2 講義室
4	Observational study: You will learn about critical appraisal of reports of observational studies.	Lecture and practice	角館 直樹	Critical appraisal/ Screening test	3 1 2 講義室
5	Randomized Controlled Trials: You will learn about critical appraisal of reports of RCT	Lecture and practice	角館 直樹	Critical appraisal of research articles of RCT	3 1 2 講義室
6	Research articles: You will learn about the structure of research articles and abstracts on clinical research	Lecture	角館 直樹	Structure of the research articles and abstracts	3 1 2 講義室
7	Systematic reviews, Meta-analyses and Clinical guidelines: You will learn about systematic reviews, meta-analyses and clinical guidelines.	Lecture	角館 直樹	Systematic review / Meta-analysis / Clinical guidelines	3 1 2 講義室
8	Systematic reviews and meta-analyses: You will critically appraise research reports of meta-analyses.	Lecture and Practice	角館 直樹	Critical appraisal of research papers of systematic reviews and meta-analysis	3 1 2 講義室

# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Spring
Subject	Choice	Mehods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKU DATE NAOKI						
Instructor(s)	KAKU DATE NAOKI, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
9	Formulating a research question: You will learn how to formulate an answerable question using PICO.	Lecture and Practice	角館 直樹	P I C O: Formulate an answerable question	3 1 2 講義室
10	Literature search : You will learn how to search the literature using PubMed.	Lecture and Practice	角館 直樹	Literature search using PubMed	コンピュータ演習室
11	Literature search : You will learn how to search the literature using the Cochrane library and Minds.	Lecture and Practice	角館 直樹	Literature search/Cochrane review, Minds	コンピュータ演習室
12	Literature search : You will search the literature based on your own research question using PubMed.	Practice	角館 直樹	Literature search using PubMed	コンピュータ演習室
13	Presentation Preparation: You will perform critical appraisal of the literature based on your own research question	Presentation	角館 直樹	Preparing PowerPoint presentations	3 1 2 講義室
14	Final presentation-Part 1-	Presentation	角館 直樹 唐木 純一	Preparing PowerPoint presentations	3 1 2 講義室
15	Final presentation-Part 2-	Presentation	角館 直樹 唐木 純一	Preparing PowerPoint presentations	3 1 2 講義室



# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI, KARAKI JUNICHI						

## Course Description

【Language】 English and Japanese In this lecture, you will obtain specialized knowledge on clinical research design and applied skills in the conduct of clinical research. In addition, you will develop the ability to create a study protocol based on a clinical question you derive from your own dental practice. Finally, you will make a presentation of the study protocol.

## Attainment Objectives

At the completion of this course, you will be able to:1. Understand the process flow from the planning of clinical epidemiology research up to implementation.2. Formulate a research question derived from your own dental practice.3. Develop a research design.4. Understand the basics of statistical analysis methods.5. Create a research protocol.

## Textbooks

Title	Author	Publisher
Introduction to Evidence-Based Dentistry		Nagasueshoten

## Reference Books

Title	Author	Publisher
Designing Clinical Research	Stephen B Hulley	Lippincott Williams & Wilkins
Guide to Practice-Based Research and Scientific Writing		Ishiyaku Publishers.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
deliverables during your coursework	60%
presentation	40%

## Etc

Prior to submitting the registration form, please contact the instructor (Kakulate N) and consult the course schedule. 【Office hour】 Before and after every class, or email at any time.

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Lecture	Lecture rooms

# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKULATE NAOKI						
Instructor(s)	KAKULATE NAOKI, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Introduction to clinical research: You will learn how to formulate an answerable question.	Lecture	角館 直樹	PICO/Finer ' s check	3 1 2 講義室
2	Controlling bias part 1: You will learn how to control information bias and selection bias.	Lecture and Practice	角館 直樹	Study design/Information and selection bias	3 1 2 講義室
3	Controlling bias part 2: You will learn how to control confounding bias.	Lecture and Practice	角館 直樹	Confounding bias	3 1 2 講義室
4	Hypothetical conceptual model: You will learn how to build a hypothetical conceptual model.	Lecture and Practice	角館 直樹	Hypothetical conceptual model	3 1 2 講義室
5	Selecting study design part 1: You will learn how to select an appropriate epidemiological study design.	Practice	角館 直樹	Epidemiological study design	3 1 2 講義室
6	Selecting study design part 2: You will learn how to plan and conduct epidemiological studies.	Practice	角館 直樹	Epidemiological study design	3 1 2 講義室
7	Finding the Evidence Part 1: You will search the literature based on your PICO framework.	Practice	角館 直樹	Literature search	3 1 2 講義室 コンピュータ演習室
8	Finding the Evidence Part 2: You will search the literature based on your PICO framework.	Practice	角館 直樹	Literature search	3 1 2 講義室 コンピュータ演習室
9	Questionnaire survey and research protocol: You will learn how to produce questionnaires and research protocol for an Institutional Review Board	Lecture and Practice	角館 直樹	Questionnaire survey and Research protocol for an Institutional Review Board	3 1 2 講義室

# Clinical Research Design

Course Affiliation	the Faculty of Dentistry			Grades	1~4 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KAKU DATE NAOKI						
Instructor(s)	KAKU DATE NAOKI, KARAKI JUNICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Statistical analysis part 1: You will learn the types of data and correlation.	Lecture	角館 直樹	Correlation coefficient	3 1 2 講義室
11	Statistical analysis part 2: You will learn hypothesis testing, chi-square test and the t-test.	Lecture and Practice	角館 直樹	Hypothesis testing/ Chi-square test and t-test	3 1 2 講義室
12	Statistical analysis part 3: You will learn various kinds of statistical analysis methods including multivariate analysis and survival analysis.	Lecture	角館 直樹	Various kinds of statistical analysis including multivariate analysis and survival analysis	3 1 2 講義室
13	Presentation Preparation	Presentation	角館 直樹	Preparing PowerPoint presentations	3 1 2 講義室
14	Final presentation-Part -	Presentation	角館 直樹 唐木 純一	Preparing PowerPoint presentations	3 1 2 講義室
15	Final presentation-Part -	Presentation	角館 直樹 唐木 純一	Preparing PowerPoint presentations	3 1 2 講義室

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

## Course Description

Understand the physical, social and mental characteristics of the elderly and gain an understanding of the medical and care systems currently surrounding the elderly. In addition, after understanding the characteristics of dental diseases in old age, knowledge of support for the elderly will be developed from the perspective of health promotion through improvement of the oral environment.

## Attainment Objectives

1. understand the physical changes and ageing of the oral region in the elderly.
2. understand the social situation surrounding the elderly and the medical and care system.
3. understand the dental diseases common in old age.

## Textbooks

Title	Author	Publisher
Lecture and exercise handouts are distributed.		

## Reference Books

Title	Author	Publisher
Invitation to geriatrics	Shigenobu Nakamura	Nanzando
Dental Guidebook for the Elderly.	Hiroshi Uematsu et. al.	Ishiyakushu ppan

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports and deliverables	0%

## Etc

Study consultations are available as needed.

As students from several universities are likely to take the course, either face-to-face lectures or distance lectures (zoom, teams, on-demand) will be given depending on the situation.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	The current situation surrounding healthcare for the elderly	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Low birthrate and ageing population and challenges	

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	The current situation surrounding healthcare for the elderly	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	elderly healthcare system	
3	The current situation surrounding healthcare for the elderly	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	terminal care	
4	Characteristics of common oral diseases in the elderly.	lecture	唐木 純一 多田 葉子 磯部 彩香 久保田 潤平	biofilm	
5	Characteristics of common oral diseases in the elderly.	lecture	唐木 純一 多田 葉子 磯部 彩香 久保田 潤平	Xerostomia	
6	Characteristics of common oral diseases in the elderly.	lecture	唐木 純一 多田 葉子 磯部 彩香 久保田 潤平	Functional oral care	
7	Oral hygiene and infectious diseases	lecture	多田 葉子 磯部 彩香 久保田 潤平 唐木 純一	oral function	
8	Oral hygiene and infectious diseases	lecture	久保田 潤平 多田 葉子 磯部 彩香 唐木 純一	oral function	
9	Oral hygiene and infectious diseases	lecture	久保田 潤平 多田 葉子 磯部 彩香 唐木 純一	periodontal disease	
10	House Call Dentistry	lecture	多田 葉子 磯部 彩香 唐木 純一 久保田 潤平	nursing level (between 1 and 5 based on assessment of care requirements)	
11	House Call Dentistry	lecture	多田 葉子 磯部 彩香 唐木 純一 久保田 潤平	Nursing homes for the elderly	
12	House Call Dentistry	lecture	多田 葉子 磯部 彩香 唐木 純一 久保田 潤平	Nutritional intake	

2024年度

subject code:215013

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 3	Basic knowledge of the oral environment and oral care	Lectures/exercises	唐木 純一 磯部 彩香 多田 葉子 久保田 潤平	dental caries	
1 4	Basic knowledge of the oral environment and oral care	Lectures/exercises	唐木 純一 磯部 彩香 多田 葉子 久保田 潤平	aspiration pneumonia	
1 5	Approaches to healthcare for the elderly	Lectures/exercises	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	QOL(Quality of Life)	

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

## Course Description

The objective is to understand the characteristics of dental disease in old age and its relationship to systemic conditions, and to develop knowledge of support for older people from a health promotion perspective by learning about the adjacent field of dentistry for older people and patient-reported outcomes.

## Attainment Objectives

1. understand the oral-related diseases that are common in old age.
2. understand the importance of patient-reported outcomes and quality of life in the field of geriatric dentistry.
3. gain knowledge of adjacent areas of geriatric dentistry.

## Textbooks

Title	Author	Publisher
Lecture and exercise handouts are distributed.		

## Reference Books

Title	Author	Publisher
Dental Guidebook for the Elderly.	Shigenobu Nakamura	Nanzando

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Reports and deliverables	100%

## Etc

Study consultations are available as needed.

As students from several universities are likely to take the course, either face-to-face lectures or distance lectures (zoom, teams, on-demand) will be given depending on the situation.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Insurance schemes relating to healthcare for the elderly	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	nursing-care insurance system	その他
2	Insurance schemes relating to healthcare for the elderly	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	health insurance system	その他

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
3	QOL(Quality of life) and PRO(Patient-reported outcomes)	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Health-related quality of life	その他
4	QOL(Quality of life) and PRO(Patient-reported outcomes)	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Patient-reported outcomes	その他
5	Dementia	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	core symptom of dementia	その他
6	Dementia	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	behavioral and psychological symptoms of dementia	その他
7	Disasters and dentistry	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Disaster Medical Assistance Team	その他
8	Disasters and dentistry	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Base hospital for disasters	その他
9	Disasters and dentistry	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Emergency medical information system	その他
10	Dysphagia and aspiration pneumonia	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Screening for feeding and swallowing disorders.	その他
11	Dysphagia and aspiration pneumonia	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Indirect therapy	その他
12	Dysphagia and aspiration pneumonia	lecture	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Direct therapy	その他
13	Clinical assessment of older people.	Lectures/exercises	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	clinical assessment	その他



2024年度

subject code:215014

# Geriatric Dentistry

Course Affiliation	the Faculty of Dentistry			Grades	1~3 grades	Semester	Winter
Subject	Choice	Methods	Lesson and seminar	Total time	30	Credits	2
Responsible Instructor	KARAKI JUNICHI						
Instructor(s)	KARAKI JUNICHI, KUBOTA JUNPEI, TADA YOUKO, ISOBE AYAKA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1 4	Clinical assessment of older people.	Lectures/exercises	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	clinical assessment	その他
1 5	Approaches to healthcare for the elderly	Lectures/exercises	唐木 純一 久保田 潤平 多田 葉子 磯部 彩香	Issues in healthcare for the elderly	その他

# Introduction to Polymer Physics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	MOCHIDUKI SHINICHI						
Instructor(s)	MOCHIDUKI SHINICHI						

## Course Description

【Language】 Official language; Japanese To conduct research on biopolymers and environmental materials, understanding physical properties of polymers is extremely important. This lecture explains physical properties of polymers.

## Attainment Objectives

Studying the several basic knowledge required in industrial field such as molecular distribution, crystallization, scattering, and rheology.

## Textbooks

Title	Author	Publisher
Basic Polymer Science(The Society of Polymer Science) ISBN-10:4807906356		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Report	100%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	What is the Polymer	Lecture			
2	Single Chain Conformations	Lecture			
3	Configurations of Polymers	Lecture			
4	Conformations of Polymers	Lecture			
5	Crystalline State	Lecture			
6	Primary Crystallization	Lecture			
7	Secondary Crystallization	Lecture			
8	Rubber Elasticity	Lecture			
9	Viscoelasticity	Lecture			

2024年度

subject code:215021

# Introduction to Polymer Physics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Winter
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	MOCHIDUKI SHINICHI						
Instructor(s)	MOCHIDUKI SHINICHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
10	Dielectric Property	Lecture			
11	Interfacial Property	Lecture			
12	Polymer and Scattering I 【Colloid】	Lecture			
13	Polymer and Scattering II 【Light scattering method】	Lecture			
14	Polymer and Scattering III 【Molecular weight】	Lecture			
15	Summary	Lecture			

# Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring	
Subject	Choice	Methods	Lesson	Total time	30	Credits	2	
Responsible Instructor	NAKAZAWA KOUJI							
Instructor(s)	NAKAZAWA KOUJI							

## Course Description

【Language】 Official language; Japanese Biomaterial is any substance (other than drugs) or combination of substances synthetic and natural in origin, which can be used for any period of time, as a whole or as a system which treats, augments, or replaces any tissue, organ, or function of the body. In this lecture, we discuss the biomaterials.

## Attainment Objectives

1. You can understand the properties and requirements of biomaterials. 2. You can understand the reactions between the living body and biomaterials. 3. You can acquire the knowledge for development of biomaterials. 4. You can learn the trend of current biomaterial development. 5. You can propose the direction and idea for biomaterial development.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Active participation to the class	30%
Report	70%

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	What are biomaterials ?	Lecture			
2	Necessary conditions of biomaterials	Lecture			
3	Biocompatibility	Lecture			
4	Foreign matter reactions	Lecture			
5	Biomaterials and biological reactions	Lecture			
6	Surface design of biomaterials	Lecture			
7	Safety testing	Lecture			
8	Metals	Lecture			
9	Ceramics	Lecture			
10	Polymers	Lecture			
11	Composites	Lecture			

2024年度

subject code:215022

# Biomaterials

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring	
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2	
Responsible Instructor	NAKAZAWA KOUJI							
Instructor(s)	NAKAZAWA KOUJI							

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Presentation and Discussion 1	Presentation			
13	Presentation and Discussion 2	Presentation			
14	Discussion	Lecture			
15	Summary	Lecture			

# Introduction to physical chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	TAKENAKA SHIGEORI						
Instructor(s)	TAKENAKA SHIGEORI						

## Course Description

To improve the knowledge about physical Chemistry, Advanced Physical Chemistry is lectured with taking up from fundamental to advanced subjects every year.

## Attainment Objectives

Participant should understand following subjects in Physical Chemistry.1) Thermodynamics2) Kinetics3) Equilibrium4) Quantum chemistry5) Statistical thermodynamics6) Electrochemistry7) Group theory

## Textbooks

Title	Author	Publisher
Before starting this class, teacher posts or notices the text book with reference one.		

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
Quize&Examination	100%

## Etc

Participants should review topics after lecture every times using the related text books and/or references. Teacher noticed the topic of next lecture and participants should search the important point of the topic

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Gas and thermodynamics law zero	Lecture		Homework about fundamental subject	
2	Thermodynamics Law I	Lecture		Homework about fundamental subject	
3	Thermodynamics Law I	Lecture		Homework about fundamental subject	

# Introduction to physical chemistry

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	30	Credits	2
Responsible Instructor	TAKENAKA SHIGEORI						
Instructor(s)	TAKENAKA SHIGEORI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
4	Free energy and chemical potential	Lecture		Homework about fundamental subject	
5	Thermodynamic equilibrium	Lecture		Homework about fundamental subject	
6	Equilibrium under single-component system	Lecture		Homework about fundamental subject	
7	Electrochemistry and ionic solution	Lecture		Homework about fundamental subject	
8	Before Quantum Chemistry	Lecture		Homework about fundamental subject	
9	Quantum Chemistry: Model system and hydrogen atom	Lecture		Homework about fundamental subject	
10	Atom and molecule	Lecture		Homework about fundamental subject	
11	Symmetry in Quantum Chemistry	Lecture		Homework about fundamental subject	
12	Rotation and vibration spectroscopies	Lecture		Homework about fundamental subject	
13	Statistical thermodynamics	Lecture		Homework about fundamental subject	
14	Kinetic theory of gases	Lecture		Homework about fundamental subject	
15	Kinetics	Lecture		Homework about fundamental subject	

# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring	
Subject	Choice	Mehods	Lesson	Total time	32	Credits	2	
Responsible Instructor	YAMADA HIROSHI							
Instructor(s)	YAMADA HIROSHI							

## Course Description

【Language】 Japanese A human body is subjected to external and internal forces, and some functions and behaviors of body components can be dealt as mechanical phenomena. By revealing the correlations between biological phenomena and mechanical factors, one can enhance healthy conditions and protect the body from disorders and diseases with an aid of engineering. This class introduces the methods in solid biomechanics to evaluate or analyze the structures, functions and responses of human body components to learn the mechanical characteristics of musculoskeletal and cardiovascular systems, etc. It also introduces some approaches to the body components with engineering discipline.

## Attainment Objectives

1. One can explain an overview of biomechanics and related fields.
2. One can calculate the force on the musculoskeletal system.
3. One can explain the mechanical characteristics and stress state of bones and teeth.
4. One can explain the stress relaxation and creep deformation of soft tissues.
5. One can explain the large deformation of soft tissues based on the concept of continuum mechanics.
6. One can explain the mechanical tests and the analyses of stress and strain by finite element method for biological tissues and cells.

## Textbooks

Title	Author	Publisher
Fundamentals of mechanics and biomechanics, in Japanese (ISBN 978-4-339-07230-3)	H. Yamada	

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
short reports in each class	40%
presentations and reports of investigations	60%

## Study Method

Lecture Contents	Methods	Instructor	before-and-after Le	Lecture rooms



# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	32	Credits	2
Responsible Instructor	YAMADA HIROSHI						
Instructor(s)	YAMADA HIROSHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Overview of biomechanics	Lecture		preparation and review for the lectures and exercises.	
2	Mechanics of human body with microgravity	Lecture		preparation and review for the lectures and exercises.	
3	Mechanics in the musculoskeletal system	Lecture		preparation and review for the lectures and exercises.	
4	Infinitesimal deformation of hard tissues	Lecture		preparation and review for the lectures and exercises.	
5	Mechanics of bone and teeth	Lecture		preparation and review for the lectures and exercises.	
6	Viscoelasticity of soft tissues	Lecture		preparation and review for the lectures and exercises.	
7	Individual investigation for Lecture 1-6	Practice		preparation and review for the lectures and exercises.	
8	Presentation of an individual investigation for Lecture 1-6	Practice		preparation and review for the lectures and exercises.	
9	Mechanics of skeletal muscles	Lecture		preparation and review for the lectures and exercises.	
10	Large deformation of soft tissues	Lecture		preparation and review for the lectures and exercises.	
11	Cardiovascular mechanics	Lecture		preparation and review for the lectures and exercises.	

# Biomechanics

Course Affiliation	the Faculty of Dentistry			Grades	1~2 grades	Semester	Spring
Subject	Choice	Methods	Lesson	Total time	32	Credits	2
Responsible Instructor	YAMADA HIROSHI						
Instructor(s)	YAMADA HIROSHI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
12	Cardiovascular mechanics	Lecture		preparation and review for the lectures and exercises.	
13	Dynamics in biological tissues	Lecture		preparation and review for the lectures and exercises.	
14	Mechanical tests and finite element analyses of tissues & cells	Lecture		preparation and review for the lectures and exercises.	
15	Individual investigation for Lecture 9-14	Practice		preparation and review for the lectures and exercises.	
16	Presentation of an individual investigation for Lecture 9-14	Practice		preparation and review for the lectures and exercises.	

# Life and Medical Ethics

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Required	Methods	Lesson and seminar	Total time	16	Credits	1
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, SOH INHO, NAKAMICHI ATSUKO, TSUJISAWA TOSHIYUKI						

## Course Description

The purpose of this course is to lecture on theory and practice of ethical issue about human and animal experiment, clinical research and etiological study. To lecture fundamental concepts of Healthcare and welfare, and professional ethics of dental hygienist.

## Attainment Objectives

The ability to:(1) describe ethical issue on life science research;  
 (2) describe ethical issue on clinical research;  
 (3) cultivate sense of medical ethics;  
 (4) describe ethical issue on dental hygienist;  
 (5) understand practice standard stipulated in the law for clinical study

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
after-action report on 1st to 6th lectures	60%
practice assignments of 7th and 8th lectures	40%

## Etc

Student consultation: at all times

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Basic knowledge and behavior on medical ethics To lecture basic knowledge on medical ethics requiring for medical profession.	Lecture (Teams, Moodle)	邵 仁浩	before: guideline for medical ethics after: after-action report	

# Life and Medical Ethics

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Required	Methods	Lesson and seminar	Total time	16	Credits	1
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, SOH INHO, NAKAMICHI ATSUKO, TSUJISAWA TOSHIYUKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Laws and guidelines for etiological and clinical research To lecture medical law, pharmaceutical affairs law, and national guidelines for epidemiological and clinical research	Lecture (Teams, Moodle)	邵 仁浩	before: guideline of ethics of epidemics and clinical study after: after-action report	
3	Animal welfare, animal rights, and ethical issue for genetic study 1 To lecture law and guidelines regarding animal welfare, and 3R based on animal welfare. In addition, to lecture infection control and recent tendency of animal experiment outside of Japan.	Lecture (Teams, Moodle)	辻澤 利行	before: guideline of ethics of animal experiment after: after-action report	
4	Animal welfare, animal rights, and ethical issue for genetic study 2 To lecture laws and guidelines regarding genetics experiment.	Lecture (Teams, Moodle)	辻澤 利行	before: guideline of ethics of genetics experiment after: after-action report	
5	Ethical issue for clinical and healthcare activity by dental hygienist To lecture ethics requiring for dental hygienists in dental practice and healthcare. In addition, to lecture ethical code, duty of confidentiality, and legal duty.	Lecture (Teams, Moodle)	中道 敦子	before: code of ethical practice of dental hygienist after: after-action report	
6	Ethical theory on medicine, healthcare and welfare To lecture ideal state of dental hygienist as medical profession through comparison theory and socially-accepted ideas based on theories regarding medical and welfare ethics	Lecture (Teams, Moodle)	中道 敦子	before: quadrisection for medical ethics, care ethics after: after-action report	

# Life and Medical Ethics

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Required	Mehods	Lesson and seminar	Total time	16	Credits	1
Responsible Instructor	AKIFUSA SUMIO						
Instructor(s)	AKIFUSA SUMIO, SOH INHO, NAKAMICHI ATSUKO, TSUJISAWA TOSHIYUKI						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7	Practice of application for ethical review in Kyushu Dental University (1) To practice form of medical ethical review of Kyushu Dental University requiring human and animal research.	Practice (Teams, Moodle)	秋房 住郎	before: form of medical ethical review of Kyushu Dental University after: practice assignment	
8	Practice of application for ethical review in Kyushu Dental University (2) To present the created form of medical ethical review of Kyushu Dental University requiring human and animal research.	Practice (Teams, Moodle)	秋房 住郎	before and after: practice assignment and presentation	

# Advanced Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

## Course Description

The purpose of this course is to lecture on role of dental hygienist in support for life and extension of the healthy life expectancy in older adults.

## Attainment Objectives

The ability to:

- describe the general condition for oral Frailty Syndrome.
- describe association of dental hygienist in medical care and nursing care for older adults.
- describe oral health management for the elderly.
- describe nursing care techniques and meal support for older adults.
- describe the evaluation method of oral function.
- carefully read research papers on older adults.

## Textbooks

Title	Author	Publisher
References documents, material are edited in Japanese		
在宅・施設で行う口腔ケアに必要な介護技術	秋房住郎・泉繭依	永末書店

## Reference Books

Title	Author	Publisher
歯科衛生士のための摂食嚥下リハビリテーション	社団法人日本歯科衛生士会 監修	医歯薬出版
摂食・嚥下リハビリテーション 第3版	才藤栄一・向井美恵	医歯薬出版

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	100%

## Etc

Student consultation: Accepted by e-mail at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Present issues of super aging society	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams

# Advanced Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
2	Present issues of super aging society and medical system	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
3	Present issues of super aging society and long-term care insurance system	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
4	Oral health management for older adults 1	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
5	Oral health management for older adults 2	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
6	Oral health management for older adults 3	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
7	Fixation assistance of body and assistance to move body1	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
8	Diagnosis and evaluation of oral function 1	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
9	Diagnosis and evaluation of oral function 2	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
10	Diagnosis and evaluation of oral function 3	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams

# Advanced Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Winter
Subject	Choice	Mehods	Lesson	Total time	30	Credits	2
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
11	Diagnosis and evaluation of oral function 4	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
12	Search papers on motivation for oral health management	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
13	Search papers on living instruction and nutrition guidance	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
14	Search papers on oral function training	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams
15	Search papers on multi-occupation collaboration	Lecture (Teams, Moodle)	泉 繭依	report	その他 Moodle Microsoft Teams



# Seminar of Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Mehods	Seminar	Total time	60	Credits	4
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

## Course Description

Practice oral function assessment, nursing care techniques and meal support for oral health management.

## Attainment Objectives

The ability to:

- Perform diagnostic examinations of oral function
- Care assistance techniques for oral health management
- Dietary support for oral health management
- Oral health management according to various diseases
- Conduct oral function assessment

## Textbooks

Title	Author	Publisher
References documents, material are edited in Japanese		
在宅・施設で行う口腔ケアに必要な介護技術	秋房住郎・泉繭依	永末書店

## Reference Books

Title	Author	Publisher
摂食・嚥下リハビリテーション 第3版	才藤栄一・向井美恵	医歯薬出版
歯科衛生士のための摂食嚥下リハビリテーション	社団法人日本歯科衛生士会 監修	医歯薬出版

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
report	100%

## Etc

Student consultation: Accepted by e-mail at any time.

# Seminar of Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Mehods	Seminar	Total time	60	Credits	4
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Diagnosis and evaluation of oral function 1-1 Practice evaluating various swallowing functions that can be performed by many professions	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
2	Diagnosis and evaluation of oral function 1-2 Practice evaluating various swallowing functions that can be performed by many professions	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
3	Diagnosis and evaluation of oral function 2-1 Practice evaluation of mouth cleaning, tongue and mouth dryness	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
4	Diagnosis and evaluation of oral function 2-2 Practice evaluation of mouth cleaning, tongue and mouth dryness	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
5	Diagnosis and evaluation of oral function 3-1 Practice evaluation of tongue, motor function, low tongue pressure, evaluation of chewing function	Practice	泉 繭依	report	その他 Moodle Microsoft Teams

# Seminar of Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Seminar	Total time	60	Credits	4
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
6	Diagnosis and evaluation of oral function 3-2 Practice evaluation of tongue, motor function, low tongue pressure, evaluation of chewing function	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
7	Case 1-1: sequelae of cerebrovascular disease	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
8	Case 1-2: sequelae of cerebrovascular disease	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
9	Case 1-3: sequelae of cerebrovascular disease	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
10	Case 2-1: Dementia	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
11	Case 2-2: Dementia	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
12	Case 2-3: Dementia	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
13	Case 3-1: Disuse syndrome	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
14	Case 3-2: Disuse syndrome	Practice	泉 繭依	report	その他 Moodle Microsoft Teams
15	Case 3-3: Disuse syndrome	Practice	泉 繭依	report	その他 Moodle Microsoft Teams

# Seminar of Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Seminar	Total time	60	Credits	4
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
16	Assuring posture and assisting in movement 1	Practice		report	その他 Moodle Microsoft Teams
17	Assuring posture and assisting in movement 2	Practice		report	その他 Moodle Microsoft Teams
18	Assuring posture and assisting in movement 3	Practice		report	その他 Moodle Microsoft Teams
19	Indirect oral function training 1	Practice		report	その他 Moodle Microsoft Teams
20	Indirect oral function training 2	Practice		report	その他 Moodle Microsoft Teams
21	Indirect oral function training 3	Practice		report	その他 Moodle Microsoft Teams
22	Meal support 1	Practice		report	その他 Moodle Microsoft Teams
23	Meal support 2	Practice		report	その他 Moodle Microsoft Teams
24	Meal support 3	Practice		report	その他 Moodle Microsoft Teams
25	Dental hygiene research related to the older adults 1	Practice		report	その他 Moodle Microsoft Teams
26	Dental hygiene research related to the older adults 2	Practice		report	その他 Moodle Microsoft Teams

# Seminar of Functional Support for Elderly persons

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Seminar	Total time	60	Credits	4
Responsible Instructor	IZUMI MAYA						
Instructor(s)	IZUMI MAYA						

Lecture No.	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
27	Practice of oral function evaluation 1	Practice		report	その他 Moodle Microsoft Teams
28	Practice of oral function evaluation 2	Practice		report	その他 Moodle Microsoft Teams
29	Practice of oral function evaluation 3	Practice		report	その他 Moodle Microsoft Teams
30	Practice of oral function evaluation 4	Practice		report	その他 Moodle Microsoft Teams

# Seminar of Community Dental Hygiene Practice

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	NAKAMICHI ATSUKO						
Instructor(s)	NAKAMICHI ATSUKO						

## Course Description

To learn the role of the dental hygienist to support the health of people.

## Attainment Objectives

1. The role of dental hygienist to community health. 2. Contents of the community oral health activity. 3. The plan of the community oral health activity. 4. Practice of the community oral health activity. 5. An evaluation of the community oral health activity. 6. Cooperate with people concerned with the making of health of the community people.

## Grading Criteria and Method of Evaluation

Evaluation item	Ratio
after-action reports	80%
presentation	20%

## Etc

Consultation is accepted at any time.

## Study Method

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
1	Basics of community oral health activity	lecture and discussion	中道 敦子	【Key words】 Community oral health	
4	Community oral health activity planning	practice	中道 敦子	after-action reports	
5	Community oral health activity practice	practice	中道 敦子	after-action reports	
6	Community oral health activity practice	practice	中道 敦子	after-action reports	

# Seminar of Community Dental Hygiene Practice

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	NAKAMICHI ATSUKO						
Instructor(s)	NAKAMICHI ATSUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
7	Community oral health activity practice	practice	中道 敦子	after-action reports	
8	Community oral health activity practice	practice	中道 敦子	after-action reports	
9	Community oral health activity evaluation feedback	practice	中道 敦子	after-action reports	
10	Community oral health activity feedback	discussion	中道 敦子	【Key words】 Community oral health, Dental hygienist	
11	Community oral health activity to an elderly person collect information	practice	中道 敦子	after-action reports	
12	Community oral health activity to an elderly person planning	practice	中道 敦子	after-action reports	
13	Community oral health activity to an elderly person practice	practice	中道 敦子	after-action reports	
14	Community oral health activity to an elderly person practice	practice	中道 敦子	after-action reports	
15	Community oral health activity to an elderly person practice	practice	中道 敦子	after-action reports	
16	Community oral health activity to an elderly person practice	practice	中道 敦子	after-action reports	
17	Community oral health activity to an elderly person evaluation	practice	中道 敦子	after-action reports	

# Seminar of Community Dental Hygiene Practice

Course Affiliation	the Faculty of Dentistry			Grades	1 grade	Semester	Spring
Subject	Choice	Methods	Lesson and seminar	Total time	60	Credits	4
Responsible Instructor	NAKAMICHI ATSUKO						
Instructor(s)	NAKAMICHI ATSUKO						

Lecture	Contents	Methods	Instructor	before-and-after Le	Lecture rooms
18	Community oral health activity to an elderly person feedback	discussion	中道 敦子	【Key words】 Appetite, Oral function decline	
19	Community oral health activity collect information	practice	中道 敦子	after-action reports	
20	Community oral health activity planning	practice	中道 敦子	after-action reports	
21	Community oral health activity practice	practice	中道 敦子	after-action reports	
22	Community oral health activity practice	practice	中道 敦子	after-action reports	
23	Community oral health activity practice	practice	中道 敦子	after-action reports	
24	Community oral health activity practice	practice	中道 敦子	after-action reports	
25	Community oral health activity evaluation	practice	中道 敦子	after-action reports	
26	Community oral health activity feedback	discussion	中道 敦子	【Key words】 Dental Hygiene Practice, Life stage	
27	Prospects of the dental hygienist activity to community	discussion	中道 敦子	Your idea	
28	Prospects of the dental hygienist activity to community	discussion	中道 敦子	Your idea	
29	Latest research trends	discussion	中道 敦子	Paper report	
30	Latest research trends	discussion	中道 敦子	Paper report	