

基本情報/Course Schedule Information	
開講区分(開講学期)/Semester	Fall and Winter Term
曜日・時間/Day and Period	Wed5
開講科目名/Course Name (Japanese)	情報ネットワーク学入門
開講科目名(英)/Course Name	Introduction to Information Networking
授業形態/Type of Class	講義科目/Lecture
単位数/Credits	2
担当教員/Instructor	KOIZUMI Yuki,TAKEMASA Zyunji,AMANO Tatsuya,FUJIHASHI Takuya

※メディア授業科目について

授業回数の半数以上を、多様なメディアを高度に利用して教室等以外の場所で行う授業を「メディア授業科目」としています。

学部学生が「メディア授業科目」を卒業要件に算入できるのは60単位が上限です。

なお、非該当の場合であっても、メディアを利用した授業を実施する場合があります。

授業担当教員一覧

詳細情報/Detailed Syllabus Information	
授業サブタイトル/Course Subtitle	Introduction to Information Networking
開講言語/Language of the Course	English
学習方法/Learning Method	聴講・視聴/Listening and watching face-to-face/online class,読解/Reading,討論/Discussion,調査/Research,発表/Presentation ☐ Listening and watching face-to-face/online class: Listening and watching a lecture, video, or demonstration, face-to-face or via online (e.g., attending a face-to-face lecture, watching an on-demand video) ☒ Reading: Reading books and academic papers (e.g., summarizing an academic paper, reading information on a website) ☒ Discussion: Learning through question-and-answer interactions and exchanges of opinions among students and between students and the instructor (e.g., pair/group discussion, online chat, one-on-one guidance for writing an academic paper) ☐ Collaborative work: Working as a pair or a group (e.g., producing a poster through group work) ☒ Research: Collecting information from books and academic papers; gathering and analyzing data by fieldwork (e.g., review of previous research, fieldwork) ☐ Experience/practice: Learning from experience- and practice-based activities, and feedback on such activities (e.g., solving problems; laboratory work using instruments; on-campus and off-campus practical training; skills practice including sporting skills; project-based learning; internship) ☒ Presentation: Writing papers, making presentations, and creating works (e.g., report writing, oral/poster presentation, creation of works, portfolio development) ☐ Others(free description)
右の8つの学習方法のうち、該当するものにチェックをつけてください。 「その他(自由記述)」を選択した場合は、右の黄色セルに具体的な内容を入力してください。	
授業の目的と概要/Course Objective	This lecture presents an advanced introduction to modern information networking technologies. This lecture also covers introductory topics for networking research methodologies such as system performance analysis techniques and networking algorithms.
履修条件・受講条件/Requirement / Prerequisite	Basic knowledge on the Internet.
出欠席及び受講に関するルール/Attendance and Student Conduct Policy	
教科書・指定教材/Textbooks	Powerpoint files prepared by Prof. J. Kurose, who is one of authors of the following book are used. James F. Kurose and Keith W. Ross, Computer Networking: A Top-Down Approach (The latest Edition), Pearson.
参考図書・参考教材/Reference	Not specified, but the following is a reference book. James F. Kurose and Keith W. Ross, Computer Networking: A Top-Down Approach (7th Edition), Pearson, 2017.
成績評価に関する補足情報/Additional Information on Grading	Report 80% +Work at the course 20% (no examination)
特記事項/Special Note	
オフィスアワー/Office Hour	18:10-18:40, Wednesday
実務経験のある教員による授業科目/Course conducted by instructors with practical experience	N/A

※ 合理的配慮は定型文につき除外。

学習目標・成績評価詳細情報/Learning Goals &Grading Policy Information	
学習目標(1)/Learning Goal(1)	To obtain skills to design protocols of individual layers of the Internet-based protocol architecture
学習目標(2)/Learning Goal(2)	To obtain the knowledge about the latest networking technologies and researches
学習目標(3)/Learning Goal(3)	
学習目標(4)/Learning Goal(4)	
学習目標(5)/Learning Goal(5)	

↑ 5行以上必要な場合は、行を挿入してください。

評価方法/Evaluation Method (プルダウンで選択してください。「その他(自由記述)」を選択した場合は、カッコ内に具体的な内容を入力してください。)					
学習目標/Learning Goals	レポート・論文/Report/paper	学習への参加度/Learning Engagement			
学習目標(1)/Learning Goal(1)	○	○			
学習目標(2)/Learning Goal(2)	○	○			
学習目標(3)/Learning Goal(3)					
学習目標(4)/Learning Goal(4)					
学習目標(5)/Learning Goal(5)					
評価割合(%) /Grade Breakdown	80%	20%	%	%	%

↑ 5行以上必要な場合は、行を挿入してください。評価割合/Allocation of Marks (％)：100%

授業計画/Class Plan Detailed Information			
回/Time	題目/Title	内容/Content	授業時間外学習/ Independent Study Outside of Class
1	Introduction	Guidance Learn the basics of information networks and the Internet.	Prepare for the class based on the class materials.
2	Application Layer	Learn various application layer protocols	Prepare for the class based on the class materials. - Write reports
3	Transport Layer	Learn the role of the transport layer, focusing on the typical transport protocols UDP and TCP.	Prepare for the class based on the class materials.
4	Transport Layer	Learn the role of the transport layer, focusing on the typical transport protocols UDP and TCP.	Prepare for the class based on the class materials. Write reports
5	Network Layer	Learn about the role of the network layer, routing, and network protocol IP Learn about Software	Prepare for the class based on the class materials.
6	Network Layer	Learn about the role of the network layer, routing, and network protocol IP Learn about Software	Prepare for the class based on the class materials. Write reports
7	Data Link Layer	Learn the role of the data link layer, MAC protocol, and LAN basics.	Prepare for the class based on the class materials.
8	Data Link Layer	Learn the role of the data link layer, MAC protocol, and LAN basics.	Prepare for the class based on the class materials.
9	Wireless and Mobile Networks	Learn about wireless networks, cellular networks, and related protocols	Prepare for the class based on the class materials.
10	Wireless and Mobile Networks	Learn about wireless networks, cellular networks, and related protocols	Prepare for the class based on the class materials. Write reports
11	Multimedia Networking	Learn about streaming issues for multimedia (audio, video), and various protocols mainly for streaming.	Prepare for the class based on the class materials. Write reports
12	Network Security	Learn the basics of network security (encryption, authentication, etc.), with a focus on related protocols.	Prepare for the class based on the class materials.
13	Network Security	Learn the basics of network security (encryption, authentication, etc.), with a focus on related protocols.	Prepare for the class based on the class materials. Write reports
14		Summarize the start-of-the-art network research	Summarize the state-of-the-art network research Make a presentation
15		Give a presentation of the state-of-the-art network research and discuss the research	Write reports
16			

↑ 16行以上必要な場合は、行を挿入してください。

授業担当教員/Instructor(s)					
教員氏名/Instructor Name	ふりがな/Name (hiragana)	所属・職名・講座名/Affiliation, Title, Course	居室/Office	内線/Extension	e-mail/E-mail
Koizumi Yuki	こいずみ ゆうき	Graduate School of Information Science and Technology・Associate Professor			
Junji Takemasa	たけまさ じゅんじ	Graduate School of Information Science and Technology・Assistant Professor			
Takuya Fujihashi	ふじはし たくや	Graduate School of Information Science and Technology・Assistant Professor			

Tatsuya Amano	あまの たつや	Graduate School of Information Science and Technology · Assistant Professor			

↑ 5行以上必要な場合は、行を挿入してください。