

Category (科目区分)	Cluster of Social Medicine System		
Course Title (授業科目名)	Medical Information System Practice		
Instructors (担当者名)	Tetsuya OTSUBO	Academic Year (配当年次)	1,2
Required course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	1
Class Format (授業形態)	Lecture, Exercise (1-9), Webclass on demand (10)		
Schedule (開講期間)	September 2024 ~ October 2024 (details of the schedule can be negotiated)		
Class Date/Period (開講曜日・時間)	Every Tuesday, 18:00-21:00 (details of the schedule can be negotiated)		
Course Outline/ Course Objectives (授業の概要・到達目標)			
<p>Course Outline: This course introduces and deepens the understanding of the requirements, implementation techniques, security of medical,hospital and healthcare information systems.</p> <p>Course Objectives: The goal of this course is to acquire the requirements, implementation techniques, and security required for medical,hospital and healthcare information systems and the ability to put these requirements into practice.</p>			
Course Planning (授業計画)			
	Course Outline/ Course Objectives (授業の概要及び到達目標) (Contents of Class) ((授業内容))	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
1	Introduction to Medical Information Systems. (Scheduled for Sep. 3th) In this class, systems for medical information will be discussed, including recent trends.	Professor. Tetsuya Otsubo	Department of Medical Informatics [Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F]
2	Requirements for medical information systems and electronic medical record systems. (Scheduled for Sep. 10th) In this class, explain the requirements that medical/hospital/healthcare information systems in the next era should have from both social and technical backgrounds.	Professor. Tetsuya Otsubo	Department of Medical Informatics [Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F]
3	Issues Concerning Medical Information. (Scheduled for Sep. 17th) The digitalization of medical care has been promoted as a national policy, and social trends such as the use of Individual Number Cards for insurance cards and online eligibility verification have been started. In this class, In this class, explain the points to keep in mind when handling highly sensitive medical information and personal information, including the relationship with related laws and regulations, based upon actual clinical practice.	Professor. Tetsuya Otsubo	Department of Medical Informatics [Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F]
4	Research on Medical Information 1. (Scheduled for Sep. 24th) The trends in research on medical information systems and the utilization of that information will be described.	Professor. Tetsuya Otsubo	Department of Medical Informatics [Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F]
5	Research on Medical Information 2. (Scheduled for Oct. 1st) Discussion of research on medical information of interest to students will be conducted through literature review and presentation.	Professor. Tetsuya Otsubo	Department of Medical Informatics [Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F]

	Course Outline/ Course Objectives (授業の概要及び到達目標) (Contents of Class) ((授業内容))	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
6	Personal information protection in medical information (Scheduled for Oct. 8th) The digitalization of medical care has been promoted as a national policy, and social trends such as the use of Individual Number Cards for insurance cards and online eligibility verification have been started. In this class, In this class, explain the points to keep in mind when handling highly sensitive medical information and personal information, including the relationship with related laws and regulations, based upon actual clinical practice.	Associate Professor Masayuki KATAHIRA	Department of Medical Informatics [Computer Room, Reserch Building for Basic Medicine 1F]
7	Digital image processing in medical information (part 1) (Scheduled for Oct. 15th) Medical imaging today is generally based on computerized digital images. This lecture will cover the basic concepts of digital imaging and computer image processing, including basic concepts, image compression, and digital image processing algorithms.	Associate Professor Masayuki KATAHIRA	Department of Medical Informatics [Computer Room, Reserch Building for Basic Medicine 1F]
8	Digital image processing in medical information (part 2) (Scheduled for Oct. 22nd) In this exercise, students will actually experience the various digital image processing techniques learned in the 8th lecture, using several sample images.	Associate Professor Masayuki KATAHIRA	Department of Medical Informatics [Computer Room, Reserch Building for Basic Medicine 1F]
9	General discussion and report writing (Scheduled for Oct. 29th) In this class, a comprehensive discussion will be held to summarize the entire course. And students will be required to write a report on a topic chosen in advance from among the contents studied in this course.	Professor. Tetsuya Otsubo Associate Professor Masayuki KATAHIRA	Department of Medical Informatics [Computer Room, Reserch Building for Basic Medicine 1F]
10	(WebClass) Review using WebClass System. Report submission	Professor. Tetsuya Otsubo	Department of Medical Informatics [Webclass]
Grading Criteria (成績評価の基準と方法)			
A total of 45 hours (30 hours of class lectures and excersizes + 15 hours of out-of-class study) constitutes one unit. Grading will be decided comprehensively based on attitude, report, and participation.			
Contact Information (問い合わせ先(氏名, メールアドレス等))			
Name: Tetsuya OTSUBO / E-mail: otsubo@med.akita-u.ac.jp			
Coment (その他特記事項)			
Message: For working graduate students who are unable to attend due to work commitments, etc., the schedule can be adjusted. Therefore, students who wish to take this course must contact the person in charge of the course in advance. Textbook/Reference Books: Materials will be distributed or references will be specified as necessary. Out of Class Study: Students are expected to do preparatory studies according to the objectives and			