

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

Course Number	Course Name	Credits	standard registration year	Term	Meeting Days/Period etc.	Classroom	Instructor	Course Overview	Remarks	Credited Auditors	Application conditions	Subjects Areas or Course offering Schools/Colleges
0A00101	Applied Ethics	1.0	1 - 5	FallB	Intensive		Matsui Kenichi, Ohgami Akira	Situational ethical principles such as research ethics for research laboratories and medical ethics for hospitals do not always correspond well each other in giving us a clear direction in pursuing the best quality of life in modern society. Rather than taking individual principles for granted, this course attempts to understand how we may disentangle somewhat conflicting ethical principles. In so doing, this course provides unique perspectives to ethical principles by incorporating cultural and historical contexts of human rights and environmental concerns.	Lecture is conducted in English. face-to-face			Graduate General Education Courses
0A00102	Introduction to Environmental Ethics	1.0	1 - 5	FallB	Intensive		Matsui Kenichi, Watanabe Kazuo	Environmental ethics helps us not only think about interpersonal relations in society but also the ones between people and the natural environment. This expansive scope helps us see our daily activities, ethical or not, within ecosystems or biotic communities. This course invites students to think about a need to establish a universally applicable ethical principle/ law for global citizens to tackle with environmental problems. To answer this question, it introduces many environmental ethical ideas related to biodiversity, bioethics, animal rights/ welfare, and household activities.	Lecture is conducted in English. face-to-face			Graduate General Education Courses
0A00202	English Presentations	1.0	1 - 5	SprC	Intensive		Wood Matthew Christopher	This course provides an overview of basic techniques for public speaking and presentations in English. Students are then given ample opportunity to practice these techniques in front of the class.	Lecture is conducted in English. Online(Asynchronous)			Graduate General Education Courses
0A00311	Global Issues and Global Society: Food Security	1.0	1 - 5	FallB	Intensive		Ezura Hiroshi	講義が提起した「持続可能な開発目標(SDGs)」に密着した国際社会が直面する課題を解説し、大学院生各人に国際社会の一員としての自覚を提起することで、高専教養を受けた者が果たすべき役割と責任について熟考することを目指す。当科目は「持続可能な開発目標(SDGs)」の中でGoal 2 & 12に関連した、国際社会が直面する「食料問題」について取り扱う。世界の人口増と食料生産、消費動向、食糧安全保障、食料安全保障、食糧安全保障技術などについての講義を通して国際社会で活躍できる能力と人間力を養う。	Lecture is conducted in English. face-to-face			Graduate General Education Courses
0A00312	Global Issues and Global Society: Marine Environmental Change and Life	1.0	1 - 5	Spr Vac	Intensive		Inaba Kazuo, Shiraiwa Yoshihiro	講義が提起した「持続可能な開発目標(SDGs)」に密着した国際社会が直面する課題を解説し、大学院生各人に国際社会の一員としての自覚を提起することで、高専教養を受けた者が果たすべき役割と責任について熟考することを目指す。当科目は「持続可能な開発目標(SDGs)」のうち、Goal 13 & 14に関連した、国際社会が直面する「海洋環境変動と生命」について取り扱う。CO2濃度上昇に伴う地球規模気候変動、海洋酸性化、地球温暖化による生物多様性・生態系・資源の地球規模的変化などの国際問題をめぐる講義することにより、国際社会で活躍できる能力と人間力を養う。	Lecture is conducted in English. face-to-face			Graduate General Education Courses
0A00313	Global Issues and Global Society: The Social Brain	1.0	1 - 5	Spr Vac	Intensive		Ogawa Sonoko, Wydeli Taeko N.	講義が提起した「持続可能な開発目標(SDGs)」に密着した国際社会が直面する課題を解説し、大学院生各人に国際社会の一員としての自覚を提起することで、高専教養を受けた者が果たすべき役割と責任について熟考することを目指す。当科目は「持続可能な開発目標(SDGs)」の中で、主として、Goal 3 & 4に密着する「社会的責任」として、高専教養を受けた者が果たすべき役割と責任について熟考することを目指す。国際社会が直面する「社会的責任」に起因する様々な問題を「社会」として新たな分野を創出しそれを取り扱う。原則課題として、社会的責任と環境、社会認知の内在的基盤、高専教養の認知機能などについて講義する。	Lecture is conducted in English. Hybrid or Others			Graduate General Education Courses
0A00314	Global Issues and Global Society: Infection, Health and Medical Issue	1.0	1 - 5	FallC	Intensive		Wagatsuma Yukiko, Kondo Masahide	講義が提起した「持続可能な開発目標(SDGs)」に密着した国際社会が直面する課題を解説し、大学院生各人に国際社会の一員としての自覚を提起することで、高専教養を受けた者が果たすべき役割と責任について熟考することを目指す。当科目は「持続可能な開発目標(SDGs)」のうち、Goal 3に密着した、国際社会が直面する「感染症・環境健康問題」について取り扱う。	Lecture is conducted in English. 10/7,10/14,10/21,10/28,11/4,11/11,11/18,12/2,12/9,12/16			Graduate General Education Courses
0A00316	Global Issues and Global Society: Environmental Pollution and Health Effects	1.0	1 - 5	FallAB	Intensive		Yasuhiro Shinkai, Kumagai Yoshito	1.The international community is facing various problems caused by several chemical exposure as "environmental pollution and health effects". In this course, substances that affect the human body and that are extensively present in the environment such as nanoparticles, exogenous endocrine disruptors such as dioxin, cadmium, arsenic, organochlorine compounds, methylmercury and organic tin will be covered. 2.It is related to the 3rd goal of the "Global Sustainable Developmental Goals (SDGs)" posed by the United Nations. 3.Clarification of issues related to society in the international community. Research to find solutions for the problems caused by the lack of socially, actual situation of environmental pollution and health damage on the regional and global scale, lecture on the possibility of a scientific approach to problem solving, time for Q&A after the lecture. 4.Regarding "Roles of course coordinator", "class form" and "output", please follow the application form (attached document) stated in the general coordinator. This Course series focuses on the topics of "Sustainable Developmental Goals" set by the United Nations, especially Goal 3.	Lecture is conducted in English. Online(Asynchronous)			Graduate General Education Courses
0AA3012	Japan's Politics and Civil Society 1	1.0	1, 2	FallAB	by appointment		Yamamoto Hidehiro	In this class, we aim to understand Japanese politics and civil society and to master methodology of social sciences through reading some basic literatures in English. In particular, we make much use of comparative methods. We discuss a variety of themes concerning civil society in this class.	Identical to 01D8491. Lecture is conducted in English. Online(Synchronous)			Graduate School of Business Sciences, Humanities and Social Sciences (Inter-disciplinary Foundation Courses)
0ABAE49	Studies in Anglophone Culture (2A)	1.0	1, 2	SprAB	Fr2		Lafontaine Andr�e	This seminar explores the women's genres in literature, radio, and film throughout 20th century America, as they intersect with changing social contexts and tastes. We will additionally explore production trends, criticism, and popular ideas about gender.	Open in odd number years. Identical to 02D5A49. Lecture is conducted in English. Hybrid or Others in an online hybrid format (combining asynchronous (filmed lectures) and synchronous (TEAMS discussions) content)			Master's Program in Humanities
0ABAE51	Studies in Anglophone Culture (2B)	1.0	1, 2	FallAB	Fr2		Lafontaine Andr�e	This seminar approaches the writers and filmmakers working in pulp and Noir films in Hollywood from the 1930s to the late 1950s and beyond. We will examine the stylistic and thematic preoccupations of the genre, its roots in German Expressionism, as well as the influence of WWII, the Great Depression, and the detective novel. This seminar will allow students to develop further understanding of key mid-20th century American writers and filmmakers, the functioning of the Studio system, and two influential aesthetic traditions: film noir and the hardboiled detective novel.	Open in odd number years. Identical to 02D5A51. Lecture is conducted in English. Hybrid or Others in an online hybrid format (combining asynchronous (filmed lectures) and synchronous (TEAMS discussions) content)			Master's Program in Humanities
0ABAE63	Transnational Literature (2)	1.0	1, 2	SprAB	Tue4		Heselhaus, Herrad	This course focuses on "Relational Studies in Literature" and analyzes and discusses how texts connect in literature, culture and politics in an international framework. The course will be based on the analysis and interpretation of interconnected primary literary texts proposed by the instructor or participants. It will also introduce and discuss various conceptualizations of "intertextuality", "relationality", "multilingualism" and "translation".	Open in odd number years. Identical to 02D5A63. Lecture is conducted in English. Online(Synchronous)			Master's Program in Humanities
0ABAE64	Applied Humanities (2)	1.0	1, 2	FallAB	Tue4		Heselhaus, Herrad	The study of "Applied Humanities" answers to social and intellectual needs of society and is especially dedicated to the understanding and solution-finding processes of global and local crises. The course will focus on topical material (especially literary publications) concerning long-term crises or acute disaster. Students will have the opportunity to do original literary research connected to the course's main topic.	Open in odd number years. Identical to 02D5A64. Lecture is conducted in English. Online(Synchronous)			Master's Program in Humanities
0ABC124	International Organisations	1.0	1, 2	SprAB	Thu2	3K126	AKIYAMA Hajime	This seminar introduces the role and limitations of international organizations in international society. Students will be able to examine the history, theory and practice of international organizations critically. They will also acquire basic academic communication skills by making a presentation and writing a research paper.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC125	Political Philosophy	1.0	1, 2	SprBC	Wed6	3K226	KIYAMA Kosuke	This course aims to familiarize students with topics of political philosophy and affords them with an overview of the field, especially those relating to international public policy. The main topics under discussion include themes such as basic normative theories, global justice, fairness in trade.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC300	Methods of Fieldwork I	1.0	1, 2	SprAB	by appointment		Urano Edson Ioshiaki	The objective of this course is to introduce students to qualitative research methods and research design. The purpose is to provide students with theoretical and practical skills while planning and carrying out their own research, through lectures and group discussions.	詳細は担当教員に問い合わせくださいPlease contact the instructor for details. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC301	Methods of Fieldwork II	1.0	1, 2	FallAB	Fr4	8A409	Urano Edson Ioshiaki	The objective of this course is to introduce students to qualitative research methods and research design. The purpose is to provide students with theoretical and practical skills while planning and carrying out their own research, through lectures and group discussions.	Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC310	Southeast Asia and Eurasian Culture and Society B	1.0	1, 2	SprAB	Mon6	8A107	Shiyoa Akifumi	This course examines the establishment and development of the Soviet nationalities policy, and the nation-building process in Central Eurasia in 1920s and 1930s. The instructor will help students to develop an understanding of the new research trends of Modern Central Eurasian history, cultural anthropology and environmental studies.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC326	Topics in Central Eurasian Studies A	1.0	1, 2	FallAB	Tue3	8A107	Yamamoto Yukiko	This course examines the current economic, political social and cultural climate of Central Eurasian countries within the global context. By utilizing the Sustainable Developmental Goals (SDGs) as a guideline of the global measure, it explores area's developmental issues and identifies efforts to overcome challenges. Students will gain a basic knowledge of international developmental goals, particularly the SDGs through various readings and discussions.	This course is provided in English. NipCa fellows are expected to register this course. Identical to 01D0992. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC327	Topics in Central Eurasian Studies B	1.0	1, 2	SprAB	Tue5		Yamamoto Yukiko	This course examines the current economic, political social and cultural climate of Central Eurasian countries within the global context. By utilizing the Sustainable Developmental Goals (SDGs) as a guideline of the global measure, it explores area's developmental issues and identifies efforts to overcome challenges. Students will gain a basic knowledge of international developmental goals, particularly the SDGs through various readings and discussions. This is a subsequent course of topic in Central Eurasian Study A. The theme of Prosperity and Planet will be covered in this semester.	This course is offered in English. NipCa fellows are expected to register this course. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC402	International Trade	2.0	2	SprAB	Mon5,6	3B203	Kurokawa Yoshinori	This course will study traditional and new trade theories and their evidence and will also study selected topics in international trade, such as trade and wage inequality, by applying the traditional and new trade theories.	Identical to 01D2654. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy

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0ABC403	Public Economics	2.0	2	SprAB	Tue5,6	3K226	Naito Hisahiro	This course teaches both the theoretical side and empirical side of public economics. In many countries, the size of public sector is quite large. Thus, it is natural and necessary to know how the presence of public sector affects the economy and how to design the optimal policy. First, this course teaches the effect of the policy of the public sector such as taxation, government debt, labor market policy, environment policies and social security policy. Second, it also discusses how to analyze those policies empirically using the micro and macro data set in depth. Third, this course teaches how to design the optimal policy and what kind of parameters are important.	Identical to 01D2651. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC404	Microeconomics	2.0	1	SprAB	Wed/Thu 3	3K220	Nakano Yuko	This course provides students with a deep understanding of graduate-level microeconomics for policy analysis. The topics to be covered include consumer theory, producer theory, game theory, and other related topics in microeconomics.	Identical to 01D2136. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC405	Development Economics I	1.0	1, 2	SprAB	Fri1	3K219	Mohammad Malek Abdul	The world economy is rapidly changing, and is confronting many challenges ranging from income inequality/gap, poverty/middle income trap, food insecurity, productivity/skill gap, institutional differences, shocks/conflicts, gender gap, etc. What are the underlying concepts and theories to explain those challenges? How can we quantify and appreciate these challenges? What tools do we have to evaluate the different technological and institutional innovations aiming to elucidate these challenges? We do not respond these questions not only with narratives and abstract theory. Rather, we also examine detailed survey data and look at policies that have been attempted and evaluated scientifically.	Equivalent to 0ABC406 Development Economics I and 01D2652 Development Economics. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC406	Development Economics II	1.0	1, 2	SprAB	Fri2	3K219	Mohammad Malek Abdul	The world economy is rapidly changing, and is confronting many challenges ranging from income inequality/gap, poverty/middle income trap, food insecurity, productivity/skill gap, institutional differences, conflicts, gender gap, etc. What tools do we have to evaluate the different technological and institutional innovations aiming to elucidate these challenges? We examine detailed survey data and policies that have been evaluated usefulness scientifically.	Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC407	International Finance and Policy	2.0	1, 2	SprAB	Fri5,6	3A212	Moges Abu Girma	The course is an advanced theory and application of international finance theory and policy for graduate students. The main topics for discussion include real business cycle theory, global imbalances, exchange rate determination, short term and long run adjustments to trade flow, sovereign debt and default risks, determinants of international capital flows and multinational production, and international financial policy and coordination.	Identical to 01D547 and 01D2656. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC408	Economics of Development	1.0	1, 2	SprAB	Fri4	3K219	Kashiwagi Kenichi	本講義では、開発経済学の主要理論とアプローチについて説明し、発展途上国の経済発展に関する課題について考察することを目的とする。特に、開発の概念、経済成長、貧困と不平等の問題等を中心に、経済発展の理論やモデルを学ぶことで、学生が開発経済学への理解を深めるとともに、発展途上国の経済発展に関する分析において、興味深い問題設定を行えるようになることを目指す。	Identical to 01D9743 and 01D2667. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC411	Public Management B	1.0	1, 2	SprAB	Tue3	3K226	Okura Sae	This course serves as an in-depth understanding of public policy and management. This course is designed with emphasis on two objective understanding of key concepts in public management and application of theories to real world problems. Students are expected to display their knowledge of public management through various readings on Japanese public administrations and policymaking processes.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC414	Comparative Criminal Law B	1.0	1, 2	SprAB	Thu2	3K226	TSAI YUNCHI	By the end of this course, students should be able to discuss what acts and mental state are for different levels of criminal offenses, and should be able to explain goals of punishment in criminal justice system of Japan, China, and Taiwan.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC625	Seminar on Policy Analysis and Programme Evaluation B	1.0	1, 2	FallAB	Tue4	3K227	Matsumura Midori	Based on what students have learned in "Policy Evaluation Seminar A", students will apply their skills to practice. In the real world, researchers often use combined methodologies and consider various treatment levels. Thus, by using real world examples (secondary data), students will conduct impact evaluation and learn methodologies suitable to answer their own research questions. Also, using the knowledge gained from Policy Evaluation II, students will critically analyze the limitations of their own research. Students will be given homework and assignments to advance their understanding and research skills.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC626	Seminar on International Organisations	1.0	1, 2	FallAB	Thu2	3K126	AKIYAMA Hajime	The purpose of this seminar is to enhance students' ability to conduct independent research on international organizations. Students will be able to identify their own academic interests, produce a clear research plan, and write an academic paper on international organizations.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC627	Seminar on Political Philosophy	1.0	1, 2	FallAB	Fri5	3K226	KIYAMA Kosuke	This seminar aims to familiarize students with central debates relating to political philosophy and affords them with an overview of the field by examining significant and important philosophical texts. The aim is to impart an in-depth understanding of the subject. The main topics in the discussion include themes such as basic normative theories, human rights, philosophy of international law.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC602	Seminar on Southeast Asian and Oceanian Studies BI	1.0	1, 2	SprAB	Tue5		Mohammad Malek Abdul, Kayane Yuka, Tsutsumi Jun, Toyama Ayako	This seminar aims to deepen and develop the research of Master thesis. Each student is requested to give a presentation on progress of his/her thesis, including results of analysis, regularly. Professors will also provide a presentation of their research occasionally in the seminar.	Open in odd number years. Identical to 01D2656. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC603	Seminar on Southeast Asian and Oceanian Studies BII	1.0	1, 2	FallAB	Tue5		Mohammad Malek Abdul, Kayane Yuka, Tsutsumi Jun, Toyama Ayako	Based on the study on seminar on Southeast Asia and Oceanian Studies All, this seminar aims to deepen and develop the research of Master thesis. Each student is requested to give a presentation on progress of his/her thesis, including results and discussion, regularly. Professors will also provide a presentation of their research occasionally in the seminar.	Open in odd number years. Identical to 01D2658. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC825	Seminar on Central Eurasian Studies (SPIES) I	2.0	1	FallAB	Mon3,4		Yamamoto Yukiko	This course will start with introduction of academic writing for various disciplines. It will then move on to the discussion of student's Master thesis themes, ways to define research questions and methodology and analysis of their research subjects.	Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC826	Seminar on Central Eurasian Studies (SPIES) II	2.0	2	SprAB	Mon3,4		Yamamoto Yukiko	Based on seminar on Central Eurasian Studies I, this course will continue studying academic writing for various disciplines. It will then move on to the discussion of student's Master thesis themes, ways to define research questions and methodology and analysis of their research subjects.	Lecture is conducted in English. This course is offered in English. NiPca fellows are expected to register this course. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC827	Seminar on Central Eurasian Studies (SPIES) III	2.0	2	FallAB	by appointment		Yamamoto Yukiko	Based on seminar on Central Eurasian Studies II, this course will deepen academic writing for various disciplines. It will then move on to the discussion of student's Master thesis themes, ways to develop methodology, analysis and discussion of their research subjects toward finalizing thesis.	Lecture is conducted in English. This course is offered in English. NiPca fellows are expected to register this course. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC922	Seminar on Public Policy B	1.0	1, 2	FallAB	Fri1	3K226	Okura Sae	This course serves as an in-depth understanding of public policy analysis and contemporary Japanese politics. Students are expected to display their knowledge of public policy analysis through various readings on Japanese politics and policymaking processes. At the end of the course, students are expected to present a research project relevant to their M.A. thesis.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0ABC925	Seminar on Comparative Criminal Law B	1.0	1, 2	FallAB	Tue4	3K226	TSAI YUNCHI	The course begins with an overview of theories of punishment and goes on to discussion about important social issues in criminal justice system of Japan, China and Taiwan. Students will learn criminal legal systems in these countries, and will improve their critical thinking ability and presentation skills.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Master's Program in International Public Policy
0BBC238	Special Seminar on Policy Analysis and Programme Evaluation BI	1.0	1-3	SprAB	Tue5	3K227	Matsumura Midori	In this class, it is assumed that students are equipped with basic impact evaluation skills. Thus, we will read top-ranked academic journals' papers to update our knowledge on policy evaluations and critically discuss each academic paper. For PhD students, it is important to read academic papers outside of their primary interest areas in order to expand their knowledge and perspective. Therefore, paper themes will not be specified so long as they relate to policy evaluations.	Open in odd number years. Identical to 02D3420. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Doctoral Program in International Public Policy
0BBC239	Special Seminar on Policy Analysis and Programme Evaluation BII	1.0	1-3	FallAB	Tue5	3K227	Matsumura Midori	In this class, we will spend half our time to reading papers from top-ranked academic journals and devote the rest to the presentation and discussion of the participants' own research papers relating to policy and programme evaluations. Hence, students are required to conduct a research paper during the term of this class. When conducting their own research, students are allowed to use either primary or secondary data, and they are free to choose topics based on their own interests.	Open in odd number years. Identical to 02D3431. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Doctoral Program in International Public Policy
0BBC806	Special Seminar on International Development Policy BI	1.0	1-3	SprAB	Wed6	3K426	Moges Abu Girma	This seminar is an advanced course in international development issues and policies. It deals with contemporary topics and challenges in development economics and reviews the latest analytical tools to understand development policy challenges in African, Asian and Latin American countries. Students are required to make extensive reading and make presentations in the seminar and to participate in discussions and reviews of recent contributions in the field of development economics.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Doctoral Program in International Public Policy
0BBC807	Special Seminar on International Development Policy BII	1.0	1-3	FallAB	Wed6	3K426	Moges Abu Girma	This seminar is an advanced course in international development issues and policies. It deals with contemporary topics and challenges in development economics and reviews the latest analytical tools to understand development policy challenges in African, Asian and Latin American countries. Students are required to make extensive reading and make presentations in the seminar and to participate in discussions and reviews of recent contributions in the field of development economics. SSIDP BI and BII are sequential and deal with broad themes in development economics and policy issues. SSIDP BII addresses country and regional experiences and case studies in development policy and the interaction and cooperation across countries.	Open in odd number years. Lecture is conducted in English. 授業形式はシラバスの「その他」欄で確認してください。			Doctoral Program in International Public Policy
0AFM201	Organizational Management II: Professional Manager	1.0	1, 2	FallC	Sat3,4		Noda Toru	This course will cover topics on learning practical management skills for newly appointed managers to promote performance. It will consist of the three key dimensions of management behaviors, 1) How to successfully make the transition from employee to manager, 2) Tips on how to carry out criticism and discipline, and 3) Strategies and behavior styles for mentoring, coaching, problem resolution. Students are expected to discuss and learn how to succeed and flourish as a manager using highly focused model for effective management.	Identical to 01PC201. Lecture is conducted in English. The style of lecture will be announced later.	△	There is an interview.	MBA Program in International Business
0AFM310	Marketing III: Branding	1.0	1, 2	SprA	Wed7,8		Tan Caroline S.L.	A brand essentially is one of the most valuable assets to a company. Brand management is an integral part of a firm's competitive strategy. The understanding of the different core aspects of brand and brand management is critical in ensuring customer loyalty and strong brand equity. This course examines the fundamentals of brands and brand management. Students will learn brand positioning, the building, maintaining and developing of brands as well as brand valuation and managing global brands. As the course will be conducted using the case study method, students will be given the opportunity to discuss and present their ideas and proposals of various industries.	Identical to 01PC312. Lecture is conducted in English. The style of lecture will be announced later.	△	There is an interview.	MBA Program in International Business

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

Course Number	Course Name	Credits	Standard registration year	Term	Meeting Days/Period etc.	Classroom	Instructor	Course Overview	Remarks	Credited Auditors	Application conditions	Subjects Areas or Course offering Schools/Colleges
DAFM313	Technology Management	1.0	1, 2	FallB	Wed7,8		Hirai Takashi	This course aims to grasp the landscape of Technology Management and asks the question, "How can corporations create value and capture it?" This course investigates strategic perspectives for aligning competitive strategies and core competencies associated with the use of technology and innovation.	Identical to 01PC330. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM315	Business Model Innovation	1.0	1, 2	FallA	Wed7,8		Hirai Takashi	This course is designed to acquaint students with the methodology of business model innovation and transformation. We will examine the superior business model characteristics from both strategic and organizational perspectives. Classes will be a mixture of lecture for theory/framework and case discussion with practical examples.	Identical to 01PC337. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM401	Cross Cultural Management I: Managing Across Borders	1.0	1, 2	FallA	Sat1,2		Magnier-Watanabe Remy	This course explores some theoretical concepts and practical examples related to the global manager's environment, social responsibility, national and organizational culture, foreign market entry, and global leadership.	Identical to 01PC421. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM402	Cross Cultural Management II: The Challenges of Globalization	1.0	1, 2	FallC	Thu7,8		Magnier-Watanabe Remy	This course explores some challenges of globalization, by considering economic systems and regional integration, international trade, foreign direct investment, and global human resources management.	Identical to 01PC422. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM506	Operations Management II: Decision Analysis	1.0	1, 2	SprC	Wed7,8		Xu Hua	Decision analysis provides powerful tools for dealing with complex decisions that involve multiple objectives and/or uncertainty. In this course, we will learn a useful decision process to identify and overcome the challenges of decision making. We will introduce some fundamental concepts, models and methods for decision analysis in various situations such as decision with multiple objectives, decisions under uncertainty and decisions with different decision makers and different/conflict decision objectives, namely game problems. We will make practices to solve some real-world decision problems through group works.	Identical to 01PC504. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM507	Operations Management III: Risk Analysis	1.0	1, 2	FallA	Tue7,8		Xu Hua	Risk analysis is defined as a systematic process to describe risk, i.e. to present an informative risk picture. Risk analysis is incorporated primarily in risk management and risk-based decision making. The objective of this course is to learn the fundamental concepts of risk analysis and a variety of models and methods to deal with risk identification, risk assessment and risk management problems. A risk filtering, ranking and management (RRFM) process will be introduced and applied to solve some practical risk management problems through group works.	Identical to 01PC505. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM508	Operations Management IV: Project Management	1.0	1, 2	SprC	Tue7,8		Kino Yasunobu	In order to accomplish a project successfully, it is important to carry out systematized management processes, such as requirements definition, planning, executing tasks, and monitoring and control. This course provides the fundamental knowledge of project management. For instance, WBS(Work Breakdown Structure), Scheduling techniques, EVM(Earned Value Management), Cost Estimation and Control, Risk Management, Quality Assurance and so on.	Identical to 01PC506. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAFM509	Operations Management VI: Systems Design Theory	1.0	2	SprB	Sat3,4		Kino Yasunobu	Understanding behaviors of social systems is one of key factors for success on business and our life. Diagraming techniques, for example, Flow chart, ER Diagram (Entity Relationship Diagram), State chart and UML (Unified Modeling Language) are useful to visualize/design our social systems. Additionally, natural languages, for example, Japanese, English, Spanish and other languages are useful when we will design social models. In this class we will learn text analysis, diagraming techniques and systems design.	Identical to 01PC509. Lecture is conducted in English. The style of lecture will be announced later	△	There is an interview	MBA Program in International Business
DAH0207	Computational Science Literacy	1.0	1, 2	Spr Vac	Intensive		Yabana Kazuhiro, Tong Xiao-Min, Ishizuka Naruhiko, Kameda Yoshinari, Kusaka Hiroyuki, Takahashi Daisuke, Amagasa Toshiyuki, Mori Masao, Shoji Mizuo	超高性能計算機を用いた数値解析により科学の未開領域を引く計算科学は実業・学術に亘る、重要な最先端の研究手段であり、その重要性を帯びている。これからの社会を築き上げるには計算科学の基礎的知識と方法論を身に付けておくのは必須であり、いわば「読め書き」すなわちリテラシーであるといえる。この講義はこれらから成り立つこのリテラシーである計算科学についての入門である。計算科学研究センターの教員より各分野における計算科学による研究を概観し、さらに計算科学が社会分野における情報駆動かつ協働的に進むべき発展の礎を築き上げることを目指す。また、計算科学を支える最新の計算機技術についても概説する。	Lecture is conducted in English. 1/17,2/2			Graduate School of Science and Technology (Inter-disciplinary Foundation Courses)
DAH0209	High Performance Parallel Computing Technology for Computational Sciences	1.0	1, 2	Sum Vac	Intensive		Boku Taisuke, Tatebe Osamu, Takahashi Daisuke, Tadanori Hiroto, Lee Jinsil	計算科学を支える大規模シミュレーション、超高速数値処理のためのスーパーコンピュータの主力プラットフォームは最新のマイクロプロセッサを用いた並列計算機となっている。ところが、大規模な計算機は、高い理論ピーク性能を示す一方で、実際のアプリケーションを高速に実行することは容易なことではない。この講義は、計算機の特性を最大限に活用するための必要知識、プログラミングを学ぶことを目的とする。これは、公開セミナーと同様に、計算科学リテラシーの上級コースである。	Lecture is conducted in English.			Graduate School of Science and Technology (Inter-disciplinary Foundation Courses)
DAH0316	Introduction to Environmental Sciences	2.0	1	FallAB	Wed1,2	C103 Nat. Sci.	Lei Zhongfang, Yabar Helmut Friedrich, Naahara Kenlo, Akitsu Tomoko, Matsui Kenichi, Villareal Myra Orlina, Murakami Akinobu, Yamamoto Sachiko, Mizunoya Takeshi, Yokoi Tomoyuki, Uchida Tarou, Kamae Yoichi, Toyofuku Masanori, Shimizu Kazuya, Miyamae Yusaku, Takahashi Shinya, Tsujimura Maki, Hirota Mitsuru, Zhang Zhen Ya, Yamai Keiko	This course introduces the core issues globally in environmental sciences and approaches relating to hydrology, biology, ecosystem science, analytical chemistry, climate system science, urban engineering, environmental engineering, social science, and environmental health. Through this course, students can learn the fundamentals and applications of environmental sciences from multi-perspectives on different scales. It aims to foster students from both global/local and high-/low-angle views.	DAH0316 and OAH0301 must be taken at the same time. Lecture is conducted in English. Online(Asynchronous) Online(Synchronous) face-to-face Please ask the leader of our program, if you would like to take this course.			Graduate School of Science and Technology (Inter-disciplinary Foundation Courses)
DAIG041	Electromagnetism I	1.0	1, 2	FallA	Fri1,2	32107	Fujioaka Jun	First, Maxwell's equations in vacuum are derived from the basic laws of the electric field and the magnetic field. Then, the generic properties of Maxwell equations in vacuum and Maxwell's equations in matter are studied.	Identical to 01BF111 and 01BG012. Online(Asynchronous) Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG042	Electromagnetism II	1.0	1, 2	FallB	Thu4,5	32107	JUNG Mincherl	Time-varying/time-harmonic electromagnetic fields and electrical properties of matter based on Maxwell's equations will be studied. Topics include: variable forms of Maxwell's eq., dielectrics/magnetization/magnetization-permittivity/permeability, etc.	Identical to 01BF112 and 01BG013. face-to-face Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG043	Electromagnetism III	1.0	1, 2	FallC	Thu1,2	32107	JUNG Mincherl	Wave equation, propagation, polarization, reflection, transmission, radiation, and scattering will be studied. Topics include: variable formed wave eq., transverse electromagnetic modes (in Lossy media).	Identical to 01BF113 and 01BG014. face-to-face Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG061	Solid State Physics I	1.0	1, 2	FallAB	Mon4	32107	Kojima Seiji	Solid State Physics I covers the crystal structure, wave diffraction, reciprocal lattice, crystal bindings and elastic constants.	Identical to 01BG701, 01BF117, and 01BG019. face-to-face Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG062	Solid State Physics II	1.0	1, 2	FallBC	Fri4	32107	Kojima Seiji	Solid State Physics II covers the phonons, crystal vibrations, thermal properties, free electron Fermi gas.	Identical to 01BG702, 01BF118, and 01BG020. face-to-face Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG063	Solid State Physics III	1.0	1, 2	FallC	Intensive		Kojima Seiji	Solid State Physics III covers the crystal structure, reciprocal lattice space, energy bands, semiconductor crystals, Fermi surfaces and metals.	Identical to 01BG703, 01BF119, and 01BG021. face-to-face Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIG421	Materials Chemistry A	1.0	1, 2	SprAB	Wed4	3A312	Tsujimura Seiya	The lectures include statistical processing in chemical experiments and analytical chemistry based on chemical equilibrium.	Identical to 01BG079 and OAR011. Lecture is conducted in English. Online(Asynchronous)			Master's Program in Engineering Sciences
DAIG422	Materials Chemistry B	1.0	1, 2	FallAB	Wed4	3B302	Yamamoto Yohei	This lecture covers fundamentals of quantum chemistry and Huckel molecular orbital theory and optical, electronic, and magnetic properties of molecules including the latest organic devices.	Identical to 01BG080 and OAR012. Hybrid or Others Lectures are conducted in English.			Master's Program in Engineering Sciences
DAIH001	Physical Properties and Evaluation of Semiconductor Defects and Impurities	1.0	1, 2	FallAB	Mon2	32107	Fukata Naoki	First, classify the crystalline defects in semiconductors and understand their structures. Then, study various electrical and optical properties of these defects. This lecture is opened in every odd year. Textbook: "Physics and Semiconductors: Defects and Defect Processes in Nonmetallic Materials" by J. Bardeen and R. Shocart.	Identical to 01BF205 and 01BG504. Lectures are conducted in English.			Master's Program in Engineering Sciences
DAJAO1	Scanning Electron Microscope	1.0	1, 2	SprAB	Thu4	32108	Sohda Yasunari, Sekiguchi Takashi	観察は研究の第一歩であり、我々は殆ど全ての観察の前に样品を観察する。イメージングでは、観察対象がサブミクロン以下になり、光学顕微鏡の限界を超えなければならない。電子顕微鏡が力を発揮する。この講義では、走査電子顕微鏡(Scanning Electron Microscope: SEM)を対象とし、その発展の歴史、原理を学ぶ。また、電子と物質の相互作用を概観し、二次電子、背散乱電子の生成、検出、検出を説明する。さらにSEMの構造に含まれる情報を整理し、観察法を学ぶ。後半では、電子の応用だけでなく、X線による組成分析や蛍光を使った機能評価を紹介し、材料科学への応用や最新のSEMの発展についてまとめる。	Identical to 01BF260. 毎年で日本語と英語で授業。R3年度は英語。			Master's Program in Engineering Sciences

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

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DAJA11	Physics of Electronic Devices	1.0	1, 2	SprAB	Wed4	3B302	Ogawa Haruhiro, Ohno Yuzuo	Semiconductor devices are indispensable to build an information society, and physics of semiconductor and its devices supports today's electronics. This course covers from fundamental properties on carrier statistics and current transport in semiconductors to electrical characteristics of pn and metal-oxide-semiconductor (MOS) junctions in diode or field-effect transistor. Based on these facts, the operating principles of three-terminal devices such as MOS transistor are explained.	Identical to 01B234. 授課年度は英語で授業。			Master's Program in Engineering Sciences
DAJA26	Optoelectronics	1.0	1, 2	FallAB	Mon4	3B406	Sakurai Takeaki	This course introduces the fundamentals of optical transition, absorption and recombination in semiconductors necessary to understand the operation of light emitting / light conversion devices such as LED and solar cell. The creation of new functions by introducing advanced technologies such as quantum nanostructures are also explained.	Identical to 01B258 and 0A1R101. 授課年度は英語で授業。			Master's Program in Engineering Sciences
DAJMA06	Advanced Semiconductor Physics and Engineering	1.0	1, 2	FallAB	Thu1		Kuroda Shinji	Lectures explain various properties of crystal structure, bond, and band structure for semiconductors and low dimensional structures, focusing on both understanding the basic properties and applying them to engineering.	Open in odd number years. Identical to 01B6131. Lecture is conducted in English. (Delivered in English upon request)			Master's Program in Engineering Sciences
DAJMC07	Technology Strategy for Advanced Materials	1.0	1, 2	FallAB	Tue5		Suzuki Yoshikazu	We study modern and present technology strategies for advanced materials. From this course, you can learn how to design/develop new materials.	Open in odd number years. Identical to 01B6332. Online(Asynchronous) Lecture is conducted in English.			Master's Program in Engineering Sciences
DAJMC08	Molecular Functional Materials	1.0	1, 2	FallAB	Tue3		Tokoro Hiroko	Various molecular materials are known for their unique magnetic, electronic, and optical properties. In this course, we focus on metal assembled complex magnets among the molecular magnetic materials. Learning the basic mechanism of their magnetic properties promote a better understanding for magnetic materials. Furthermore, a brief overview will be given on the electronic and optical properties of molecular materials.	Open in odd number years. Identical to 01B6327 and 0A1R001. Lecture is conducted in English. Online(Asynchronous)			Master's Program in Engineering Sciences
DAJMD06	Advanced Catalytic Chemistry	1.0	1, 2	FallC	Tue4,5		Nakamura Junji	The aim of the course is to describe the reaction mechanism and kinetics of heterogeneous catalysis at the atomic level with some topics such as environmental catalysts and electro catalysts.	Open in odd number years. Identical to 01B6430 and 0A1R030. Lecture is conducted in English.			Master's Program in Engineering Sciences
DAJME01	Nanomaterials II	1.0	1, 2	FallAB	Mon1	3Z112-1	Professors for the Materials Science and Engineering Class (in Materials Science, Physics)	For nanomaterials, students learn about the expansion to new substances/material technology for high-value material technology, as well as innovative property/functions through quantum phenomena given by nanometer size, substance, and material. This coursework will introduce cutting-edge research being carried out at research projects at the National Institute for Materials Science (NIMS), and will explain fields such as substances and materials, the creation of materials, the expression of new functions, and advanced material analysis, all from the viewpoint of nanotechnology.	Identical to 01B6710 and 01B6501. Lecture is conducted in English. face-to-face			Master's Program in Engineering Sciences
DAJME02	Phase Transformations in Materials	1.0	1, 2	FallC	Intensive		Tsuchiya Koichi	Since any properties of materials depend on their underlying microstructures, the knowledge on the control of microstructures are essential to all materials scientist. Phase transformation is an important tool to control the microstructures of materials. This course covers the fundamentals of phase transformations in materials, such as thermodynamics, phase diagrams, diffusion and interfaces.	Identical to 01B6505. Lecture is conducted in English. face-to-face			Master's Program in Engineering Sciences
DAJME04	Biomaterials	1.0	1, 2	FallAB	Mon2	3A405	Chen Guoping, Taguchi Tetsushi	The lecture introduces the basis of the synthesis and characteristics of metal, ceramics, polymers, and biological body-derived biomedical materials that have direct contact with the living body tissue. These all have a mutual influence on biomedical materials and cells, a biocompatibility and bioabsorbable property, surface-modification, adhesive agent, a drug delivery system, tissue replacement and ablation, and system engineering. These topics will all be reviewed. Students learn the basis of the synthesis and characteristics of smart biomaterials such as stimuli-responsive polymers for the future medicine.	Identical to 01B6509. Lecture is conducted in English. Online(Synchronous)			Master's Program in Engineering Sciences
DAJME05	Smart Biomaterials	1.0	1, 2	FallB	Intensive		Ebara Mitsuhiro	This lecture addresses mechanical properties of deformable solid materials represented by stress-strain curves and various strengths with an emphasis on fundamentals of mechanics.	Identical to 01B6517. Lecture is conducted in English. Online(Asynchronous)			Master's Program in Engineering Sciences
DAJME06	Deformation and Strength of Materials	1.0	1, 2	SprA	Fri1,2		Watanabe Ikumu	This lecture addresses mechanical properties of deformable solid materials represented by stress-strain curves and various strengths with an emphasis on fundamentals of mechanics.	Identical to 01B6518. Lecture is conducted in English. face-to-face			Master's Program in Engineering Sciences
DAJR011	Materials Chemistry A	1.0	1, 2	SprAB	Wed4	3A312	Tsujimura Seiya	The lectures include statistical processing in chemical experiments and analytical chemistry based on chemical equilibrium.	Identical to 01B6079 and 0A1G421. Lecture is conducted in English. Online(Asynchronous)			Master's Program in International Materials Innovation
DAJR012	Materials Chemistry B	1.0	1, 2	FallAB	Wed4	3B302	Yamamoto Yohei	This lecture covers fundamentals of quantum chemistry and Hückel molecular orbital theory and optical, electronic, and magnetic properties of molecules including the latest organic devices.	Identical to 01B6080 and 0A1G422. Hybrid or Others Lectures are conducted in English.			Master's Program in International Materials Innovation
DAJR030	Advanced Catalytic Chemistry	1.0	1, 2	FallC	Tue4,5		Nakamura Junji	The aim of the course is to describe the reaction mechanism and kinetics of heterogeneous catalysis at the atomic level with some topics such as environmental catalysts and electro catalysts.	Open in odd number years. Identical to 01B6430 and 0A1MD06. Lecture is conducted in English.			Master's Program in International Materials Innovation
DAJRL01	Optoelectronic Devices	1.0	1, 2	FallAB	Mon4	3B406	Sakurai Takeaki	This course introduces the fundamentals of optical transition, absorption and recombination in semiconductors necessary to understand the operation of light emitting / light conversion devices such as LED and solar cell. The creation of new functions by introducing advanced technologies such as quantum nanostructures are also explained.	Identical to 01B258 and 0A1JA26. 授課年度は英語で授業。			Master's Program in International Materials Innovation
DAJRM01	Molecular Functional Materials	1.0	1, 2	FallAB	Tue3		Tokoro Hiroko	Various molecular materials are known for their unique magnetic, electronic, and optical properties. In this course, we focus on metal assembled complex magnets among the molecular magnetic materials. Learning the basic mechanism of their magnetic properties promote a better understanding for magnetic materials. Furthermore, a brief overview will be given on the electronic and optical properties of molecular materials.	Open in odd number years. Identical to 01B6327 and 0A1MC08. Lecture is conducted in English. Online(Asynchronous)			Master's Program in International Materials Innovation
DAJL040	Experiment Design in Computer Sciences	2.0	1, 2	SprAB	Fri5,6	3B301	Sakurai Tetsuya, Arakawa Claus	(Course in English) This course is an overview of the basic knowledge needed for performing proper scientific experiments in the field of Computer Sciences. Therefore, this course focuses on three topics: 1- Philosophical discussion about the scientific methods, 2- Conceptual discussion about the design and analysis of Experiments, and 3- Statistical methods for the analysis of experimental data. After finishing this course, the student will be able to consider a research topic in Computer sciences, define what kind of data is necessary for advancing the knowledge in this topic, design an experiment to obtain this data, and evaluating the data in order to draw conclusions from the experiment in a rigorous manner. The evaluation method for this course is a short experiment performed in groups, which will be designed, executed, evaluated, presented and reviewed by the students by the end of the course.	Identical to 01C1740. Lecture is conducted in English.			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL068	Advanced Space Exploration Engineering Workshop 2020	2.0	1, 2	SprAB, FallAB	Mon7	3B406	Kameda Toshihiro	It is a workshop-style project based class, handling space exploration engineering mission proposal and realization. During the class, students are expected to propose their own space mission and provide some prototype equipment for the mission, including space environment test. Collaboration with foreign space engineering teams such as cubest development project is strongly encouraged.	Students can register this course even if they took previous Advanced Space Exploration Engineering courses, however, up to two credit hours can be provided in total for graduation requirement. Identical to 01C2445. Lecture is conducted in English. Online(Synchronous) During breaks, students must participate in foreign study at least for two weeks. Further information will be provided on the first day of the class.			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5319	Policy and case study on information-intelligence-based disaster risk management	1.0	1, 2	FallB	Intensive		Li Wei-Sen, Liu Yi-Chung, Fujiwara Hiroyuki, Jimemoto Michitaka	Disaster Prevention Research and Efforts in NCDR. The main concepts proposed by NCDR are aimed at how to implement scientific outputs at level of policy formation, emergency operation, information integration and risk communication. With practical case studies, it will offer students a chance to think the way to develop effective and efficient disaster risk management.	今後の状況により、オンライン授業となる可能性あり。 Identical to 01C19310. Lecture is conducted in English. Online(Synchronous) face-to-face			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5400	Principles of Software Engineering	2.0	1, 2	SprAB	Wed3,4		Vasilache Simona, Takahashi Shin	The goal of this course is to introduce basic software engineering principles. The students will learn about the necessity of software engineering as a modern engineering discipline; they will study various software development models, and focus on some of the major phases in the software development life cycle. Project planning and management, business aspects of software engineering, along with some of the basic tools used by software engineers during the development of large applications, will also be introduced.	Identical to 01C1215. Lecture is conducted in English. Online(Synchronous)			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5409	Data Engineering I	2.0	1, 2	FallAB	Tue3,4		Amagasa Toshiyuki, Shiokawa Hiroaki	データ工学の基礎および最新のトピックについて講義する。まず、基礎的なデータベース技術について概観し、次に、データエンジニアリングの手法について述べ、さらにグラフデータベースに関連するトピックを扱う。なお、講義は英語で行われるが、書き込み言語は日本語も行う。データベース、データエンジニアリングの基礎的なデータ工学方法を理解すると共に、グラフデータベース最新の技術動向についても学習する。	Identical to 01C1304. Lecture is conducted in English. Online(Asynchronous)			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5413	Programming Environment	2.0	1, 2	FallAB	Thu5,6	3B402	Tatebe Osamu, Sato Mitsuhsia	最新プログラミングやオブジェクト指向プログラミングなど高度な情報処理システムを実現するソフトウェアの開発のための最先端プログラミング言語処理系および開発環境について、並列プログラミング、分散プログラミング、Webプログラミングなどのプログラミング環境について学ぶ。	Identical to 01C1401. Lecture is conducted in English. face-to-face			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5421	Advanced Course in High Performance Computing	2.0	1, 2	FallAB	Wed2,3		Boku Taisuke, Takahashi Daisuke	本講義では、今日の先端的な科学計算(計算科学、計算工学)を支える高性能コンピューティング技術に関して、並列処理システム、プロセスアーキテクチャ、相互接続ネットワーク、後継計算モデル、高性能計算法等のハードウェアからアプリケーションまでのあらゆる階層に関与する技術について概観する。また、最先端の高性能システムを支えるアプリケーション側の学生も、高性能計算システムを構築するシステム側の学生の両方を対象とし、どちらの立場にも他の立場の力を補完させ、コアデザインの観点に高づく高性能計算技術の基礎を身につけることを目指す。	Identical to 01C1406, 02RA220, and 08T1123. Lecture is conducted in English. Online(Asynchronous)			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5427	Special Lecture on Numerical Simulation	2.0	1, 2	SprAB	Thu5,6	3B406	Cai Dongsheng	コンピュータアルゴリズムを用いた工学、化学、医学、経済学で用いられるシミュレーション問題をよく、具体的な背景として、差分法、線形代数、エルミート行列など、ソフトウェア、システムを必要とした数値的解法について、その基礎とその応用	Identical to 01C1165. Lecture is conducted in English.			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5428	Advanced Course in Computational Algorithms	2.0	1, 2	FallAB	Fri3,4		Sakurai Tetsuya, Tadano Hiroto, Imakura Akira	科学計算で用いられる各種のモジュールとアルゴリズムについて、とくに多次元線形計算を中心に講義する。 1. 数値計算を必要とするアルゴリズムの基礎例を学ぶ。 2. 行列演算に関する基本的事項を習得する。 3. 線形方程式の反復解法について理解する。 4. 固有値問題の解法について理解する。 5. 数値計算手法の選択について理解する。	Open in odd number years. Lecture is conducted in English.			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)
DAJL5430	Adaptive Media Processing	1.0	1, 2	SprAB	Mon2		Kameyama Keisuke	Adaptive techniques in processing, recognition and retrieval of media information will be discussed. Much weight will be put on re-labing the fundamental knowledge and algorithms in machine learning and signal/image processing, that are essential for adaptive handling of media contents. In addition, up-to-date methods in the field will also be mentioned. (Lecture in English)	Identical to 01C114 and 01C1408. Lecture is conducted in English. Online(Asynchronous)			Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

Course Number	Course Name	Credits	Standard registration year	Term	Meeting Days, Period etc.	Classroom	Instructor	Course Overview	Remarks	Credited Auditors	Application conditions	Subjects Areas or Course offering Schools/Colleges
DAL5437	Frontier Informatics A	1.0	1, 2	SprAB	Intensive		Amagasa Toshiyuki, Tanaka Hiroshi, Hashimoto Tetsuo, Inagaki Yuji, Kume Keitaro	理工学の特長領域における情報科学の分野に関する基礎知識について学ぶ。まず、各分野における基本的な事項およびデータの取り扱いについて学習する。さらに、当該分野のテーマに対してデータサイエンスや機械学習を駆使して応用する事例について講義と実習を履修し、応用から学習する。本講義では、宇宙情報科学、物理情報科学について学ぶ。	Lecture is conducted in English. (Online/Synchronous)		Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)	
DAL5438	Frontier Informatics B	1.0	1, 2	FallB	Intensive		Amagasa Toshiyuki, Yajima Hiidenobu, Nakata Ayako	理工学の特長領域における情報科学の分野に関する基礎知識について学ぶ。まず、各分野における基本的な事項およびデータの取り扱いについて学習する。さらに、当該分野のテーマに対してデータサイエンスや機械学習を駆使して応用する事例について講義と実習を履修し、応用から学習する。本講義では、バイオ情報学、気象情報科学について学ぶ。	Lecture is conducted in English. (Online/Synchronous)		Degree Programs in Systems and Information Engineering (Degree Programs' Common Courses)	
DAN0405	Simulation of Environmental Policy	2.0	1, 2	SprAB	Thu1,2	C103 Nat. Sci.	Mizunoya Takeshi	This course aims to develop economical and mathematical knowledge and learn the evaluation methods to conduct comprehensive evaluation of environmental policy. Topics in this course cover micro, macro and welfare economics and its application. Students especially learn how to evaluate the impact of public investment and macroeconomic policies on both the economy and the environment, and how to make policy decisions.	Online (On demand). Identical to 01AD014 and 0AQ101. Lecture is conducted in English. (Online/Asynchronous)		Degree Programs in Life and Earth Sciences (Degree Programs' Common Courses)	
DAN8014	Intercultural Communication	2.0	1, 2	SprAB	Wed2,3		Buzas Diana Mihaela	'Culture is to humans as water is to fish'. Even though we cannot function outside a culture, culture has intangible aspects preventing us from realizing what our own medium is. This course will take us on a journey to elevate many of those unspoken norms and basic assumptions of own and other culture into consciousness. A fascinating aspect of crossing cultures is the unique way it can become informing and open up access to creative problem solving. This can lead to personal and organizational growth. Nevertheless, communication between individuals from different cultures can also lead to a spectrum of negative reactions, from slight emotional discomfort all the way to conflict. The course will build theoretic knowledge, it is highly interactive, experiential and reflection-based.	Lecture is conducted in English.		Master's Program in Agro-Bioresources Science and Technology	
DAND361	Introduction to Water Environment	2.0	1, 2	FallAB	Thu3,4	B107 Nat. Sci.	Tajimura Maki	This class aims to foster ability to understand principles of water resources issues in relation with regional issues based on scientific/ anthropogenic knowledge of hydrological cycle and water governance. The consists of lectures on basics of hydrology and discussion on textbook of water governance/ policy.	授業の録画は、Stream上で学生が授業後いつでも閲覧可能とする。 Identical to 01AD301 and 0AQ103. Lecture is conducted in English. (Online/Synchronous)		Master's Program in Environmental Sciences	
DAND362	Environmental Soil Science	2.0	1, 2	Sum Vac	Intensive		Tamura Kenji, Asano Maki	Soil is a fundamental part that supports the natural ecosystems. This lecture deal with basic soil concept, basic soil chemistry, soil functions in ecosystems, soil genesis and classification, soil degradation and conservation, and the relationships between global environmental issues and soil. In this lecture, we will have brainstorming and group discussions on soil issues.	後者は生物農科学系科206. Lecture is conducted in English.		Master's Program in Environmental Sciences	
DAND363	Environmental Analytical Chemistry	1.0	1, 2	FallAB	Thu5	C502 Nat.Sci.	Sakaguchi Aya	Environmental Science is a field of study that plays an active role in solving environmental issues/problems in terms of science. In these studies, the target environmental conditions will be understood physically, biologically and chemically with appropriate preciseness and accuracy. Through lectures, students can learn analytical chemistry with application to environmental science. The course addresses the sampling of environmental materials, sample preparation, and subsequent chemical analyses using conventional/ advanced methods.	Identical to 01AD304. Lecture is conducted in English. (Online/Asynchronous)		Master's Program in Environmental Sciences	
DAND365	Remote Sensing	1.0	1, 2	SprAB	Thu5	B107 Nat. Sci.	Nasahara Kenlo	Remote sensing (observation of earth surface from air and space) is a powerful tool for environmental monitoring and assessment. We learn the principles, utility, and potential of this technology. As a basic background of this lecture, students are encouraged to study elementary physics, mathematics, and geography.	English class. Depending on the situation, the class will be on-line. Identical to 01AD206 and 01HA410. Lecture is conducted in English.		Master's Program in Environmental Sciences	
DAND366	Introduction to Waste Management (Solid Waste Management Systems Planning)	2.0	1, 2	SprAB	Fri1,2	B107 Nat. Sci.	Yabar Helmut Friedrich	One of the greatest challenges modern societies face is finding ways to increase economic growth while minimizing resource consumption and environmental degradation. The highly inefficient use of natural resources, from their extraction to final disposal, is already damaging the planet. The vast majority of the extracted resources end up as waste. This class will introduce the main aspects concerning integrated waste management including current waste treatment technologies, strategies, policies and modeling of waste management systems.	Identical to 01AD312 and 0AQ107. Lecture is conducted in English. (Online/Synchronous)		Master's Program in Environmental Sciences	
DAND367	Solid Waste Management Systems Planning	2.0	1, 2	FallAB	Mon3,4		Yabar Helmut Friedrich	In addition to health and safety concerns, the planning of waste management systems must also be sustainable i.e. environmentally sound, socially acceptable and economically viable. This class introduces the tools necessary to design integral solid waste management systems. The class provides specific modeling based on life cycle thinking towards planning of waste management systems through scenario design.	Identical to 01AD316 and 0AQ101. Lecture is conducted in English.		Master's Program in Environmental Sciences	
DAND368	Climate System Study I	1.0	1, 2	SprAB	Thu3	C103 Nat. Sci.	Kamae Yoichi	地球の気候システムは、大気、海洋、陸域間における複雑な相互作用により形成される。本講義においては、気候システムが気候変動に与える影響、および気候変動の相互作用等を、気候変動等の問題を念頭に置いて講義する。①に気候システム、②気候変動、③気候変動の予測、④気候変動の緩和策、⑤気候変動の適応策、⑥気候変動の政策について講義する。	英語で授業。 Identical to 01AD316 and 0AQ101.		Master's Program in Environmental Sciences	
DAND369	Environmental Psychology	1.0	1, 2	FallAB	Tue2	8G504	Kaida Naoko	In this course, students learn theories and practices in decision making in diverse environmental issues ranging from natural resources utilization, pollution control and natural conservation based on economics, psychology and applied behavioral science. Students first learn theoretical backgrounds of environmental decision making and then different cases of environmental decision making at different levels such as individuals and households, groups (i.e., schools, offices), societies (i.e., communities, cities and policies (i.e., countries, regions, global). Toward the end of the course, students discuss how to encourage pro-environmental behavioral change and decision making.	Identical to 0AQ104. Lecture is conducted in English. (Online/Asynchronous)		Master's Program in Environmental Sciences	
DAND373	Introduction to Ecology	2.0	1, 2	SprAB	Mon3,4	B107 Nat. Sci.	Hirota Mitsuru, Yokoi Tomoyuki	Ecology is scientific study of interactions of organisms with one another (biotic environments), and with abiotic environments. As ever increasing serious environmental issues at local to global scale, ecology is recognized as one of the fundamental science, because we have to learn and well consider various relevant aspects on organisms and environments. This class will address fundamentals of ecology mainly focused on plants, insects, their relations, and its surrounding environments. Although I'll try to talk students who have little background on ecology and biology, please don't forget to make every effort to understand and to have flexibility to think for oneself!	Lecture is conducted in English.		Master's Program in Environmental Sciences	
DAND377	Environmental Analysis and Planning	2.0	1, 2	FallAB	Mon5,6	C502 Nat.Sci.	Murakami Akinobu, Yamamoto Sachiko	環境中の持続可能な発展の環境を改善し、都市計画と土地利用の科学的基礎知識と技術を習得する。また、都市計画について、環境の科学的基礎知識と技術を習得する。また、都市計画について、環境の科学的基礎知識と技術を習得する。また、都市計画について、環境の科学的基礎知識と技術を習得する。また、都市計画について、環境の科学的基礎知識と技術を習得する。	Lecture is conducted in English. (Online/Asynchronous)		Master's Program in Environmental Sciences	
DAND378	Applied Environmental Ethics (Introduction to English Presentation and Debate)	2.0	1, 2	FallAB	Mon1,2	B107 Nat. Sci.	Matsui Keiichi	This course aims to develop and refine your academic skills that are imperative in analyzing legal, social, and ethical implications of environmental issues. You are asked to actively participate in discussing, presenting, critically reading and writing about these issues so that you will be fully prepared for your internationally competent career as an environmental scientist or leader. Our topics for discussion include (1) environmental leadership/ diplomacy; (2) eco-economy; (3) rights of nature; (4) climate change; (5) LMOs and ELS; (6) biological diversity and ecological services; (7) global bioethics; (8) cultural diversity and indigenous knowledge; and (9) innovative approaches to environmental ethics. The examination of these wide-ranging topics will not only enrich your knowledge about environmental ethics but also enlarge your academic background as environmental science communicator.	Identical to 01AD601, 01AH404, and 0AQ107. Lecture is conducted in English.		Master's Program in Environmental Sciences	
DAND379	Environmental Health Perspective	2.0	1, 2	FallAB	Fri2,3		Kumagai Yoshito, Yasuhiro Shinkai, Ohnishi Ryosuke, Ohbayashi Norihiko, LOMBARDO Fabien Claude Renaud, Zheng Ling	We are exposed to a variety of environmental stresses on a daily basis through living environments, lifestyles, and dietary habits. For example, while we take the nutrients necessary for life support through our diet, overload and deficiency of the nutrients impair health. It is also little doubt that chemicals contaminated in water and foods affect human health, resulting in occurrence of a variety of diseases. In this lecture, first of all, the students will learn 1) fundamental biochemistry (e.g., metabolism and synthesis) of the five major nutrients (carbohydrates, lipids, proteins, vitamins, and minerals) in the body, 2) role of such nutrients in the body development/maintenance and aging, 3) onset of various diseases caused by excessive and deficient the nutrients, and 4) intake of the nutrients from food. Next, we will learn the health hazards caused by environmental pollutants contaminated in water and food.	Identical to 01ER102 and 0AVC002. Lecture is conducted in English. (Online/Asynchronous) manaba, stream		Master's Program in Environmental Sciences	
0AS0507	Introduction to Social Medicine	2.0	1	SprAB	Thu1,2		Ichikawa Masao, Fukushige Mizuho, Tamiyas Nanako, Morita Nobuaki, Saito Tamaki, Ogai Hisakazu, Yamagishi Kazumasa, Kondo Masahide, Wagatsuma Yukiko, Gosho Masahiko, Togoobaatar Ganchimeg, Ito Tomoko, Sasahara Shinichiro, Okubo Reiko, Hori Ai, Hori Daitsuke, Honda Katsuya, Sugano Yukiko	This course aims to equip students with an understanding of the broad determinants of health - income and poverty, education, environmental factors such as housing and transport - as well as health care and genetic influences and of the importance of a multi-disciplinary approach which includes medicine, epidemiology, statistics, economics, social science and many other subjects in improving population health.	Identical to 01EQ005. Lecture is conducted in English.		Graduate School of Comprehensive Human Sciences (Inter-disciplinary Foundation Courses)	

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

Course Number	Course Name	Credits	Standard registration year	Term	Meeting Days, Period etc.	Classroom	Instructor	Course Overview	Remarks	Credited Auditors	Application conditions	Subjects Areas or Course offering Schools/Colleges
DATAL20	Education in Japan: Principles Policies and Practice I	1.0	1, 2	SprAB	Mon4	8B204	Kawaguchi Jun	現代日本の教育をめぐる諸点を制度、制度、実践といった多角的視点から理解し、またその課題について十分な知識をもとに論じることができるようになることを目標とする。授業では、日本の教育をめぐるさまざまなテーマを取り上げ、その現況、変遷、実践を概観する。具体的には、教育制度、学校教育、数学教育、理科教育、社会科教育、言語教育、生涯教育、特別支援教育、高等教育をテーマとし、近年の政策動向とその課題を提示する。授業の内容をもとに討論を行い、論点についての理解を深める。なお、主として英語で授業を行う。	Identical to 01B207. Lecture is conducted in English.			Master's Program in Education
DATAL21	Education in Japan: Principles Policies and Practice II	2.0	1, 2	SprC	Intensive	8B209	Fujita Teruyuki, Sato Hiroshi, Kawaguchi Jun	現代日本の教育政策、制度、実践を支える精神論について理解を深めるとともに、諸外国との比較を行うことで、日本の教育の特徴を提示する。Education in Japan (で) 授業した内容をより深化させ、日本の教育に対する理解を深める。具体的なテーマは、キャリア教育、学校現場、特別支援教育の3点とし、近年の政策動向とその課題を提示する。授業の内容をもとに討論を行い、論点についての理解を深める。なお、主として英語で授業を行う。	Identical to 01B208. Lecture is conducted in English.			Master's Program in Education
DATGA16	English in Medical Science and Technology I	1.0	1	SprA SprB	Mon2	4F204,4F305	Miyamasu Flaminia, Mathis Bryan James, Mayers Thomas David	The goal of this course is for students to develop the English proficiency they need to effectively and energetically communicate their professional achievements within the international scientific community. To this end, students will be divided into three classes and will take four modules. In the first module, they will study the basics of scientific communication. Thereafter, they will rotate through three modules on scientific writing, scientific presentation, and multimedia communication. Classes will be conducted entirely in English, so students will also hone their listening skills. Upon completion of the course, students will have a foundation for sharing knowledge and ideas with other scientists in English.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA17	English in Medical Science and Technology II	1.0	1	FallA FallB	Mon5	4F204,4F305	Miyamasu Flaminia, Mathis Bryan James, Mayers Thomas David	Dependent on the module they took in the English in Medical Science and Technology I course, students will rotate through two of the following modules: Scientific Writing, Scientific Presentation, Scientific Multimedia Communication. As in the spring semester, classes will be conducted entirely in English, so students will also hone their listening skills. Upon completion of the course, students will have a foundation for sharing their knowledge and ideas with other scientists in English.	Identical to 0AVC013. Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA23	Seminar on Basic Medical Sciences	3.0	1	Annual	by appointment			修士論文研究の進行上必要となる形質的・量的研究論文を紹介すると共に、討論することによって自身の研究課題を明確にすることを目的とする。修士論文執筆する各研究グループの研究について、その内容を報告する。修士論文執筆に際して必要な文献を収集し、その内容について正しく理解し、分析することを学ぶ。(2)自身の研究についてまとめ、発表・討論することを修得する。(3)自身の研究に必要なプロトコルを作成し、研究を積み立てることを学ぶ。所属する研究グループとその専門分野は以下のとおりである。	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA24	Seminar for International Students	1.0	1, 2	SprC	by appointment		Ichikawa Masao	This course provides international students with an opportunity to get prepared for disasters they might face in Japan. By the end of this course, students will be able: 1. To understand the concept and principles of disaster prevention and preparedness. 2. To obtain practical skills for disaster prevention and preparedness.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA26	Medical Science Seminar VI: Epidemiology and Biostatistics	2.0	1, 2	Annual	Tue6		Wagatsuma Yukiko, Goshō Masahiko	This course assists students in learning steps through the discussions over textbooks and articles in epidemiology and biostatistics. We encourage students majoring in epidemiology and biostatistics should attend the course.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA28	Topics in Biochemistry	1.0	1	SprAB	Mon1	4F204	Fukuda Aya, Irie Kenji, Hisatake Koji, Uchida Kazuhiko, Mizuno Tomoaki, Shionji Kensuke, Keino-Masu Kazuko	DNAの複製、転写、翻訳および代謝、細胞周期、細胞シグナル伝達などのトピックについて概観する。自費入体機能の分子メカニズムについて論じることができる。	Identical to 0BTK11. Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA29	International Medical Sciences Exchange Program I	1.0	1, 2	Annual	by appointment		Morikawa Kazuya, Ho Kiong, Koganezawa Tadachika	This course aims to train students with English skills for (i) research presentation, (ii) practical communication with overseas researchers and academic staff, and (iii) debate, through the international activities, such as international scientific conferences and overseas training courses.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA30	International Medical Sciences Exchange Program II	2.0	1, 2	Annual	by appointment		Morikawa Kazuya, Ho Kiong, Koganezawa Tadachika	This course aims to train students with English skills for (i) research presentation, (ii) practical communication with overseas researchers and academic staff, and (iii) debate, through the international activities, such as international scientific conferences and overseas training courses. Students will be able to develop their own career by obtaining information from global prospective and establish human network connections, through research collaborations and technical trainings.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGA31	International Medical Sciences Exchange Program III	3.0	1, 2	Annual	by appointment		Morikawa Kazuya, Ho Kiong, Koganezawa Tadachika	This course aims to train students with English skills for (i) research presentation, (ii) practical communication with overseas researchers and academic staff, and (iii) debate, through the international activities, such as international scientific conferences and overseas training courses. Students will be able to obtain information globally and establish human network connections through proactive international activities. It is expected that student will judge their character in global context and situation. Students will then be able to develop their own career or make an action towards their goal.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGC32	Introduction to Human Pathology	2.0	1	SprAB	Wed5,6	4F204	Noguchi Masayuki, Kato Mitsuyasu, Nagata Michio, Suzuki Hiroyuki, Takayashiki Norio, Kano Junken	This subject is aiming to understand disease entity, etiology, morphological changes of the representative human diseases at molecular and clinical levels and to study the importance of pathology findings for diagnosis and treatment of the diseases.	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGC38	English Discussion and Presentation I	2.0	1, 2	SprAB	Fri1,2		Irie Kenji, Mizuno Tomoaki, Suzuki Hiroyuki, Suda Yasuyuki	修士論文研究に関する英語による講義と討論。英語による論文紹介と討論を通して、生命科学の知識、および英語によるサイエンスコミュニケーション能力、プレゼンテーション能力を身につける。Iでは、分子細胞生物学をトピックとする。(1) タンパク質の立体配座、ダイナミクス、酵素学。(2) 転写。(3) 遺伝子発現における転写後調節。(4) 遺伝子発現の制御機構におけるmiRNAの役割。(5) シグナル伝達。(6) 細胞の増殖と環境要因への適応(7) 免疫。(8) 細胞の反応と環境要因への適応(9) 免疫。(10) 細胞の反応と環境要因への適応(11) 細胞の移動。(12) 細胞の分化と環境要因への適応(13) 免疫。(14) 免疫の調節。(15) 免疫の調節。(16) 免疫の調節。(17) 免疫の調節。(18) 免疫の調節。(19) 免疫の調節。(20) 免疫の調節。	Lecture is conducted in English.			Master's Program in Medical Sciences
DATGC39	English Discussion and Presentation II	2.0	1, 2	FallAB	Wed1,2		Irie Kenji, Kato Mitsuyasu, Kawaguchi Atsushi, Takahashi Satoru, Suzuki Hiroyuki, Mizuno Tomoaki, Suda Yasuyuki, Funakoshi Yuji	修士論文研究に関する英語による講義と討論。英語による論文紹介と討論を通して、生命科学の知識、および英語によるサイエンスコミュニケーション能力、プレゼンテーション能力を身につける。IIでは、分子細胞生物学をトピックとする。(1) がん生物学。(2) RNA代謝とその前との関係。(3) 腫瘍ウイルス学。(4) 分子免疫学。(5) シグナル伝達性タンパク質とその前との関係。(6) がんの分子メカニクス。(7) がんの分子メカニクス。(8) がんの分子メカニクス。(9) がんの分子メカニクス。(10) がんの分子メカニクス。(11) がんの分子メカニクス。(12) がんの分子メカニクス。(13) がんの分子メカニクス。(14) がんの分子メカニクス。(15) がんの分子メカニクス。(16) がんの分子メカニクス。(17) がんの分子メカニクス。(18) がんの分子メカニクス。(19) がんの分子メカニクス。(20) がんの分子メカニクス。	Identical to 0AVC021. Lecture is conducted in English. Hybrid or Others 併行面とオンラインの併用			Master's Program in Medical Sciences

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

Course Number	Course Name	Credits	Standard registration year	Term	Meeting Days/Period etc.	Classroom	Instructor	Course Overview	Remarks	Credited Auditors	Application conditions	Subjects Areas or Course offering Schools/Colleges
DATG641	Prominent Discoveries in Neuroscience	1.0	1, 2	SprA	Tue/Thu7		Yanagisawa Masashi, Sakurai Takeshi, Abe Takashi, Sakaguchi Masanori, Lazarus Michael, Honjoh Sakiko	神経科学分野において重要な論文を読み、内容を深く理解することで、基礎から応用までの幅広い知識を養う。 目標 重要論文を読みこなし、トピックについて論じることが出来る。 さらに、英語によるプレゼンテーション能力が向上し、自分自身の研究分野においても英語で議論ができる。	Identical to 03AA185. Lecture is conducted in English.		Master's Program in Medical Sciences	
DATG649	Oncology	2.0	1	FallAB	Mon/Tue 4	4F204	Noguchi Masayuki, Irie Kenji, Kato Mitsuyasu, Sakurai Hideyuki, Sato Yuiko, Sekine Ikuo, Chiba Shigenu, Hisatake Koji, Masumoto Koji, Suzuki Hiroyuki, Takayashiki Norio, Mizokami Yuji, Minaguchi Takeo, Mori Kensaku, Kojima Takahiro, Kato Kosuke, Funakoshi Yuji	This subject is aiming to understand disease entry, etiology, and the progression mechanism of malignant tumor at the molecular level. The topics of the latest tumor research (basic and diagnostic treatment (clinical)) are also covered while acquiring basic knowledge.	Lecture is conducted in English. Online(Asynchronous)		Master's Program in Medical Sciences	
DATG652	Genome Medicine	2.0	1, 2	FallAB	Tue5,6	4F204	Noguchi Emiko, Takekoshi Kazuhiro, Tsuchiya Naoyuki, Noguchi Masayuki, Homma Masato, Muralani Masafumi, Morikawa Kazuya, Kawai Koji, Sekine Ikuo, Fukushima Hiroko,	ゲノム科学の基本原理とその医学への応用方法を理解する。 目標 ゲノム科学の最新研究、診断・治療におけるゲノム情報とゲノム情報の臨床応用について、方法と課題を論じることが出来る。	Lecture is conducted in English. Online(Asynchronous)		Master's Program in Medical Sciences	
DATG658	Critical Path Research Management	2.0	1	FallAB	Mon,6,7	4F204	Hashimoto Koichi, Matsusaka Satoshi, Muratani Masafumi, Tsurushima Hideo, Kojima Takahiro, Machino Takeshi, Yamada Takeshi	This course aims to equip students with an understanding the process of critical path research and translational research, using to translate the finding in basic research more quickly and efficiently into medical practice. 1. Students will be able to explain the process of medical drug and device development. 2. Students will be able to explain the importance of pre-clinical and clinical studies evaluating the safety and efficacy of medical drugs and devices. 3. Students will be able to explain the social situation of medical drug and device development, and the organization and authorized people concerning drug development. 4. Students will be able to explain the importance of technology for drug and device development and intellectual property.	Identical to 04VC205. Lecture is conducted in English. Online(Asynchronous)		Master's Program in Medical Sciences	
DATG661	Human Infection and Immunology	2.0	1	SprAB	Mon,3,4	4F204	Shibuya Kazuko, Morikawa Kazuya, Kawaguchi Atsushi, Ho Kiong, Matsumoto Isao, Tahara Satoko, Tsuboi Hiroto, Oda Chiyusa, NABEKURA TUKASA	感染を惹起する病原微生物、特に細菌とウイルスの生物学的特性、宿主免疫システム、および病原微生物と宿主の免疫との相互関係を分子レベルで理解する。これらの基礎的知識をもとに、ヒトの感染性の病原体を誘発する感染の過程を学ぶ。 1. 細菌の生物学的特性を説明できる。 2. 病原細菌および病原ウイルスの複製を説明できる。 3. 細菌の病原性の機序と制御を説明できる。 4. 感染の制御、抗菌剤、薬剤耐性などについて説明できる。 5. 寄生虫や真菌の複製機序を説明できる。 6. 寄生虫や真菌の病原性について分子レベルで説明できる。 7. ウイルスの複製の分子機序について説明できる。 8. ウイルスの病原性について分子レベルで説明できる。 9. ウイルス工学の概要を説明できる。 10. ウイルスに対する制御メカニズムや戦略を説明できる。 11. 免疫システムを誘発する細胞や臓器を説明できる。 12. 抗体の構造と機能を説明できる。 13. リンパ球の分化と抗原受容体の遺伝子再構成を説明できる。 14. 自然免疫について説明できる。 15. 獲得免疫について説明できる。 16. 免疫系の病態を説明できる。	Identical to 08TK103. Lecture is conducted in English.		Master's Program in Medical Sciences	
DAVC002	Environmental Health Perspective	2.0	1	FallAB	Fri,2,3		Kumagai Yoshito, Yasuhiro Shinaki, Ohnishi Ryosuke, Ohbayashi Norihiko, LOMBARDO Fabien Claude Renaud, Zheng Ling	We are exposed to a variety of environmental stresses on a daily basis through living environments, lifestyles, and dietary habits. For example, while we take the nutrients necessary for life support through our diet, overload and deficiency of the nutrients impair health. It is also little known that chemicals contaminated in water and foods affect human health, resulting in occurrence of a variety of diseases. In this lecture, first of all, the students will learn 1) fundamental biochemistry (e.g., metabolism and synthesis) of the five major nutrients (carbohydrates, lipids, proteins, vitamins, and minerals) in the body, 2) role of such nutrients in the body development/maintenance and aging, 3) onset of various diseases caused by excessive and deficient the nutrients, and 4) intake of the nutrients from food. Next, we will learn the health hazards caused by environmental pollutants contaminated in water and food.	Identical to 01ER102 and 04ND379. Lecture is conducted in English. Online(Asynchronous) manaba, stream		Master's Program in Medical Sciences	
DATHA11	Introduction to Epidemiology	1.0	1	SprAB	Tue3	4F204	Wagatsuma Yukiko	Epidemiology is the study of factors affecting the health and illness of populations, and serves as the foundation and logic of interventions made in the interest of public health and preventive medicine. The aim of this course is to learn the fundamental concepts and uses of epidemiology, and its role in formulating principles.	Lecture is conducted in English.		Master's Program in Public Health	
DATHA12	Biostatistics	1.0	1	SprAB	Wed3	4F204	Gosho Masahiko, Maruo Kazushi	This course aims to equip students with understanding basic statistical methods and with interpreting the analysis results, and with applying them for their medical studies. Students will learn statistical test, estimate, correlation, regression, analysis of variance, multivariate analysis, survival analysis.	Lecture is conducted in English.		Master's Program in Public Health	
DATHA13	Biostatistics in Practice	1.0	1	SprAB	Wed,5,6	4F305	Maruo Kazushi, Gosho Masahiko	This course aims to teach concepts and techniques to analyze various data from biomedical studies, using the SAS OnDemand for Academic, a free online software for statistical analysis.	Lecture is conducted in English.		Master's Program in Public Health	
DATHA14	Dissertation in Public Health Sciences	8.0	2	Annual	by appointment			修士論文を作成するための研究の支援および指導を行う。 論文指導を行う。	Lecture is conducted in English.		Master's Program in Public Health	
DATHA15	Seminar: Epidemiology and Biostatistics	2.0	1	Annual	Tue6		Wagatsuma Yukiko, Gosho Masahiko, Tamiya Nanako	This course assists students in learning steps through the discussions over textbooks and articles in epidemiology and biostatistics. We encourage students majoring in epidemiology and biostatistics should attend the course.	Lecture is conducted in English.		Master's Program in Public Health	
DATHA16	Critical Appraisal in Quantitative Health and Social Sciences Research	1.0	1	SprC	Mon/Thu 3,4	4F204	Togoobaatar Ganchimeg	The course will provide students with experience in critically appraising a range of research methods and familiarize them with a variety of biostatistical approaches. Students will use a variety of frameworks to critically appraise literature from their chosen field of study and examine and discuss the implications for evidence-based practice.	Lecture is conducted in English.		Master's Program in Public Health	
DATHE22	Health Care Policy and Management	1.0	1, 2	FallAB	Thu3	4F204	Kondo Masahide, Okubo Reiko	1) To understand basic theories of health care policy science and challenges of health systems worldwide. 2) To understand health systems and challenges in Japan. Goal: To be able to argue issues of health systems based on basic theories from the viewpoint of health policy sciences.	Identical to 04VC206. Lecture is conducted in English. Online(Asynchronous)		Master's Program in Public Health	
DATHE23	Health Service Administration	1.0	1, 2	FallAB	Thu4	4F204	Tamiya Nanako, Sugiyama Takehiro, Mori Takahiro, Iwagami Masao	1) To understand the policy and systems for administering health services in Japan 2) To understand the practices of health services in Japan 3) To understand Health Services Research from the point of view of the administration of health services. Upon completion of this course, students will be able to examine the current issues on health system and its administration based on basic theories from the prism of Health Services Research.	Lecture is conducted in English. face-to-face		Master's Program in Public Health	
DATHE24	Health Economics	1.0	1, 2	FallC	Intensive	4F204	Kondo Masahide, Okubo Reiko	As a foundation of health economics, application of microeconomics, welfare economics, and new institutional economics in health care are explained. Goal: To be able to view the health system as a market for health care. To be able to appraise economic evaluations. (1) Introduction: health care, money and economic growth, (2) Microeconomics of health insurance, (3) Law of demand, (4) Theory of production, (5) Market mechanism, (6) Behaviour of health care provider, (7) Basics of welfare economics, (8) Economic evaluation of health care programme, (9) Equity, justice and fairness, (10) Overall discussion.	Identical to 01D2512. Lecture is conducted in English. Online(Asynchronous)		Master's Program in Public Health	
DATHE25	Introduction of Health Services Research	1.0	1, 2	SprAB	Thu4	4F305	Tamiya Nanako, Sugiyama Takehiro, Mori Takahiro, Iwagami Masao, Ito Tomoko	This course is designed to introduce basic concepts and methods used in Health Services Research. The course helps students to understand how to apply Health Services Research on several fields in health care based on the interests of the students. Upon completion of this course, students will be able to discuss current public health and welfare services through the prism of Health Services Research.	Identical to 01D2510. Lecture is conducted in English.		Master's Program in Public Health	
DATHF31	Epidemiology	2.0	1, 2	FallAB	Tue,3,4	4F305	Wagatsuma Yukiko	The fundamental concepts and uses of epidemiology, and its role in formulating principles, are examined. The uses of information science and statistics in epidemiological and clinical researches are studied, and the role that these fields can play in EBM (Evidence-Based Medicine) are also examined. Exercises are conducted in which epidemiological methods are utilized, to promote understanding of the practice of this discipline.	Lecture is conducted in English. hybrid or Others 併列履とオンラインの使用		Master's Program in Public Health	

Course List for Graduate program (Courses conducted in English)

as of 16 February 2021

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DATHF32	Clinical Trials	1.0	1, 2	FallAB	Tue7,8	4F204	Wagatsuma Yukiko, Goshō Masahiko	Clinical trial is a comparison test of a medical treatment, versus a placebo, or the standard medical treatment for a patient's condition. Good Clinical Practice (GCP) guidelines include the standards on how clinical trials should be conducted, define the roles and responsibilities of clinical trial sponsors, clinical research investigators and monitors. The aim of this course is to learn about the outline of clinical trials and GCP.	Lecture is conducted in English. Online/Synchronous			Master's Program in Public Health
DATHF33	Health Promotion	1.0	1, 2	FallAB	Tue2	4F305	Anne Tokie	ヘルスプロモーション、アドボカシー、コミュニケーション、エンパワメントの理論と実践について、多面的な研究視点を活用し、教授することを目的とする。 目標:ヘルスプロモーションの今日的課題をさまざまな観点から論じることが出来る。 (1)ヘルスプロモーション-国際概論、(2)ヘルスプロモーション-理論、(3)ヘルスプロモーション-方法、(4)ヘルスプロモーション-技術、(5)エンパワメント理論、(6)エンパワメント-技術、(7)ヘルスプロモーションとアドボカシー、(8)ヘルスプロモーションとコミュニケーション、(9)ヘルスプロモーション-演習、(10)ヘルスプロモーション-演習2	Lecture is conducted in English. Online/Synchronous			Master's Program in Public Health
DATHF34	Topics in Environmental Health	1.0	1, 2	SprAB	Mon4	5C502		環境疫学的方法論の一つである疫学の基礎を理解し、気候変動の健康影響など、環境疫学に關する問題に關する知識を得る。目標:健康に影響を与える基本的な環境疫学の問題について説明することができる。 (1) Introductionと疾病発生の計測について解説する。(2)因果モデルについて解説する。(3) 誤分類、validity & precisionについて解説する。(4) 疫学デザインと偏倚について解説する。(5) 各論:大気汚染について解説する。(6) 各論:水汚染について解説する。(7) 各論:放射線、電磁場について解説する。(8) 内分分泌系化学物質について解説する。(9) 各論:地球環境変化の健康影響について解説する。(10) 各論:地球環境変化の健康影響について解説する。	Lecture is conducted in English.			Master's Program in Public Health
DATHF36	Mental Health	1.0	1, 2	SprAB	Mon5	4F305	Saito Tamaki, Morita Nobuaki, Ogai Yasukazu	目標:精神健康の問題を持つ人の詳細や援助における基本的な概念、手法および実践的なシステムを理解できる。 1. ストレスのメカニズムや評価について、説明できる。 2. 心理学的な発達や危機について説明できる。 3. メンタルヘルスマップを行う方法について説明できる。 4. 精神健康を持つ人の詳細や援助システムについて説明できる。	Lecture is conducted in English.			Master's Program in Public Health
DATQ04	Anti-Doping	1.0	1	FallAB	Intensive		Watanabe Koichi	The development of anti-doping (AD) program in sports all over the world, AD program and Global sport, Sport system, the Code and roles and responsibilities of athletes are introduced. Also the importance of integrity in sport, values-based education, fairness in sport will be discussed.	Identical to 01EH050. Lecture is conducted in English. Hybrid or Others Detailed schedule will be announced by the instructor	△	It depends on decision of the class instructor	Master's Program in Sport and Olympic Studies
DATQ06	Sport and Diversity	1.0	1	SprA	Thu3		Shimizu Satoshi, Sawae Yukinori	Through this course, the students will learn about problems that we have been facing regarding sports and diversity and discuss about future inclusive society through 2 different topics. First topic is about sport and gender issues such as women's participation in sports, women's position and leadership in sports organizations, LGBT issues, etc. The second topic is about sport and disabilities. The students will learn about the Paralympic Games and other international competitive sports events as well as learning about various disabilities and their characteristics through some examples.	Lecture is conducted in English. GS302	△	It depends on decision of the class instructor	Master's Program in Sport and Olympic Studies
DATQ09	Cross-Cultural Communication	1.0	1	SprAB	Fri5		Rakwal Randeep	In this course, students will learn the basis of cross-cultural communication in respect to the globalised university, and the future working environment they will face. Irrespective of your backgrounds, past affiliations and disciplines, the need will be to have good communication with people having diverse perspectives and personalities, and which is key for building relationships and success, and future careers.	Lecture is conducted in English. GS302			Master's Program in Sport and Olympic Studies
DATQ10	Research Project Management	2.0	1	FallAB	Fri1,3		Rakwal Randeep	In this course, students will learn about management of their research projects, focusing on the planning, outline construction and details therein in line with the stated aims and objectives of the project.	Lecture is conducted in English. Hybrid or Others Under present condition of international students potential absence in October need for an online link together with face-to-face.			Master's Program in Sport and Olympic Studies
DATQ209	Olympism and Legacy	1.0	1	FallAB	Thu2		Fukasawa Koyo	In this course, we will learn about the significance of Olympism and Olympic Legacy; consider the ideal way of legacy that fits the situation in the future countries and regions, and reflect Olympism by contemplating future Olympic Legacy. Will aim to develop insight into legacy through them. After confirming the essentials of Olympism, we will take the opportunity of the Olympic Legacy to be mentioned and the details of its introduction. Based on these, we will investigate the actual sports mega event, contemplate actions that reflect the legacy philosophy, and give presentations on them.	Identical to 01EH045. Lecture is conducted in English. Hybrid or Others Classes will be held face-to-face. Students who are unable to come to campus will be asked to participate online. For those who cannot participate in the class due to time differences, the class will be recorded and can be viewed on demand.			Master's Program in Sport and Olympic Studies
DATQ215	Elite Sport Coaching	1.0	1	SprABC	by request		Sengoku Yasuo	In this course, we will learn and practice the theory and methodology about coaching and training for elite athlete.	Identical to 01EH082. Lecture is conducted in English. face-to-face GS302			Master's Program in Sport and Olympic Studies