Category（科目区分）	Cluster of Social Medicine System		
Course Title（授業科目名）	Medical Inforamation System Practice		
Instructors（担当者名）	Tetsuya Otsubo	Academic Year（配当年次）	1,2
Required course / Elective Cpourse（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 2025 〜 October 2025（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）

Course Outline: This course aims to provide an understanding of the knowledge, operational skills, and security measures necessary for utilizing real-world data in medical information systems.
Course Objectives：The goal of this course is to acquire and apply the knowledge, operational skills, and security measures necessary for utilizing real-world data in medical information systems.

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	General Overview of Real-World Data. This provides an overview of real-world data in medical information systems, incorporating recent trends and developments.	Professor. Tetsuya Otsubo	Department of Medical Informatics 〔Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F〕
2	Preprocessing of Real-World Data Using R This lecture covers the preprocessing of real-world data through hands-on exercises using R.	Professor. Tetsuya Otsubo	Department of Medical Informatics 〔Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F〕
3	Manipulation of Real-World Data Using R (1) This lecture covers the processing of real-world data through hands-on exercises using R.	Professor. Tetsuya Otsubo	Department of Medical Informatics 〔Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F〕
4	Manipulation of Real-World Data Using R (2) Following Lecture 3, this session will cover the processing of real-world data through hands-on exercises using R.	Professor. Tetsuya Otsubo	Department of Medical Informatics 〔Division of Medical Informatics Conference Room, Wing No.1 of the University Hospital B1F〕
5	Designing Research Using Real-World Data Through literature review and presentations, students will engage in discussions on research using real-world data that aligns with their interests.	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 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 inmedical information (part 1) 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 inmedical information (part 2) 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 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)）

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Comment　（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