

As of May 20, 2020

**Recommended Courses for KUINEP Students
&
Additional Liberal Arts and Sciences Courses**

2020 Fall Semester

Kyoto University

Recommended Courses for KUINEP Students

Understanding Japan

Culture and Traditions in Japan II-----	1
Current Issues in Japan II -----	3

Additional Liberal Arts and Sciences Courses

Introduction to Classical Japanese Literature -----	5
Sociology of Modern Technology -----	8
Japanese Language & Culture -----	10
Western History II-E2 -----	13
Education in Contemporary Japan -----	15
Readings in Humanities and Social Sciences (Education, English)II-E1 -----	17
Quest for Mathematics I-E2 -----	18
Nonlinear Mathematics-E2 -----	19
Data Analysis Practice I-E2 -----	20
Introduction to Molecular Cell Biology-E2 -----	21
Introduction to Computational Molecular Biology-E2-----	22
Introduction to Algorithms-E2-----	23
Fundamentals of Discrete Optimization-E2-----	24
Information Network-E2-----	25
Fundamentals of Artificial Intelligence-E2-----	26
Information Literacy for Academic Study-E2-----	27
Art, Culture and Technology-----	28
Introduction to Lifestyle Related Diseases-E2-----	29
Science Communication (Science, English)-E3-----	30
Fundamentals of English Writing and Speaking-E3-----	31
Theory and Practice in Scientific Writing and Discussion (Pharmaceutical Sciences, English)B-E3-----	33

Recommended Courses for KUINEP Students

Course number	U-LAS07 10002 LE31				
Course title (and course title in English)	Culture and Traditions in Japan II Culture and Traditions in Japan II		Instructor's name, job title, and department of affiliation	Institute for Liberal Arts and Sciences Associate Professor, YUKAWA SHIKIKO	
Group	Humanities and Social Sciences	Field(Classification)	Understanding Japan		
Language of instruction	English	Old group	Group A	Number of credits	2
Number of weekly time blocks	1	Class style	Lecture	Year/semesters	2020・Second semester
Days and periods	Tue.2	Target year	All students	Eligible students	International students
[Overview and purpose of the course]					
<p>年中行事、歴史、信仰、結婚や家族、職など、様々な側面から日本の文化や伝統、またその歴史の変遷について考察していく。授業では議論への活発な参加が期待される。</p> <p>We will explore Japanese culture and its traditions from classical to modern times from a variety of angles: annual traditions, history, religion, marriage/family and work, to name a few. Students are expected to take an active part in class discussions.</p>					
[Course objectives]					
<p>日本への関心を広げ、そして深めること。日本の文化と自国の文化とを比較し、その共通点と相違点を把握し、より深く理解できるようになること。</p> <p>The primary goal of this class is for students to explore and deepen their understanding of Japan, its culture and its people. During the course of the semester, students should also attempt to compare Japanese culture with their own in order to identify and gain a better understanding of points of similarity and difference between the two.</p>					
[Course schedule and contents]					
<p>授業は 1) 以下のテーマに基づく講義および、2) 受講生による口頭発表によって行われる。</p> <p>1) <講義> 第1～10回目 第1～3回目：日本の年中行事・儀礼や生活様式 第4回目：日本人の美意識 第5～7回目：日本の婚姻制度と家族―戦前と戦後― 第8～9回目：日本人と仕事 第10回目：日本人とのコミュニケーション・日本人の価値観や思考パターン 2) <発表> 第11～14回目 最後の3～4回の授業では、日本の文化や社会の中で関心を持っているトピックについて、3～4人からなるグループ発表を英語で行う。発表の具体的な日程や要領については、初回の授業で説明する。 第15回目：フィードバック</p> <p>※ただし、本授業の最終登録者数が50名を超えた場合には、以下のとおり授業日程を変更することとする。 第10回目まで：変更なし。 第11回目：小テスト（記述式試験）</p>					
Continue to Culture and Traditions in Japan II(2) ↓ ↓ ↓					

Culture and Traditions in Japan II(2)
<p>出題範囲：第1～10回目の講義内容全般。とくに、講義中に解説した基本的な概念・キーワードの理解度を測る。</p> <p>第12回目：グループディスカッション1回目。 テーマ：日本人のコミュニケーションスタイルの特徴。 第12～13回目の授業では、4～5人からなるグループディスカッション・意見交換を行う。12回目については、次のサブテーマの中から一つ選ぶこと（またはグループのメンバーで相談して日本人のコミュニケーションスタイルに関するサブテーマを自由に設定してもよい）：1) うち・そと、2) 義理、3) 本音・建前、4) 腹芸。 なお、各自の経験を踏まえ、日本語でコミュニケーションをとる場合と、母語もしくは共通語でコミュニケーションをとる場合とで、何がどのように違うかについても意見を述べること（日本人学生は英語でコミュニケーションをとる場合と比較すること）。</p> <p>第13回目：グループディスカッション2回目。 テーマ：日本人の価値観。 衣・食・住をはじめ、家族、結婚、教育・子育て、仕事、生活環境、自然環境、対人関係、信仰、歴史、文芸、文化的遺産、しきたり・作法、娯楽等々、あらゆる角度から日本人の価値観について考察を試みる。周囲のものに日本人の価値観がどのように表現されているか、具体例を挙げつつ議論を進めること。また、各自の視点に立ち、自国民の価値観と比較し、その共通点と相違点についても述べること。</p> <p>第14回目：総まとめ・ディスカッション 2回にわたるグループディスカッションの成果をまとめ、残された課題や疑問点について全員で議論する。</p> <p>第15回目：フィードバック</p>
<p>The course will consist of 1) lectures on the following topics, and 2) oral presentations to be given by the students.</p> <p>1) <Lectures> Weeks 1-10 Weeks 1-3: Annual traditions/rituals and lifestyles in Japan Week 4: The aesthetic sensitivities of the Japanese Weeks 5-7: Marriage in Japan and the Japanese family —before and after WWII— Weeks 8-9: The Japanese and work Weeks 10: Communicating with the Japanese/ Japanese attitudes and values/Japanese thinking patterns 2) <Student presentations> Weeks 11-14 The last 3 to 4 class sessions will be used by the students to give group presentations in English on any aspect of Japanese culture or society that interests them (3-4 members per group). Details of the presentation schedule and guidelines will be explained at the first class session. Week 15: Feedback</p> <p>※ Note: If, however, there are more than 50 students enrolled in the class, the schedule will be changed as follows. Weeks 1-10: No change. Week 11: Test (written exam). The test will cover material introduced in the lectures in weeks 1-10. In particular, the test will aim to measure students' understanding of key terms and concepts explained during the lectures. Week 12: Group Discussion Session 1.</p>
Continue to Culture and Traditions in Japan II(3) ↓ ↓ ↓

Culture and Traditions in Japan II(3)

Topic: What are some key characteristics of Japanese communication styles?

For weeks 12 and 13, we will break up into groups of 4-5 students. For week 12, each group should choose as their subtopic one of the following: 1) uchi/soto, 2) giri, 3) honne/tatemae, 4) haragei. (Or, the group may opt to come up with an appropriate subtopic of their own.)

In addition, students should share their opinions regarding any differences in the way they communicate when speaking in Japanese and when speaking in their own native language or another language. (Japanese students should compare their communication styles when speaking in English and when speaking in Japanese.)

Week 13: Group Discussion Session 2:

Topic: Japanese values and attitudes.

In week 13, the members of each group will discuss their thoughts regarding the values and attitudes of the Japanese that can be seen in various areas of Japanese culture and society, such as food, clothing, housing, marriage, family, education and child-rearing, living environment, natural environment, personal relationships, religion, history, literature/arts, cultural assets, customs/etiquette, entertainment, etc. Students will be asked to give concrete examples of how Japanese values and attitudes are reflected or expressed in our daily surroundings. Students should also try to note similarities and differences between values/attitudes in Japan and the values/attitudes that characterize their own culture.

Week 14: Final Discussion Session:

We will wrap up the course by having each group share the results of their previous discussion sessions with the rest of the class.

Week 15: Feedback

[Course requirements]

初回の授業からすべて参加すること。学期末に行われる発表は全員必須。

大人数への対応のため授業の日程を変更した場合には（詳細は上記参照）、第1回目の授業でのテストおよび第12～14回目におけるグループディスカッションへの参加は必須。

講義はすべてナチュラルスピードの英語で行われる。本授業を受講する学生は十分な英語による聞き取り能力、またクラスへの積極的な参加が求められる。

Be sure to attend all of the classes from day one. The final presentation is required of all students taking this course.

If the schedule is changed to accommodate a large class size (see details above), students are required to take the test to be given in week 11 and to take part in all of the discussion sessions in weeks 12-14.

The instructor's lectures will be given in English at natural speed. Students taking this course are expected to be able to follow the lectures and take an active part in the class.

[Evaluation methods and policy]

(1) 参加態度 (20%)、(2) 最終発表 (50%)、および(3) レポート (2頁) (30%) を総合して評価する。最終発表はグループ発表とするが、各学生の担当部分と貢献度によって各々の評価を行う。

大人数への対応のため授業の日程を変更した場合には（詳細は上記参照）、(1) 参加態度 (20%)、(2) 小テスト (40%)、(3) 第12～14回目におけるグループディスカッションへの参加・積極性 (20%)、および(4) レポート (2頁) (20%) を総合して評価する。

The student's final grade will be based on (1) in-class performance, including attendance (20%), (2) the final presentation (50%), and (3) a short paper (2 pages) (30%). Although the final presentation is a group presentation, each student will be evaluated individually based on his/her part of the presentation and contribution to the group effort.

In the event the class schedule is changed to accommodate a large class size (see details above), each student's final grade will be based on (1) in-class performance, including attendance (20%), (2) a test (40%), (3) participation in the group discussions in weeks 12-14 (20%), and (4) a short paper (2 pages) (20%).

Continue to Culture and Traditions in Japan II(4) ↓ ↓ ↓

Culture and Traditions in Japan II(4)

[Textbooks]

必要に応じて、授業中に資料を配布する。

Handouts will be distributed as necessary.

[References, etc.]

(Reference book)

1) Varley, Paul, Japanese Culture: Fourth Edition, University of Hawai'i Press, 2000.

2) Hendry, Joy, Understanding Japanese Society, Fourth edition, Routledge, 2013.

3) Sugimoto, Yoshio, An Introduction to Japanese Society, Second edition, Cambridge University Press, 2003.

4) Davies, Roger J. and Ikeno, Osamu (editors), The Japanese Mind: Understanding Contemporary Japanese Culture, Tuttle Publishing, 2002.

5) Martinez, D. P. (editor), Modern Japanese Culture and Society, Volumes I-IV, Routledge Library of Modern Japan, 2007.

[Study outside of class (preparation and review)]

前週の授業で取り上げたテーマについて、その内容を復習するとともに、配布資料を次の授業までによく読んで予習しておくこと。

学期末にグループ発表を行うこととなった場合は、グループのメンバーと協力し、各自責任をもって発表の準備・練習を行うこと。

Review the contents of the previous week's lecture, and carefully read any handouts provided before coming to class.

In the event group presentations are held in the final weeks of the semester, students are expected to cooperate with the members of their group and to do their fair share in preparing for and rehearsing their presentation.

[Other information (office hours, etc.)]

オフィスアワーの場所・時間はKULASISで確認してください。

For my office hour location/times, please check KULASIS.

Course number	U-LAS07 10004 LE31				
Course title (and course title in English)	Current Issues in Japan II Current Issues in Japan II		Instructor's name, job title, and department of affiliation	Institute for Liberal Arts and Sciences Professor,NAGAYAMA HIROAKI	
Group	Humanities and Social Sciences		Field(Classification)	Understanding Japan	
Language of instruction	English		Old group	Group A	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods	Thu.5	Target year	All students		Eligible students International students
[Overview and purpose of the course]					
<p>The primary purpose of this class is to deepen our understanding of a variety of issues in Japan. Japan is the world's third largest economy and one of the most prosperous nations in the world. However, there are many seemingly intractable challenges that the country and people are facing. Over the course of this class, we will cover a wide variety of these issues that Japan is currently facing.</p> <p>During this course, participants will learn about and discuss Japanese society, issues of the low birth rate, the aging society, poverty, LGBT, Hikikomori, Ijime, industries/the economy, medical services, energy policies, the environment, education and other aspects of the country.</p> <p>The course consists of lecture-based instruction followed by guided discussion, student presentations and short midterm and final tests.</p> <p>At the end of each class, students are expected to engage in discussions regarding the lecture topics and consider solutions. Selected groups will be appointed to present in the class.</p>					
[Course objectives]					
The primary goal of this class is that the students could deepen their understanding of a variety of social issues in contemporary Japan. Students are expected to consider countermeasures to address these issues.					
[Course schedule and contents]					
Tentative Schedule are as follows;					
Week 1) Japan in the world					
Week 2 and 3) Low birth rate/Gender issues					
<ul style="list-style-type: none"> • Why is the birthrate of Japan declining, and countermeasures/solutions to address issues raised? 					
Week 4) Economy of differences					
<ul style="list-style-type: none"> • What policies should the government introduce in order to tackle the problems brought about by increasing economic differences? 					
Week 5) Agricultural issues					
<ul style="list-style-type: none"> • Why is the self-sufficiency ratio of foods in Japan declining? Will the Japanese agricultural industry gain international competitiveness by joining TPP (Trans Pacific Partnership)? Identify the merits and demerits associated with globalization (Pursuing TPP, FTA and EPA). • How should Japan address the aging problems of farmers? How will AI bring changes to the agricultural industry in Japan? 					
Week 6) Medical issues					
<ul style="list-style-type: none"> • The aging of society will further accelerate in the future - how should Japanese hospital management address the increasing burden of medical expenses? 					
Continue to Current Issues in Japan II(2) ↓ ↓ ↓					

Current Issues in Japan II(2)
<ul style="list-style-type: none"> • What is the problem of Japan's medical industry? How are these issues different from that of your home country? • Propose countermeasures to achieve equal distribution of medical doctors in Japan. <ol style="list-style-type: none"> 1) between large cities and rural areas 2) among specializing in obstetrics, gynecology, pediatrics and others
Week 7) Short midterm test and comprehensive review of Week 1 to 6
Week 8) Japanese Industry and Economy/ Death from overworking or Karoushi
<ul style="list-style-type: none"> • Global vs International • Industry & trade in Japan-Basic knowledge • Why is Japan's labor productivity low compared with other OECD countries? • How can death from overworking be reduced?
Week 9) Ijime and LGBT issues in Japan
<ul style="list-style-type: none"> • What is the current situation of LGBT rights in Japan?
Week 10) Hikikomori, Ijime and LGBT issues in Japan
<ul style="list-style-type: none"> • What is the difference between Hikikomori and NEET? • What are 'missing workers' ?
Week 11) Weak Immigration policy
<ul style="list-style-type: none"> • Refugee issue • How can we address the labor force shortage in Japan ? • What are the major issues of immigration in Japan? • What would be an ideal policy for accepting more foreign labor workers in Japan?
Week 12) Educational issues
<ul style="list-style-type: none"> • What are the major issues facing education in Japan today? Identify the problem and discuss what kinds of government policies could be implemented to address the issues. • How is Japan's education system different from that of other countries, such as and or Switzerland? • How can you compare three types of tuition support for university students? Which kind of support do you think is most effective in Japan?
1) Make tuition free of charge at all of the universities
2) Scholarship and tuition exemption for students with low incomes and good grades
3) Loans
Week 13) Energy and Environment
<ul style="list-style-type: none"> • What should Japan do to address global warming issues (while also taking into consideration national security issues regarding access to vital economic resources)? • Should Japan continue to rely on nuclear power? What are pros and cons of the current policy?
Week 14) AI and SDG, Wrap up discussion in Japanese Society
<ul style="list-style-type: none"> • How will AI have an impact on industry in Japan (Such as in the Medical Industry)? <p>In considering current labor shortage situation in Japan, and government decision to increase immigrants to be worked for less cognitive works, in what ways should AI and robots be introduced most effectively in Japan?</p>
Week 15) Short final test
Week 16) Feedback
Continue to Current Issues in Japan II(3) ↓ ↓ ↓

Current Issues in Japan II(3)
[Course requirements]
This class is limited to international students. No prerequisites required. You should be interested and committed to learning about current issues in Japan.
[Evaluation methods and policy]
Grading policy are determined by the number of registered students. Case1: If the number of registered students become more than 40, the grades are determined based on the following: Short midterm test: 35% Short final test: 35% Quizzes during the class: 10% (*)There will be no prior notification for the dates of the quizzes Class participation to discussion, attendance, and attitude: 20% (Optional Presentation) +10% as a bonus Bonus points will be awarded to the students who make a presentation in the class. Case 2: If the number of registered students is less than 40, the grades are determined based on the following: Short midterm test: 30% Short final test: 30% Quizzes during the class: 10% (*)There will be no prior notification for the dates of the quizzes Presentation 20% Class participation to discussion, attendance, and attitude: 10%
[Textbooks]
Handouts will be distributed at each class.
[References, etc.]
(Reference book) Introduced during class
[Study outside of class (preparation and review)]
Review the contents of the lectures and prepare for the tests (a short mid-term test and a short final test)
[Other information (office hours, etc.)]
No specific date and time. Please make an appointment by e-mail.

Additional Liberal Arts and Sciences Courses

Course number		U-LAS02 20026 LE37					
Course title (and course title in English)	Introduction to Classical Japanese Literature			Instructor's name, job title, and department of affiliation	Institute for Liberal Arts and Sciences Associate Professor, YUKAWA SHIKIKO		
	Introduction to Classical Japanese Literature						
Group	Humanities and Social Sciences		Field(Classification)	Arts, Literature and Linguistics(Issues)			
Language of instruction	English		Old group	Group A	Number of credits	2	
Number of weekly time blocks	1	Class style	Lecture		Year/semesters	2020・Second semester	
Days and periods	Wed.3		Target year	All students		Eligible students	For all majors
[Overview and purpose of the course]							
<p>日本古代から近世までの代表的な作品を通じて、繰り返し現れる日本古来の、さまざまな文学的理念、規範、価値等について考察すると共に、それらの文学的理念等が、どのように形成され、またどのような変遷を経て、現代にまで継承されてきたかについて考察を試みる。</p> <p>この授業は、本学学部生に限らず、海外からの交換留学生にも開講しているため、受講者は様々な文化的背景を持つ外国人留学生と英語で対話し、日本の古典について意見を交換する機会を得ることができる。</p> <p>また、本授業では、『萬葉集』、『伊勢物語』、『源氏物語』、『方丈記』、『物くさ太郎』等々、日本人学生には馴染みのある代表的な作品を扱うが、テキストとしては英訳本を用いる。ディスカッションもレポートの作成も英語で行われる。したがって、違う角度から自国の文学や文化を見つめ直すよい機会にもなる。</p>							
PURPOSE:							
To explore recurrent themes, ideas and values seen in representative works of classical Japanese literature and to gain a better understanding of how some of the ideas or values have changed over time, and how others have been altered to suit changing tastes.							
This course is being offered concurrently to both international exchange students and undergraduate students of Kyoto University. Hence, students will have ample opportunity to interact and to share their thoughts with students from a variety of backgrounds and cultures in our discussion of the selected works of literature. We will be using English translations of the original Japanese works as our reading material. Discussion sessions and students' reports will also be completed in English.							
[Course objectives]							
日本古来から繰り返し現れるさまざまな文学的理念、規範、価値を理解すること。また、これらの文学的理念等が、どのように形成され、どのような変遷を経て現代にまで継承されてきたかを理解すること。							
COURSE AIMS/OBJECTIVES:							
To seek and discuss possible interpretations of Japanese ideals, attitudes and ways of thinking, through a close reading of selected representative works of classical Japanese literature from the Nara to Edo Periods.							
本授業では、講義やレポートで取り上げられる文学作品の内容について、受講者が主観的な感想のみを述べることを目的としておらず、テキスト (text) に基づいて、客観的に分析し論述できる							
Continue to Introduction to Classical Japanese Literature(2) ↓ ↓							

Introduction to Classical Japanese Literature(2)	
<p>ようになることを目標としている。このことを十分に理解したうえで授業に臨んでもらいたい。</p>	
<p>Before enrolling in this course, students should carefully note the following: One of the main objectives of this course is for students to acquire the ability to analyze -- in an objective and logical manner -- the works of classical Japanese literature to be studied. Hence, students will be expected to express their thoughts in an objective manner based on a careful and close reading of the text, and by citing evidence from the literature. This course is not intended for students to simply express their subjective opinions or personal preferences with regard to the literary works in question.</p>	
[Course schedule and contents]	
<p>種々の作品を残した日本古典文学の作者達は、一体どのような出来事、事柄、性質によって刺激を受け、触発され、そして、その刺激に対し、いかに文学的に答えようとしたのだろうか。どのようなものを好み、どのようなものを敬遠したのだろうか。また、さまざまな文学的理念、規範や価値の中で、現代にまで継承されてきた概念には、どのようなものが見られるのだろうか。一方、変容されたものは、どのようにその変貌を遂げたのだろうか。</p>	
OVERVIEW:	
Whether it be the eloquent verse of Ono no Komachi pining for her lover, the amorous tales of Hikaru Genji, who in turn learns of his own wife's seduction by another man, or the poignant story of the young warrior Atsumori in his last moments on the battlefield, classical Japanese prose and poetry pose important questions for us to consider.	
What events, what things, what qualities provoked the artistic sensitivities of pre-modern Japanese writers and moved them to literary expression? What appealed to them and what did not? What were the objects of Japanese aesthetic appreciation? What ideas and values have gained acceptance in present-day Japan, and how have others been altered to suit modern tastes?	
<p>本授業では、奈良時代から江戸時代にかけての代表的な作品の精読を通じ、上記のような問題について考察する。日本の古典には、「もののあはれ」、「をかし」、「いろごのみ」、「無常」、「幽玄」、「花」、「風雅・風流」、「わび」、「さび」、「勧善懲悪」等々といった、幾つか重要なテーマを見出すことができる。同時に、「妻問ひ」、「隠遁」、「ますらを(振り)・たをやめ(振り)」、「判官最良」、「粋・いき・通」、「義理人情」等々、さまざまな社会的慣習、生き方、価値観等の類も見られる。これらの文学的理念、規範、価値等が、日本文学歴史上どのように形成、維持され、あるいは衰退していったかについて検討すると共に、現代において、どのように受け入れられ、あるいはどんなふうに変容されたかについて考察する。</p>	
本授業で取り扱う主なジャンル：	
<ul style="list-style-type: none"> - 和歌（『萬葉集』、『古今和歌集』、『新古今和歌集』等） - 史書（『古事記』、『日本書紀』等） - 日記（『土佐日記』等） - 物語、説話（『源氏物語』、『今昔物語（集）』、『平家物語』等） - 随筆（『枕草子』、『方丈記』、『徒然草』等） - 歌論等（『無名抄』等） - 能、浄瑠璃、歌舞伎（世阿弥、近松門左衛門等） 	
Continue to Introduction to Classical Japanese Literature(3) ↓ ↓	

Introduction to Classical Japanese Literature(3)

- 俳諧（『奥の細道』等）

また、上記の作品の作風や文体、表現技法等にも注目し、それらの役割について考察する。

In the course of our study, we will attempt to answer these and other questions based on a careful reading of selected works. We will explore themes such as mononoahare, wokashi, irogonomi, mujo, yugen, hana, fuga, wabi/sabi, kanzenchoaku, etc., as seen in representative works from the Nara Period through Edo times. In many cases the themes are recurrent, drawing upon the literature of preceding eras or profoundly influencing that of later periods, and they offer valuable insight into Japanese ideals and ways of thinking. We will also discuss examples, as seen in the text, of pre-modern Japanese conventions, cultural practices and social values — tsumadohi, inton (tonsei), masurawo/tawoyame, hoganbiiki, giri-ninjo, to name just a few.

Some of the genres we will cover in our discussion: waka poetry (Manyoshu, Kokinwakashu, Shinkokinwakashu, etc.); chronicles/histories (Kojiki, Nihon Shoki, etc.); diaries/memoirs (Tosa Nikki, etc.); narrative prose (Taketori Monogatari, Genji Monogatari, Heike Monogatari, etc.); essay-style writing (Makura no Soshi, Hojoki, Tsurezuregusa); drama (noh, joruri, kabuki); haikai poetry (Oku no Hosomichi, etc.). We will also address writing styles and literary devices used in these works and examine their various functions.

Class time will be devoted to both lectures and group discussion sessions.

授業日程（授業の進行を見て変更することがある）：

- 1 回目 授業概要、成績評価方法・基準の説明、
京都大学電子図書館貴重資料映像『物くさ太郎』※
 - 2 回目～3 回目 『古事記』、『萬葉集』※
 - 4 回目～6 回目 『古今和歌集』、『土佐日記』、『竹取物語』※、『伊勢物語』
 - 7 回目～9 回目 『源氏物語』※、『枕草子』、『堤中納言物語』
 - 1 0 回目～1 1 回目 『新古今和歌集』、『方丈記』、『平家物語』※
 - 1 2 回目～1 3 回目 『徒然草』、謡曲（『邯鄲』※）
 - 1 4 回目 『奥の細道』、浄瑠璃（『曾根崎心中』）
 - 1 5 回目 フィードバック
- ※印を付した作品はグループディスカッションも行う予定である。

CLASS SCHEDULE (subject to revision as needed):

- 1: Lecture overview, explanation of evaluation method (assessment)
 - Kyoto University Digital Library Rare Materials Exhibition "Enjoying Otogi Zoshi" "Monokusa Taro"*
 - 2~3: Kojiki, Manyoshu*
 - 4~6: Kokinwakashu, Tosa Nikki, Taketori Monogatari*, Ise Monogatari
 - 7~9: Genji Monogatari*, Makura no Soshi, Tsutsumi Chunagon Monogatari
 - 10~11: Shinkokinwakashu, Hojoki, Heike Monogatari*
 - 12~13: Tsurezuregusa, yokyoku (Kantan*)
 - 14: Oku no Hosomichi
 - 15: Feedback
- Group discussion sessions will be held with regard to the works marked with an asterisk *.

Outline and Working Bibliographyは、Term Paperの提出締め切り2週間前までにはコメントとともに返却するので、このコメントを参考にTerm Paperの推敲を行うことを勧める（Outline, Working

Continue to Introduction to Classical Japanese Literature(4) ↓ ↓

Introduction to Classical Japanese Literature(4)

BibliographyおよびTerm Paperについては以下「成績評価の方法・観点及び達成度」参照）。
なお、希望する学生にはTerm Paperもコメントとともに学期末に返却する。

通常のオフィス・アワー以外に、1月頃にフィードバック・セッションを提供する。Term Paperや授業の内容について質問がある学生には積極的な参加を勧める。フィードバックセッションの日時・場所は授業中にアナウンスする。

The outline/bibliography will be evaluated by the instructor and returned with comments in writing to the student at least two weeks before the term paper deadline. The comments should be used as a guide in restructuring the term paper, making necessary corrections or changes to the content or writing style, and researching additional sources as needed.(See section on assessment below for information on outline, working bibliography and term paper)

At the end of the semester, completed term papers will also be returned with comments to those students who wish to have their paper returned to them.

In addition to the instructor's regular office hours, a "feedback session" will be held in January for students who have questions about their term paper or questions in general about the content of the course. The specific day/time and location of the feedback session will be announced in class.

[Course requirements]

None

[Evaluation methods and policy]

成績判定は以下によって行う。

- 1)参加態度、ディスカッションへの貢献度（30%）。
 - 2)レポート課題（70%）。
- 上記レポート課題は、[1] Outline and Working Bibliography (20%)、及び[2] Term Paper (50%)から成る。

学生は各自で、興味のある作品（またはその一部）を対象に、本授業で取り上げたテーマ（複数選択可）との関連について分析・考察したものをレポートにまとめ、提出することとする。具体的なアプローチやレポートの書式等については授業時に指示する。このレポート課題では、客観的に論じることが求められており、決して作品に対する主観的な感想を述べる事が目的ではないので注意されたい。

なお、授業期間中、レポートの作成について授業担当の教員と直接相談できる時間（オフィスアワー）を設けているので、積極的に利用されたい。

ASSESSMENT:

Assessment will be based on the following:

- (1) In-class participation and contribution to discussions (30%).
- (2) Term Paper (70%), which consists of [1] an outline and working bibliography (20%), and [2] the paper (50%).

Each student will be required to write a term paper presenting critical analysis of a work or works of classical

Continue to Introduction to Classical Japanese Literature(5) ↓ ↓

Introduction to Classical Japanese Literature(5)

Japanese literature of his/her choice in relation to one or more of the themes explored in class. Each student is also required to submit an outline and working bibliography prior to submitting his/her paper. Details of the term paper assignment, including possible approaches for the paper and the paper format, will be explained in class.

Students should note that this paper is intended as an exercise in critical thinking and writing, and students will be expected to express their ideas in an objective manner based on a careful reading of the text/texts. This paper is not meant to be an "essay" written on the purely subjective opinions of the student regarding his/her chosen work(s) of literature.

Students will have the opportunity, and are encouraged, to discuss any specific concerns they may have regarding their paper with the instructor throughout the course.

[Textbooks]

必要に応じて、授業時に資料を配布する。
Handouts and required reading material will be provided in class.

[References, etc.]

(Reference book)

- (1) McCullough, Helen Craig, Classical Japanese Prose: An Anthology, Stanford University Press, 1990.
- (2) Carter, Steven D. (translator), Traditional Japanese Poetry: An Anthology, Stanford University Press, 1991.
- (3) Keene, Donald (ed.), Anthology of Japanese Literature: from the earliest era to the mid-nineteenth century, Grove Press, 1955.
- (4) Miner, Earl et al., The Princeton Companion to Classical Japanese Literature, Princeton University Press, 1985.
- (5) Haruo Shirane (ed.), Traditional Japanese Literature: An Anthology, Beginnings to 1600 (Translations from the Asian Classics), Columbia University Press, 2008.
- (6) William Theodore De Bary et al., Sources of Japanese Tradition: From Earliest Times to 1600 (Introduction to Asian Civilizations), Columbia University Press, 2002.
- (7) William Theodore De Bary et al., Sources of Japanese Tradition Vol. 2: 1600 to 2000 (Introduction to Asian Civilizations), Columbia University Press, 2005.

[Study outside of class (preparation and review)]

1) 毎週授業で紹介された作品に関するキーワードや概念をはじめ、講義の内容を復習すること。
Students are expected to review the content of each lecture each week, including and especially any key terms and concepts introduced in class.

2) この授業では計6回にわたり少人数によるグループ・ディスカッションを行う予定である。グループディスカッションが予定されている回については、あらかじめ配布資料をよく読んでおき、ディスカッションのテーマ（トピック）について考え、自分の意見が述べられるように準備すること。また他のメンバーに意見を聞きたいことについてはその質問を準備すること。

A total of six discussion sessions will be held over the course of this semester. Discussions will be held in small groups. Students are expected to come to class having closely read any material that has been assigned for the discussion in advance. Students should come prepared to share their ideas and thoughts regarding each discussion topic/question.

3) 11月の中旬に、レポートの作成要領についての指示がある。したがって、受講者は、レポートで

Continue to Introduction to Classical Japanese Literature(6) ↓ ↓ ↓

Introduction to Classical Japanese Literature(6)

取り上げたい作品（またはその抜粋）とテーマについて、11月中旬より直ちに文献調査を開始し、同作品および関連資料を精読しつつ、レポートの作成に必要な準備を行うことを強く勧める。文献調査の方法等について不明な点があれば、早めに担当教員に相談すること。

Guidelines for writing the outline, working bibliography, and the term paper will be handed out in class in MID NOVEMBER. Students should therefore begin thinking about possible questions to explore in their term paper AND BEGIN READING the main work(s) of classical Japanese literature they will analyze for their paper AS SOON AS POSSIBLE. Students should begin this process immediately once they receive the guidelines in November and are encouraged to consult the instructor should they encounter any difficulties or have questions.

[Other information (office hours, etc.)]

オフィス・アワーの場所・時間はKULASISで確認してください。
For my office hour location/times, please check KULASIS.

Course number	U-LAS61 10005 LJ28				
Course title (and course title in English)	現代技術社会論 Sociology of Modern Technology		Instructor's name, job title, and department of affiliation Graduate School of Energy Science Professor, ISHIHARA KEIICHI Graduate School of Energy Science Professor, TEZUKA TETSUO Graduate School of Energy Science Professor, KAWAMOTO HARUO Graduate School of Energy Science Professor, SHIMODA HIROSHI Institute for Integrated Radiation and Nuclear Science Professor, UNESAKI HIRONOBU Graduate School of Energy Science Professor, KUROSAKI KEN Graduate School of Human and Environmental Studies Professor, YOSHIDA JIYUN Graduate School of Energy Science Associate Professor, OKUMURA HIDEYUKI Graduate School of Energy Science Associate Professor, MCLELLAN, Benjamin Graduate School of Energy Science Associate Professor, OGATA SEIICHI Graduate School of Energy Science Associate Professor, ISHII HIROTAKE Graduate School of Energy Science Professor, TAKAYUKI KAMEDA Institute for Integrated Radiation and Nuclear Science Associate Professor, UEBAYASHI HIROTOSHI Graduate School of Energy Science Assistant Professor, YAMAMOTO KOUHEI Graduate School of Energy Science Assistant Professor, MINAMI EIJI Graduate School of Energy Science Assistant Professor, OGAWA TAKAYA		
Group	Interdisciplinary Sciences		Field(Classification) Environmental Sciences		
Language of instruction	Japanese and English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020・Second semester
Days and periods	Thu.5		Target year	All students	Eligible students For all majors
[Overview and purpose of the course]					
<p>近い将来、エネルギー・資源の枯渇、ごみや汚染物質の排出などが突然顕在化して、われわれの社会に大きな打撃を与えることになるかもしれない。また、地震などの自然災害や原子力災害などは、一度起これば壊滅的な被害を与える。さらに、社会コミュニティの対立や南北問題など、地域からグローバルな国際社会に至るまで多くの問題を抱えている。本講義では、これらの問題の所在を明らかにしてその本質を探るとともに、解決の糸口を探るべく、それぞれの分野の最前線で活躍している担当教員らが平易な解説で講義する。</p>					
Continue to 現代技術社会論(2) ↓ ↓ ↓					

現代技術社会論(2)
[Course objectives]
週ごとに取り上げられるエネルギー・環境問題を中心とした各テーマについて、それぞれ現代社会と技術の関わりを理解する。また、広範なテーマのレポート課題に取り組むことによって、現代社会と技術の関わりを幅広い視野で分析・考察する力を修得する。
[Course schedule and contents]
<p>第1回～第14回 ガイダンス及び講義</p> <ul style="list-style-type: none"> ・ガイダンス <p>初回講義にて、講義内容およびスケジュール等について説明する。概ね下記の内容で講義をすすめるが、順序などは入れ替わる場合がある。正式な講義スケジュールはこのガイダンスにて連絡する。但し*印のついた3つの講義は年度によってどれか1つが実施される。</p> <p>第1部 エネルギー・環境に関する問題</p> <ul style="list-style-type: none"> ・地球上での物質循環とバイオマス（河本） <p>光合成から物質変換、分解・無機化に至るまでの地球上での物質循環の概略、生態系の種類による特徴などについて論述し、バイオマスのエネルギーおよびケミカル源としてのポテンシャル、地球環境に与える影響等について議論を進める。</p> <ul style="list-style-type: none"> ・原子力エネルギーの現状と将来（宇根崎） <p>本講では、まず原子力エネルギーの原理と特徴を述べ、それらが各国の原子力エネルギー利用戦略、政策とどのように関連するかを述べた後に、原子力エネルギーの現状と将来について概説することにより、今後のエネルギー利用における原子力エネルギーの位置づけについて解説する。</p> <ul style="list-style-type: none"> ・情報化・エネルギーとその課題（下田） <p>近年、急速に発展する情報技術により社会構造が大きく変化してきている。講義では、このような変革がエネルギーや環境問題に与える影響や恩恵について論じ、さらに円滑な社会構造変革のためには、どのような課題があるかについて説明する。</p> <ul style="list-style-type: none"> ・エネルギーシステム学入門（手塚） <p>エネルギーと環境の問題においては、人間およびその集団の意思決定が重要な役割を果たす。そしてその意思決定は、一人一人が周囲から多様な影響を受けながらも最終的には自分の判断で決定するという、自律分散システムを形成する。もし現状のエネルギー需給の状態に満足できないとするならば、人間を取り巻く物理的、社会的環境を変える必要が生じる。本講では、上記のシステム学の視点から、人間社会におけるエネルギー消費について一緒に考えてみたい。</p> <ul style="list-style-type: none"> ・エネルギー利用と大気環境（亀田） <p>わが国における各種エネルギー需給構造の変遷に伴う大気環境問題の推移について概観し、エネルギー利用と密接に関連した地域規模の大気環境問題である酸性ガスや粒子状物質による大気汚染の現状と地球規模の大気環境問題である気候変動（地球温暖化）のメカニズム、影響や国際的取り組みについて講述する。</p> <ul style="list-style-type: none"> ・ゴミから現代社会を考える（石原） <p>日本におけるマテリアルフローを示しながら、資源有効利用を促進するための制度、現状について講述した後、循環型社会構築に関する技術的、社会的問題点を考え、その解決について議論を行う。</p> <ul style="list-style-type: none"> ・The future of non-renewable resources for energy technologies（McLellan） <p>Energy technologies use materials made from non-renewable resources for bulk infrastructure and functional properties. Being non-renewable, these materials are limited. This class discusses the details and interconnectedness of such resources with the energy system.</p> <ul style="list-style-type: none"> ・再生可能エネルギーの現状と課題（尾形） <p>講義では、再生可能エネルギーの現状について、各種の統計情報や海外諸国の導入事例を示しながら解説し、技術的、社会的課題について解説する。さらに再生可能エネルギーが社会経済システム</p>
Continue to 現代技術社会論(3) ↓ ↓ ↓

現代技術社会論(3)

ムに与える影響や可能性を学際的な視点で考えてみたい。

・環境アセスメントの基礎 (山本) *

人々の生活を豊かにするために行われる開発や施設の設置・改良などの事業を行うにあたり、その事業による環境への影響を事前に予測・評価を行うとともに、影響を可能な限り低減するための対策について検討するための一連の手続きが環境アセスメントである。本講義ではこの仕組みについて概説するとともに、大気環境を中心に実例の紹介や課題についても触れる。

・電気自動車と燃料電池自動車の技術開発 (小川) *

近年、電気自動車や燃料電池自動車が普及し始めている。これらの技術発展は会社側の思惑が多く絡んでいる。技術的な側面から思惑について考察し、将来的に用いられるだろう再生可能エネルギー由来の燃料についても説明する。

第2部 リスクに関する問題

・地震動予測のための地下構造の探査技術 (上林)

来るべき大地震による揺れの(強震動)予測を高精度で行うには、震源と地盤構造のモデル化の精度が特に重要となる。過去の地震被害へ震源と地盤構造がどのように影響したかを紹介すると共に、地盤構造のモデル化に必要な各種探査手法の特徴について述べる。

・原子力と材料 (黒崎)

原子炉では様々な材料が使われている。量子エネルギーを生み出す核燃料や、核燃料を環境から隔離する核燃料被覆管などが、その代表的なものである。本講義では、材料の特性と応用の間の結びつきに着目し、代表的な原子力材料がそこで用いられている必然性を議論する。

・バイオ燃料と品質規格 (南) *

新しい技術が社会に普及する過程では安全性、信頼性、環境性などの観点から公的規格や規制が必要になる場合がある。本講義では、バイオ燃料を例として取り上げ、規格の重要性や制定までの社会的仕組みを述べる。

第3部 社会に関する問題

・技術と豊かさ (奥村)

人や人間社会に真に必要な技術とは何か、また我々に何が出来るか。現代技術社会に暮らす我々の大量消費型生活を「豊かさ」「地球上に生きる人」といった視点を入れて見つめ直し、そういった技術を持たない国や人々との比較において人間の価値観・普遍性、お金の概念などをエネルギー・環境問題の観点を含めて考察する。

・情報技術と親密圏/公共圏の再編成 (吉田)

情報技術の浸透にともなう社会空間の再編性の様相について、「親密圏」(少数の人びとのあいだで、互いの生への配慮・関心によって成立する空間)と「公共圏」(多くの人びとのあいだで、さまざまな問題が共有されコミュニケーションがおこなわれる空間)、および両者の関係の変容を中心に、社会学的に考察する。

・インターネットと社会 (石井)

インターネットは今や私たちの生活に無くてはならないものとなっている。本講義では、インターネットの発展の歴史を概観すると共に、インターネットが社会にもたらした恩恵と弊害について解説し、今後のインターネットの課題と可能性について考える。

第15回 フィードバック

フィードバック方法は別途連絡します。

Continue to 現代技術社会論(4) ↓ ↓ ↓

現代技術社会論(4)

[Course requirements]

None

[Evaluation methods and policy]

・各教員が提示するレポート課題及び平常点(授業参加への積極性等)により成績を評価する。(レポート点は80点満点、平常点は20点満点、合計100点満点とする)
・レポート課題は、現代社会と技術の関わりについて深い理解と考察が認められるものに高い点を与える。

[Textbooks]

エネルギー科学研究科、エネルギー社会・環境科学専攻編『エネルギー・環境・社会』現代技術社会論 [第2版] (丸善株式会社) ISBN:4621082416

[References, etc.]

(Reference book)

Introduced during class

(Related URL)

<http://www.energy.kyoto-u.ac.jp/>

[Study outside of class (preparation and review)]

予め指定の教科書を読むことを推奨する。

[Other information (office hours, etc.)]

授業中に判らないことがあれば、積極的な質問を期待する。

Lecture code: W607002

Course number		U-LAS54 10007 SJ47			
Course title (and course title in English)	日本語・日本文化演習 Japanese Language & Culture		Instructor's name, job title, and department of affiliation	Institute for Liberal Arts and Sciences Professor, KAWAI JUNKO Institute for Liberal Arts and Sciences Program-Specific Associate Professor, SASAKI YUKI Center for the Promotion of Interdisciplinary Education and Research Program-Specific Assistant Professor, NISHIJIMA KAORU	
	Group	Career Development		Field(Classification)	Other Career Development Courses
Language of instruction	Japanese and English		Old group		Number of credits 2
Number of weekly time blocks	1	Class style	Seminar	Year/semesters	2020・Second semester
Days and periods	Mon.2	Target year	All students	Eligible students	For all majors
[Overview and purpose of the course]					
<p>本授業では、まず講義で日本語や日本文化の特徴、およびその様々な検討方法を学ぶ。その際、日本文化を広義に定義し、その範囲に日本社会の状況、社会問題をも含んで講義を進めていく。そして、日本語、日本文化、日本の社会状況を紹介する経験とその準備を通して、日本人学生と留学生と共に、日本語、日本文化、社会状況ならびに自分自身が身につけてきた言語や文化、そして自分自身が育ってきた社会の特徴を再発見することを目指す。そして、その過程を通じて、グローバルな視野に立った物の見方・考え方を養うことを目的とする。</p> <p>In this class, both Japanese and international students will be introduced to and exchange views on Japanese language and cultures. We define culture broadly in this class to include social conditions and problems in Japanese society.</p> <p>Learning about Japanese culture together will allow students of all backgrounds to rediscover their own cultures and develop new perspectives regarding languages, cultures and social conditions in today's global contexts.</p>					
[Course objectives]					
<ul style="list-style-type: none"> ・日本語、日本文化、日本の社会状況ならびに自分自身が身につけてきた言語、文化を捉える多様な視点を学ぶこと。 ・日本語、日本文化、日本の社会状況を紹介し、異なる文化的背景を持つ学生間で議論を行うことによってグローバルな視野に立った物の見方・考え方を身につけること。 ・母語とは異なる言語による、より効果的なプレゼンテーション及びディスカッションの技法を習得すること。 ・To gain understanding of diverse viewpoints and develop various perspectives on Japanese language and cultures including social conditions and issues as well as on international students' cultures ・To be able to introduce various aspects of Japanese language, cultures including social conditions and issues through presentations ・To learn presentation method and how to actively join discussions 					
[Course schedule and contents]					
<p>多様な文化を有する人たちの交流の中で、自国文化や社会的状況を多面的に理解し紹介できることが要請される場面は多い。日本人であっても日本語や日本文化について深い理解をもって解説するためには、言語・文化に意識的に向き合わなければならない。本授業は、日本語や日本文化を意識的に捉え、深い理解に立って他者と見方や考え方を共有できるようなることを目的に、講義を中心としながら、演習・討議を交えて進めていく。</p>					
Continue to 日本語・日本文化演習(2) ↓ ↓ ↓					

日本語・日本文化演習(2)	
第1回(1) オリエンテーション <担当：河合、佐々木、西島>	
[第1回(2)ー第7回 ー日本語の特徴と日本語教育ー]	
第1回(2) <佐々木> 講義：日本語の特徴	
第2回 <佐々木> 講義：日本語のバリエーション 演習：ディスカッション 及び プレゼンテーションの準備(1)	
第3回 <佐々木> 講義：日本語教育の現状、日本語教育の教授法 演習：ディスカッション 及び プレゼンテーションの準備(2)	
第4回 <佐々木> 講義：日本語教育における日本文化の教えかた 演習：ディスカッション 及び プレゼンテーションの準備(3)	
第5回、第6回 演習：リハーサル&プレゼンテーションに向けたフィードバック	
第7回 プレゼンテーション	
[第8回ー第13回 ー多文化の中の日本文化・日本社会ー]	
第8回 <西島> 講義：文化の定義と比較の方法	
第9回 <西島> 講義：都市と地方の格差(限界集落の問題) 演習：ディスカッション 及び プレゼンテーションの準備(1)	
第10回 <西島> 講義：家族の変容(単身世帯の急増) 演習：ディスカッション 及び プレゼンテーションの準備(2)	
第11回 <西島> 講義：祭の比較(日本と東南アジアの儀礼の比較あるいは文化保全) 演習：ディスカッション 及び プレゼンテーションの準備(3)	
第12回、第13回<西島> リハーサル&プレゼンテーションに向けたフィードバック	
第14回 <西島、河合、佐々木>	
Continue to 日本語・日本文化演習(3) ↓ ↓ ↓	

日本語・日本文化演習(3)

プレゼンテーション(日英選択可)

第15回 <西島、河合、佐々木>
フィードバック

When people from different cultural backgrounds meet, it offers an opportunity not only to exchange views, but also to introduce and reflect on aspects of one's own culture and society. Consciously learning about a culture and discussing it with others leads to deeper understanding and a better ability to explain elements of that culture. In this way, this course is beneficial for both international and Japanese students.

The class consists of lectures and seminars as well as discussions and student presentations. We will examine Japanese language and culture from a variety of angles and share views among classmates from various cultural and social backgrounds

1(1) Guidance [Kawai, Sasaki, Nishijima]

Part I:
Lectures 1(2)- 7
Characteristics of Japanese language and language teaching

1(2) [Sasaki]
Lecture: Linguistics features of the Japanese language

2 [Sasaki]
Lecture: the Japanese language variations
Seminar: Discussion and preparing for your presentation (1)

3 [Sasaki]
Lecture: Current conditions in Japanese language education / a comparative analysis of Japanese language education methods
Seminar: Discussion and preparing for your presentation (2)

4 [Sasaki]
Lecture: Japan culture through Japanese language education
Seminar: Discussion and preparing for your presentation (3)

5,6 [Sasaki]
Seminar: Presentation rehearsal and feedback

7 [Sasaki, Kawai, Nishijima]
Presentation for Part I: Either in Japanese or English

Part II: Lectures 8-13
Social scientific approach toward Japanese culture and society in the global context

Continue to 日本語・日本文化演習(4) ↓ ↓ ↓

日本語・日本文化演習(4)

8 [Nishijima]
Lecture: Definitions of "culture" and comparative studies

9 [Nishijima]
Lecture: Disparities between Urban and Rural Area (Problems of Marginal Villages)
Seminar: Discussion and preparing for your presentation (1)

10 [Nishijima]
Lecture: Countries Transformation of Families(Increase of Single-household)
(Hidden Poverty among Japanese Middle-class)
Seminar: Discussion and preparing for your presentation (2)

11 [Nishijima]
Lecture: Comparison of Rituals between Japan and Other Asian Countries
Seminar: Discussion and preparing for your presentation (3)

12,13 [Nishijima]
Seminar: Presentation rehearsal and feedback

14 [Nishijima, Kawai, Sasaki]
Presentation for Part II: Either in Japanese or English

15 [Nishijima, Kawai, Sasaki]
Feedback

[Course requirements]

None

[Evaluation methods and policy]

積極的参加態度 (30%)、「レポート・発表準備課題、プレゼンテーション」(70%)で評価する。

配点の割合の詳細は講義において示す。

Participation (30%) , "Reports, assignments, and presentations"(70%).
Details will be announced in class.

[Textbooks]

プリントを配布する
Handouts

[References, etc.]

(Reference book)

Readings for each week will be handed out in class. The following books will be our basic guides throughout the course.

Part I

Continue to 日本語・日本文化演習(5) ↓ ↓ ↓

日本語・日本文化演習(5)

・遠藤織枝『日本語教育を学ぶ』第2版（三修社、2011年3月）[Endoh, Orië, "Nihongo-kyoiku o manabu", 2011] (Abridged translations in English will be provided.) ・金水敏『ヴァーチャル日本語 役割語の謎』（岩波書店、2003年1月）[Kinsui, Satoshi, "Virtual-Nihongo Yakuwarigo no Nazo", 2003] (Abridged translations in English will be provided.) ・近藤安月子『「日本語らしさ」の文法』（研究社、2018年3月）[Kondoh, Atsuko, "Nihongo-rashisa' no Bunpo", 2018] (Abridged translations in English will be provided.) ・定延利之『日本語社会のぞきキャラくり』（三省堂、2011年3月）[Sadanobu, Toshiyuki, "Nihongo-shakai Nozokiyarakuri", 2011] (Abridged translations in English will be provided.) ・Kingston, Jeff (ed) (2013), Critical Issues in Contemporary Japan, Routledge ・浜本満, 浜本まり子. 1994. 『文化人類学のCOMMON SENSE—文化人類学入門』学術図書出版社 [Hamamoto Mitsuru, Hamamoto Mariko, eds., "Jinruigaku no Common Sense - Bunka Jinruigaku Nyumon" 1994] (Abridged translations in English will be provided.)
Part II ・中根千枝. 1967. 『タテ社会の人間関係』講談社現代新書 [Nakane Chie, "Japanese Society" 1972 (Center for Japanese Studies, UC Berkeley) ISBN-13: 978-0520021549]

[Study outside of class (preparation and review)]

プレゼンテーションの準備として、段階を追って随時レポート・課題が出される。各自、積極的に準備を行うことが求められる。

To prepare for presentation(s), you will be asked to submit several assignments and short reports step by step. Your active participation is expected.

[Other information (office hours, etc.)]

海外留学を考える学生を優先するが、これまでとは異なる新しい視点で日本語・日本文化を考えてみようとする学生や留学生の受講も歓迎する。

多文化共学短期派遣プログラム（東アジア）、同アセアンプログラム参加のための推奨科目となっている。また交換留学生の履修推奨科目にもなっている。

Although this class was designed for students who plan to study abroad, all local and international students who want to learn about Japanese language and cultures from various different perspectives are welcome.

This class is recommended for the local students who are planning to participate in the short term study abroad programs 多文化共学短期派遣プログラム（東アジア）(Short term study abroad (East Asia)) and 同アセアンプログラム（Short term study abroad (ASEAN)) . This class is also one of the "recommended classes" for international exchange students.

※平成27年度以前の卒業要件が適用される学部生が履修し、単位を修得した場合には、単位数の2分の1が卒業に必要な単位として算入されます。

Course number	U-LAS01 10010 LE38				
Course title (and course title in English)	Western History II-E2 Western History II-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Humanities and Social Sciences		Field(Classification)	History and Civilization(Foundations)	
Language of instruction	English		Old group	Group A	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture	Year/semesters	2020 • Second semester
Days and periods		Target year	All students	Eligible students	For all majors
[Overview and purpose of the course]					
This is an introductory undergraduate course, providing students a basic narrative of major turning points that shaped modern Europe from the late 18th-century through the present, including the cause and the course of the two world wars. This is a contents based course taught in English. The purpose of this course is to develop (a) an understanding of some of the principle themes in modern Western History, and (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding verbally.					
[Course objectives]					
One of the goals of this course is to help students to consider multiple accounts of historical events in order to understand international relations from a variety of perspectives. Besides nurturing their English reading, writing and communication skills, the ultimate goal of this course is to provide a platform for students to discuss history in English.					
[Course schedule and contents]					
Week 1: Introduction to the course and Overview Week 2/3: The French Revolution and Napoleon Week 4/5: The Industrial Revolution and Pax Britannica Week 6/7: World War I Week 8/9: Interwar period and the rise of Fascist Italy, Germany and Japan Week 10/11: World War II Week 12/13: The Cold War Week 14: Post Cold War and the Contemporary Era Week 15: Final examination Week 16: Feedback & Summary of the Course					
*Note: The schedule may change slightly depending on class requirements.					
[Course requirements]					
There are no prerequisites. This course is open to all students regardless of major. Enthusiasm and willingness to participate and share ideas in class is necessary.					
[Evaluation methods and policy]					
A system of continuous evaluation will be adopted.					
----- Continue to Western History II-E2(2) ↓ ↓ ↓					

Western History II-E2(2)
----- Although this will be a lecture styled course, students will be required to engage in discussions and/or presentations and submit written work as per instructions.
Final grade will be based on the following: 30% Regular participation and activity in class. 70% Exam/Final Paper at the end of the course.
[Textbooks]
Not used Reference materials and notes will be distributed in class as per requirements. Students will be expected to go through the handouts and bring them to class as per instruction.
[References, etc.]
(Reference book) Introduced during class To be announced in class.
[Study outside of class (preparation and review)]
No prior knowledge of history is required. Students should be able to participate in discussions with their classmates in English.
[Other information (office hours, etc.)]
No office hours specified. Meetings are to be arranged by appointment. Classroom Management: Be respectful to everyone and everything in class.

Course number	U-LAS01 10010 LE38				
Course title (and course title in English)	Western History II-E2 Western History II-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Humanities and Social Sciences		Field(Classification)	History and Civilization(Foundations)	
Language of instruction	English		Old group	Group A	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods		Target year	All students	Eligible students	For all majors
[Overview and purpose of the course]					
This is an introductory undergraduate course, providing students a basic narrative of major turning points that shaped modern Europe from the late 18th-century through the present, including the cause and the course of the two world wars. This is a contents based course taught in English. The purpose of this course is to develop (a) an understanding of some of the principle themes in modern Western History, and (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding verbally.					
[Course objectives]					
One of the goals of this course is to help students to consider multiple accounts of historical events in order to understand international relations from a variety of perspectives. Besides nurturing their English reading, writing and communication skills, the ultimate goal of this course is to provide a platform for students to discuss history in English.					
[Course schedule and contents]					
Week 1: Introduction to the course and Overview Week 2/3: The French Revolution and Napoleon Week 4/5: The Industrial Revolution and Pax Britannica Week 6/7: World War I Week 8/9: Interwar period and the rise of Fascist Italy, Germany and Japan Week 10/11: World War II Week 12/13: The Cold War Week 14: Post Cold War and the Contemporary Era Week 15: Final examination Week 16: Feedback & Summary of the Course					
*Note: The schedule may change slightly depending on class requirements.					
[Course requirements]					
There are no prerequisites. This course is open to all students regardless of major. Enthusiasm and willingness to participate and share ideas in class is necessary.					
[Evaluation methods and policy]					
A system of continuous evaluation will be adopted.					
----- Continue to Western History II-E2(2) ↓ ↓ ↓					

Western History II-E2(2)
----- Although this will be a lecture styled course, students will be required to engage in discussions and/or presentations and submit written work as per instructions.
Final grade will be based on the following: 30% Regular participation and activity in class. 70% Exam/Final Paper at the end of the course.
[Textbooks]
Not used Reference materials and notes will be distributed in class as per requirements. Students will be expected to go through the handouts and bring them to class as per instruction.
[References, etc.]
(Reference book) Introduced during class To be announced in class.
[Study outside of class (preparation and review)]
No prior knowledge of history is required. Students should be able to participate in discussions with their classmates in English.
[Other information (office hours, etc.)]
No office hours specified. Meetings are to be arranged by appointment. Classroom Management: Be respectful to everyone and everything in class.

Lecture code: H731001

Course number	U-LAS04 20008 LE47				
Course title (and course title in English)	Education in Contemporary Japan Education in Contemporary Japan		Instructor's name, job title, and department of affiliation	Institute for Liberal Arts and Sciences Professor, KAWAI JUNKO	
Group	Humanities and Social Sciences		Field(Classification)	Pedagogy, Psychology and Sociology(Issues)	
Language of instruction	English		Old group	Group A	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods	Wed.3	Target year	All students		Eligible students For all majors
[Overview and purpose of the course]					
This course provides an introduction to approaches to and topics in Japanese education. The course examines the characteristics of schooling in Japan from the past to today, and includes analysis of contemporary issues in education.					
"Education" has several functions: it transmits values, culture, and customs while at the same time instilling societal rules, and selecting individuals (for example through examinations) and allocating them in a certain position within the society. We will study how these social functions operate in Japanese society by comparing Japan's educational system with that of other countries. Students are encouraged to share their own knowledge and experiences.					
Class will be interactive, mixing both lectures and discussions with activities, including a field trip to a local school. Throughout the whole course, students will have opportunities to take a close look at what is happening and what has happened in Japanese society by examining Japanese education from various perspectives.					
[Course objectives]					
<ul style="list-style-type: none"> • To gain knowledge and understanding of the characteristics of Japanese education through comparisons with other countries and students' own experiences. • To develop interest and skills to participate in discussions with classmates from various cultural backgrounds. • To develop skills in critical analysis through structured reading, written assignments, and a field observation. 					
[Course schedule and contents]					
Topics					
1. Introduction to approaches to education (Session 1)					
2. Overview of Japanese education system (Session 1-2)					
3. Characteristics of Japanese education (Session 2-9)					
(1) Historical background for understanding contemporary Japanese education					
(2) Egalitarianism in Japanese elementary education					
(3) Ability grouping and effort-ism (Spirit of "Gambaru")					
Continue to Education in Contemporary Japan(2) ↓ ↓ ↓					

Education in Contemporary Japan(2)
<p>(4) Individualism and group harmony</p> <p>(5) Life of adolescents - Roles of Japanese school clubs, functions and culture of cram schools, teacher-student relationships, school-family relationships.</p> <p>(6) Entrance examinations</p> <p>(7) Transition from school to work</p> <p>4. Observation in real educational settings: field trip to a local school (date to be decided)</p> <p>5. Contemporary education issues (Session 10-14)</p> <p>(1) Japanese educational problems: a historical overview</p> <p>(2) Ijime (Bullying) and Futoko (Truancy, Non-attendance)</p> <p>(3) Over-demanding parents</p> <p>(4) Language education</p> <p>(5) Studying abroad</p> <p>6. Feedback (Session 15)</p>
[Course requirements]
None
[Evaluation methods and policy]
Participation in class activities (30%), Mid-term report (book review) (30%), and Final report (40%)*. *For the final report, students may choose one of the following assignments: (1) A report on observation at school site or (2) An analysis of a personal educational history (In-depth Interview).
授業への参加(30%)、中間レポート(文献紹介)(30%)、期末レポート(40%)。
[Textbooks]
Handouts will be distributed. プリント配布
[References, etc.]
(Reference book)
(1) Apple, Matthew T., Da Silva, Dexter, and Fellner, Terry, Language Learning Motivation in Japan (Second Language Acquisition), Multilingual Matters, 2013
(2) Cummings, William, Chapter 5, "Egalitarian Education", Education and Equality in Japan, Princeton University Press, 1980
(3) Fukuzawa, Rebecca E. and LeTendre, Gerald. Intense Years: How Japanese Adolescents Balance School, Family, and Friends, Taylor and Francis, 2001
(4) Mock, John, Kawamura, Hiroaki, and Naganuma, Naeko, The Impact of Internationalization on Japanese Higher Education: Is Japanese Education Really Changing? Sense Publishers, 2016
(5) Rohlen, Thomas, Chapter 5 "Space and Time", and Chapter 6 "Organization", in Japan's High School, The University of California Press, 1983
Continue to Education in Contemporary Japan(3) ↓ ↓ ↓

Education in Contemporary Japan(3)

(6)Shavit, Yossi, and Muller, Walter, (eds.) From School to Work; A Comparative Study of Educational Qualifications and Occupational Destinations, Clarendon Press Oxford, 1998

(7)Tobin, Joseph J, Wu, David Y., and Davidson, Dana H. Preschool in Three Cultures; Japan, China, and the United States, Yale University Press, 1989

(8)伊藤茂樹「心の問題」としてのいじめ問題」『教育社会学研究 59』1996 [Ito, Shigeki, “IJIME Constructed as a Problem of Mind,” Kyoiku SyakigakuKenkyu, Vol. 59, 1996 (Abridged translations in English will be provided.)]

(9)森田洋司『不登校現象の社会学』学文社、1991 [Morita, Yoji, Futokogensho no Shakaigaku, 1991 (Abridged translations in English will be provided.)]

(10)小野田正利『悲鳴をあげる学校—親の”イチャモン”から”結びあい”へ』旬報社、第7刷、2007
[Onoda, Masatoshi, Himei o ageru gakko, 2007 (Abridged translations in English will be provided.)]

[Study outside of class (preparation and review)]

- Students are expected to complete the reading assignments and actively participate in class discussion every week.
- Students are required to give a 10-15 minute presentation on one of the selected reading assignments as a small group.

[Other information (office hours, etc.)]

During one of the classes between Session 7 and Session 9, we will visit a nearby local elementary school for a participant observation. Students will need to cover any necessary transportation fees and enroll in the Personal Accident Insurance for Students while Pursuing Education and Research.

第7回～9回のうち1回は、小学校での実習を行う。旅費（交通費）が必要な場合、原則として受講生の負担となる。学生教育研究災害傷害保険に各自加入しておくこと。

Course number	U-LAS03 10005 SB48				
Course title (and course title in English)	外国文献研究 (教育・英) II-E1 Readings in Humanities and Social Sciences (Education, English)II-E1		Instructor's name, job title, and department of affiliation	Graduate School of Education Professor,Emmanuel MANALO	
Group	Humanities and Social Sciences		Field(Classification)	Readings in Humanities and Social Sciences	
Language of instruction	English		Old group	Group C	Number of credits 2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters 2020・Second semester
Days and periods	Mon.4		Target year	2nd year students or above	Eligible students For all majors
[Overview and purpose of the course]					
The main purpose of this course is to develop students' English communication skills (reading and writing, listening and speaking) through examination and discussion of recent scientific research studies in education and psychology. Students taking the course will be asked to write brief reports about assigned and self-selected readings, to make short group and electronic presentations in class, and to contribute to discussions.					
[Course objectives]					
The goals of this course are to develop the following skills in students: - Reading skills to enable access to information they need from published research articles in education and psychology, - Speaking and listening skills necessary for group work and discussions, - Report writing skills for a general (non-expert) audience, - Academic presentation skills.					
[Course schedule and contents]					
The following is a guide to the structure of the 16 weeks of the semester. As required, some minor adjustments may be made to this structure. Week 1: Introduction to the course and its expectations Week 2: Example research presentation, assignment of articles to present, discussion of presentation requirements Weeks 3 to 4: Presentation preparation and practice Weeks 5 to 8: Group presentations and discussion Weeks 9 to 14: Individual electronic presentations and discussion Week 15: Examination week (There is no final examination for this course.) Week 16: Feedback week					
Students will be assigned readings to undertake, as well as to look for their own pertinent research articles to read.					
Class sessions will normally comprise of brief presentations from students about the articles they have read, followed by questions, comments from, and discussion with the instructor and other non-presenting students. Active participation is a requirement.					
----- Continue to 外国文献研究 (教育・英) II-E1(2) ↓ ↓ ↓					

外国文献研究 (教育・英) II-E1(2)	
[Course requirements]	
None	
[Evaluation methods and policy]	
Grading for the course will be based on the following requirements: - Two brief presentations = 30% (15% for each): Students make the presentations based on readings they undertake (one assigned, and one self-selected) - Two brief reports = 30% (15% for each): Based on the presentations that students make - Portfolio of work done in class and for homework = 40%: The portfolio (which should be a well-organized folder) should contain summaries of and comments on readings done in class, written comments about other students' presentations, and any other assigned homework tasks (e.g., writing different kinds of questions in response to given reading materials; writing comments about video presentations).	
[Textbooks]	
Not used	
[References, etc.]	
(Reference book) Introduced during class	
[Study outside of class (preparation and review)]	
Students taking this course will be expected to prepare for each class by reading and taking notes from research articles and other materials that the instructor assigns.	
[Other information (office hours, etc.)]	
Students can email the instructor to make an appointment or to ask any questions about the course.	

Course number	U-LAS10 10023 LE55				
Course title (and course title in English)	Quest for Mathematics I-E2 Quest for Mathematics I-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Natural Sciences		Field(Classification)	Mathematics(Foundations)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods		Target year	Mainly 1st & 2nd year students	Eligible students	For liberal arts students
[Overview and purpose of the course]					
This class aims at introduction of calculus for those who did not study "Mathematics III (of the Japanese high school standard)".					
[Course objectives]					
The goal of the class is to solve problems of the same level with those in entrance examination for science students. An additional goal of this course is to give a chance to the students to present and discuss mathematics in English.					
[Course schedule and contents]					
The course will cover the following topics, and each of them is read in 3-4 weeks: 1. Limit of series and continuous functions 2. Differentiation of elementary functions (i.e. sine, cosine, exponential etc.) 3. Brief introduction of the Riemann integral and differential equations 4. Applications.					
[Course requirements]					
None					
[Evaluation methods and policy]					
The evaluation of the course will take into account the following criteria: -homework (20%) -presentation (10%) -final exam (70%)					
[Textbooks]					
Not used					
[References, etc.]					
(Reference book) Thomas 『Calculus.』 (Pearson)					
----- Continue to Quest for Mathematics I-E2(2) ↓ ↓ ↓					

Quest for Mathematics I-E2(2)**[Study outside of class (preparation and review)]**

Exercises are given in class and students are required to solve them for clear understanding of the topics in class.

[Other information (office hours, etc.)]

High school text book "Mathematics III (高等学校 数学 III)" based on the Japanese high school standard is useful to understand of the subject of the class.

Office hours are not assigned and it is advisable to make comments willingly during and after the class.

Course number	U-LAS10 20012 LE55				
Course title (and course title in English)	Nonlinear Mathematics-E2 Nonlinear Mathematics-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Natural Sciences		Field(Classification)	Mathematics(Development)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture	Year/semesters	2020 • Second semester
Days and periods		Target year	Mainly 2nd year students	Eligible students	For science students
[Overview and purpose of the course]					
Mathematical modeling is very important to understand and to analyze natural phenomena, and nonlinear models have been of great importance in many fields. This class emphasizes on mathematical analysis for those nonlinear models, esp. nonlinear differential equations, and the goal of the class is to study introductory theories to deal with nonlinear equations through some examples. Furthermore, this class is also intended for students to enjoy interesting approach to natural phenomena through mathematical analyses. An additional goal of this course is to give a chance to the students to present and discuss mathematics in English.					
[Course objectives]					
The goal of the class is to study introductory theories to deal with nonlinear differential equations through some examples. In addition to learning modern mathematics and proofs, students can learn how to discuss and present mathematical topics in English through this course.					
[Course schedule and contents]					
Some mathematical models appeared in mathematical physics are shown, and fundamental mathematical theories related with those models are explained. The course will cover the following topics: 1. Mathematical modeling in fluid mechanics (5 weeks) 2. Fundamental theories about differential equations (4 weeks) 3. Analysis of the aimed phenomena through mathematical approach (5 weeks).					
[Course requirements]					
(Eligible students) mainly the sciences of the second grade. Students are required good understanding of both calculus and linear algebra studied in the first grade.					
[Evaluation methods and policy]					
The evaluation of the course will take into account the following criteria: -homework (20%) -presentation (10%) -final exam (70%)					
----- Continue to Nonlinear Mathematics-E2(2) ↓ ↓ ↓					

Nonlinear Mathematics-E2(2)
[Textbooks]
Not Specified
[References, etc.]
(Reference book) E. Goursat 『A course in mathematical analysis" vol. 1-3』 (reprinted form DoverPublications) F.G. Tricomi 『Differential equations』 (reprinted form Dover Publications)
[Study outside of class (preparation and review)]
Students are required to solve exercises given in class for deep understanding of the class.
[Other information (office hours, etc.)]
This class is an English class of "非線型数学" read in the first semester. Their syllabuses are the same to each other, but topics in class especially those of fluid mechanics, are not the same.

Lecture code: N813002

Course number	U-LAS11 20005 SE55				
Course title (and course title in English)	Data Analysis Practice I-E2 Data Analysis Practice I-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Natural Sciences		Field(Classification)	Data Science(Development)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters 2020 • Second semester
Days and periods		Target year	All students		Eligible students For all majors
[Overview and purpose of the course]					
Today's research landscape is characterized by an increasing amount of publicly accessible scientific data, e. g. from chemical or genomic screenings. This course is aimed at students from all disciplines who want to learn essential data analytics skills that help to interpret and explore scientific data. Prior specialized knowledge is not required to attend the course and topics will be introduced at a beginner's level. The lectures impart methods to obtain, clean, analyze, and visualize data from the web via python and illustrate basic concepts of data mining and statistical analyses.					
[Course objectives]					
In this course, students will - learn about the theoretical basis of data mining and statistical learning - gain the skills to retrieve, analyze, explore, and visualize data and draw conclusions for decision making - become familiar with computational operations, python, and data structures					
[Course schedule and contents]					
[01-07] THEORY: - Fundamental statistics and exploratory data analysis - Data visualization - Linear regression - Classification - Supervised learning: decision trees, random forest, support vector machines, others - Unsupervised learning: clustering					
[08-14] PRACTICE: Introduction to python (jupyter), demonstration and execution of data analysis workflows based on concepts covered in preceding theory section.					
[15] FEEDBACK					
[Course requirements]					
Access to a personal computer is essential to complete homework assignments.					
[Evaluation methods and policy]					
20 % Class attendance					
----- Continue to Data Analysis Practice I-E2(2) ↓ ↓ ↓					

Data Analysis Practice I-E2(2)
----- 30 % Mid-term exam 50 % Homework assignments
[Textbooks]
Instructed during class
[References, etc.]
(Reference book) Introduced during class
(Related URL) (Announced during class.)
[Study outside of class (preparation and review)]
Weekly review of course content is advised. The completion of homework assignments in groups of 1 to 3 students requires additional time investment outside of class.
[Other information (office hours, etc.)]
Announced during class.

Lecture code: N932001

Course number	U-LAS14 20064 LE68				
Course title (and course title in English)	Introduction to Molecular Cell Biology-E2 Introduction to Molecular Cell Biology-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Natural Sciences		Field(Classification)	Biology(Issues)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods		Target year	Mainly 1st year students	Eligible students	For science students
[Overview and purpose of the course]					
<p>In our world there is no form of matter more astonishing than the living cell: tiny, fragile, marvelously intricate, continually made afresh, yet preserving in its DNA a record of information dating back more than three billion years, to a time when our planet had barely cooled from the hot materials of the nascent solar system. Ceaselessly re-engineered and diversified by evolution, extraordinarily versatile and adaptable, the cell retains a complex core of self-replicating chemical machinery that is shared and endlessly repeated by every living organism on the face of the Earth in every animal, every leaf, every bacterium in a piece of cheese, every yeast in a vat of wine.</p> <p>Curiosity, if nothing else, should drive us to study cell biology; we need to understand cell biology to understand ourselves. But there are practical reasons, too, why cell biology should be a part of everyone's education. We are made of cells, we feed on cells, and our world is made habit-able by cells. The challenge for scientists is to deepen our knowledge of cells and find new ways to apply it. All of us, as citizens, need to know something of the subject to grapple with the modern world, from our own health affairs to the great public issues of environmental change, biomedical technologies, agriculture, and epidemic disease.</p> <p>This course is designed to provide the fundamentals of cell biology that are required by anyone to understand both the biomedical and the broader biological issues that affect our lives.</p> <p>This course is not recommended for students who already have selected specialized life science courses such as biochemistry and genetics. (Essential Cell Biology)</p>					
[Course objectives]					
<p>This course will give a basic understanding of cellular physiology. Students will be able to explain, in English, how the cell is organised and how it functions.</p>					
[Course schedule and contents]					
<p>This lecture will describe cellular physiology in continuity with the course titled "Basic Biology and Metabolism".</p> <p>1 - 2. DNA replication, repair and recombination 3 - 4. From DNA to protein: How Cells Read the Genome</p>					
Continue to Introduction to Molecular Cell Biology-E2(2) ↓ ↓					

Introduction to Molecular Cell Biology-E2(2)
<p>5 - 6. Control of Gene expression 7 - 8. Membrane Structure 9 - 10. Transport Across Cell Membranes 11 - 12. How Cells Obtain Energy From Food 13 - 14. Cell-division cycle 15. Feedback</p>
<p>This schedule may proceed quicker or more slowly than expected, depending on the level and number of the students.</p>
[Course requirements]
<p>Students who have chosen Basic Biology and Metabolism are encouraged to also follow this course.</p>
[Evaluation methods and policy]
<p>A mid-term examination, in English, to assess the students understanding of the content so far (50%).</p> <p>A final examination, in English, to assess the students global understanding of the course (50%).</p>
[Textbooks]
<p>Alberts B et al. 『Essential Cell Biology 4th edition』 (Garland Science) ISBN:815344554 Handouts based various sources specifically tailored for the lecture will be provided.</p>
[Study outside of class (preparation and review)]
<p>Reading the textbook before the lecture will help the students to understand the lecture. Students should review the textbook after the lecture and answer the questions provided.</p>
[Other information (office hours, etc.)]
<p>Any questions and requests are welcome by prior arrangements via E-mail.</p>

Course number	U-LAS14 20061 SE68					
Course title (and course title in English)	Introduction to Computational Molecular Biology-E2		Instructor's name, job title, and department of affiliation	Not fixed		
	Introduction to Computational Molecular Biology-E2					
Group	Natural Sciences		Field(Classification)	Biology(Issues)		
Language of instruction	English		Old group	Group B	Number of credits	2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters	2020 • Second semester
Days and periods		Target year	All students		Eligible students	For science students
[Overview and purpose of the course]						
<p>Have you ever wondered why aspirin relieves pain or why some pesticides are toxic for insects? This course is designed to teach students how to explore such questions through computational means. Students will investigate molecular structures, functions, and interactions on an atomistic level in a playful way. Prior knowledge about basic molecular biology is advantageous. The lectures provide insights into theoretical biophysics, computer-based approaches, and molecular modelling tools. At the core of this course is a project in which students develop a research hypothesis and apply computational tools to analyze and explore a biological question of their own interest. This project will give students the opportunity to practice scientific writing and presentation skills.</p>						
[Course objectives]						
<p>Students of this course will</p> <ul style="list-style-type: none"> - gain deeper understanding about the structure and function of (macro)molecules and the theoretical basis of molecular interactions - learn how to execute and apply computational workflows for molecular analysis and visualization - become conversant with the theory of molecular modelling - learn how to write scientific reports or present scientific research results 						
[Course schedule and contents]						
<p>[01 - 02] Introduction to molecular structures and biological data [03] Biological databases and data formats [04] Computational biology/ molecular modelling basics [05] Proteins and their motion (molecular dynamics simulations) [06] Molecular interactions I (molecular docking simulations) [07] Molecular interactions II (3D pharmacophores) [08] Chemoinformatics/-genomics [09 - 14] Project-based counselling and discussion of questions [15] Project presentations or submission of course reports [16] Feedback</p>						
----- Continue to Introduction to Computational Molecular Biology-E2(2) ↓ ↓ ↓						

Introduction to Computational Molecular Biology-E2(2)	
[Course requirements]	
Access to a computer is essential to conduct the project. The course projects will be executed in groups of 1 to 3 students. Group meetings might have to be scheduled independently and outside of class to design and execute the course projects, and prepare for the final presentation or course report.	
[Evaluation methods and policy]	
40 % Class attendance/ participation 40 % Quality of research project 20 % Final presentation/ course report	
[Textbooks]	
Not used. Material and articles will be provided in class.	
[References, etc.]	
(Reference book)	
Material and articles will be provided in class. The following books give deeper insights into presented topics, but are no mandatory prerequisites to successfully complete the course. - Leach, A.R., 2001. Molecular modelling: principles and applications. Pearson education. ISBN: 0582382106, 9780582382107 - Schlick, T., 2010. Molecular modeling and simulation: an interdisciplinary guide: an interdisciplinary guide (Vol. 21). Springer Science & Business Media. ISBN:1441963510, 9781441963512	
[Study outside of class (preparation and review)]	
Weekly review of course content is advised. The design and execution of the course project, as well as the preparation of the final presentation or course report, require additional time investment outside of class.	
[Other information (office hours, etc.)]	

Lecture code: T052002

Course number	U-LAS30 20030 LE10				
Course title (and course title in English)	Introduction to Algorithms-E2 Introduction to Algorithms-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Informatics		Field(Classification)	(Issues)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods		Target year	All students		Eligible students For all majors
[Overview and purpose of the course]					
This is an introductory non-technical course on algorithms designed for all undergraduate students, including liberal arts students. The goal of this course is to show how computers can solve practical problems, and especially to give the students a basic understanding of the notion of algorithms, their importance and how they work. All the notions will be motivated by real-life applications.					
[Course objectives]					
At the end of the course, students should understand the importance of algorithms and how they work.					
[Course schedule and contents]					
1. What are algorithms, and why should you care? (1 week) 2. How to describe and evaluate algorithms (1 week) 3. Sort and search algorithms: how do search engines work? (3 weeks) 4. Constructing algorithms: some simple but powerful techniques (3 weeks) 5. Graphs algorithms: how to represent practical problems on a computer, and solve them (4 weeks) 6. Easy vs. hard problems: what cannot be computed? (2 weeks) 7. Feedback (1 week)					
[Course requirements]					
This is a general non-technical course for all undergraduate students. No specific background from mathematics or computer science is required.					
[Evaluation methods and policy]					
Evaluation on submitted reports (three reports during the semester) and class attendance and participation.					
[Textbooks]					
Not used					
[Study outside of class (preparation and review)]					
The instructor expects students to spend enough time after each class for review. Additionally, mandatory reading material and assignments (3 reports) will be given during the course.					
[Other information (office hours, etc.)]					

Lecture code: T048001

Course number	U-LAS30 20028 LE10				
Course title (and course title in English)	Fundamentals of Discrete Optimization-E2 Fundamentals of Discrete Optimization-E2		Instructor's name, job title, and department of affiliation	Not fixed	
Group	Informatics		Field(Classification)	(Issues)	
Language of instruction	English		Old group	Group B	Number of credits 2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters 2020 • Second semester
Days and periods		Target year	All students	Eligible students	For all majors
[Overview and purpose of the course]					
The goal of this course is to introduce students to the field of discrete optimization. This is a non-technical course open to all undergraduate students, which does not require any specific background on mathematics or computer science. What is the shortest path between two places on a roadmap? What is the optimal strategy for delivering packages from a seller to clients? Discrete optimization is a methodology to solve such practical problems, in addition to a wide range of problems arising in science, economy or business. This course will show how to model such tasks as optimization problems and how to solve them in practice.					
[Course objectives]					
At the end of the course, students should know how to solve in practice concrete problems using discrete optimization.					
[Course schedule and contents]					
1. What is optimization, and why is it important? (1 week) 2. Discrete optimization: how to organize your schedule or pack your bag efficiently? (4 weeks) 3. Heuristics and approximation: practical methods for hard problems (3 weeks) 4. Big data: solving large-scale problems (2 weeks) 5. Pattern recognition: learning from experience (2 weeks) 6. Artificial intelligence: can computers “think” ? (2 weeks) 7. Feedback (1 week)					
[Course requirements]					
This is a general non-technical course for all undergraduate students. No specific background from mathematics or computer science is required.					
[Evaluation methods and policy]					
Evaluation on submitted reports (three reports during the semester) and class attendance and participation.					
[Textbooks]					
Not used					
[Study outside of class (preparation and review)]					
The instructor expects students to spend enough time after each class for review. Additionally, mandatory reading material and assignments (3 reports) will be given during the course.					
[Other information (office hours, etc.)]					

Course number	U-LAS30 20031 LE11					
Course title (and course title in English)	Information Network-E2 Information Network-E2		Instructor's name, job title, and department of affiliation	Not fixed		
Group	Informatics		Field(Classification)	(Issues)		
Language of instruction	English		Old group	Group B	Number of credits	2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters	2020 • Second semester
Days and periods		Target year	All students	Eligible students	For all majors	
[Overview and purpose of the course]						
Using the Internet for gathering information, sending e-mails, and online shopping has become a part of everyday life. In this course, students will learn the basic workings of the Internet and how computers communicate across networks. Students will also learn about information security issues and how to avoid potential problems while using the Internet.						
[Course objectives]						
The students will learn the basics of the Internet and the various protocols used when devices communicate across the network, understand problems involving information security and how to deal with them, and learn the basic rules governing proper use of information networks.						
[Course schedule and contents]						
We will cover the following topics during the course, and spend one or two weeks on each topic:						
<ol style="list-style-type: none"> 1) Overview of the Internet 2) Application Layer (World Wide Web, e-mail, etc.) 3) Transport Layer (sockets, TCP and UDP) 4) Network Layer (IP addresses and routing) 5) Link Layer (LANs and Ethernet) 6) Wireless and mobile networks 7) Security 8) Rules of Internet usage 						
[Course requirements]						
No prerequisites are required, but it is recommended that the students take an introductory course such as "Basic Informatics" before this course.						
----- Continue to Information Network-E2(2) ↓ ↓ ↓						

Information Network-E2(2)
[Evaluation methods and policy]
Students will be expected to understand the basic workings of the Internet, information security and proper use of information networks. The student's understanding of these topics will mainly be evaluated by a final report at the end of the course. Evaluation will also be influenced by performance on practice exercises given during the course. Approximately: class participation (10%), exercises (30%), final report (60%).
[Textbooks]
Relevant materials will be distributed in class, so no textbook is required. However, students who wish to study the topics in more detail are recommended to read the book "Computer Networking" by J. Kurose and K. Ross (see below).
[References, etc.]
(Reference book) J. Kurose and K. Ross 『Computer Networking: A top-down approach (7th Edition)』 (Pearson, 2016) ISBN:978-0133594140
[Study outside of class (preparation and review)]
Students should study material related to each topic before class, and review the course material after each class. It is also recommended that students gain first-hand experience of the topics discussed by using computers outside of class.
[Other information (office hours, etc.)]

Course number	U-LAS30 20036 LE10						
Course title (and course title in English)	Fundamentals of Artificial Intelligence-E2			Instructor's name, job title, and department of affiliation	Not fixed		
Group	Informatics		Field(Classification)	(Issues)			
Language of instruction	English		Old group		Number of credits	2	
Number of weekly time blocks	1	Class style	Lecture		Year/semesters	2020 • Second semester	
Days and periods		Target year	All students		Eligible students	For all majors	
[Overview and purpose of the course]							
Recent improvements in Artificial Intelligence techniques, in particular the set of techniques commonly referred to as “Deep Learning”, have largely increased the number of tasks that computers can solve easily. This lead to a current explosion in the use of AI: chatbots helping users on commercial websites, self-driving vehicles, automatic translation, automatic photos tagging, etc. It is of course not possible to introduce all aspects of AI in one semester, but this course will attempt to give a sufficiently detailed explanation of at least a few of the most AI common techniques. We will focus on supervised Machine Learning in general and Deep Learning in particular. One goal will be to give practical and working knowledge to students, so that they can apply what they learned to at least some simple tasks.							
[Course objectives]							
Students will have a good understanding of simple supervised machine learning techniques, and be able to implement and use some for automatic classification tasks.							
[Course schedule and contents]							
1- Overview of Artificial Intelligence and its applications (1 week) This will give a “Big Picture” description of the field of AI. We would first discuss some common applications of AI: Image Recognition, Speech Recognition, Text understanding, Chatbots, Machine Translation, Video Games, Automation (self-driving vehicles, robotic), Financial Predictions, Medical Diagnostic. Then we would discuss the general approaches to AI: Logic reasoning, Machine Learning (supervised and unsupervised), ...							
2-Review of Mathematics Concepts (3 weeks) We will review here some of the Mathematics tools that are the most necessary for the understanding of AI methods. In particular, we will review essential notions of probability and statistics (expectation, variance, random variables, estimators) as well as calculus and optimization (derivative, numerical methods for finding a minimum,...)							
3-Basic Principles of Supervised Machine Learning (3 weeks) Focusing on simple tasks such as binary classification or linear regressions, we introduce the terminology and basics of Machine learning: defining a parameterized model, defining a loss, choosing an optimization method. We will also introduce some classic models for binary classification: naive Bayes, perceptron, deep neural networks. Finally, we discuss the theoretical aspects of bias, variance and capacity.							
----- Continue to Fundamentals of Artificial Intelligence-E2(2) ↓ ↓							

Fundamentals of Artificial Intelligence-E2(2)
4-Practical use of Machine Learning (3 weeks) We will learn to use a simple programming language (Python) and some of its libraries (scipy, scikit, chainer) to do practical machine learning. We will see how to load some data in a standard format (such as CSV) and then analyze it. We will consider both using directly library functions or implementing simple methods (so as to apply the theoretical knowledge of the previous part).
5-Artificial Intelligence and Natural Language Processing (4 weeks) We will discuss several Natural Language Processing tasks. In particular, Parsing, Summarization, Language Models and Machine Translation. We will especially focus on how Deep Learning models can be applied to these tasks. This will be an opportunity to further explain some of the most common Neural Network components used in deep learning, such as word embeddings, Recurrent Neural Networks, Softmax,...
6-Practical Project (1 week) As a final application, students will be asked to implement and train an end-to-end binary classifier for a specific task (eg. automatically classifying which documents in a set are newspaper articles).
7-Feedback (1 week)
[Course requirements]
None
[Evaluation methods and policy]
Evaluation is based on class participation (15 %), mini reports and exercises (50 %) and the implementation of an assigned project (35 %).
[Textbooks]
Instructed during class Lecture handouts will be provided in the class.
[References, etc.]
(Reference book) Ian Goodfellow, Yoshua Bengio and Aaron Courville 『Deep Learning』 (The MIT Press) ISBN:978-0262035613 (2016)
[Study outside of class (preparation and review)]
The instructor expects students to spend over 60 minutes after each class to review the content. Some practical exercises will also be given at the end of some lectures so as to let the students see how much of the content they do understand practically.
[Other information (office hours, etc.)]
No office hours specified. But, questions and requests are welcome by email.

Lecture code: T047001

Course number		U-LAS30 20027 LE13					
Course title (and course title in English)	Information Literacy for Academic Study-E2		Instructor's name, job title, and department of affiliation	Not fixed			
	Information Literacy for Academic Study-E2						
Group	Informatics		Field(Classification)	(Issues)			
Language of instruction	English		Old group	Group B		Number of credits	2
Number of weekly time blocks	1	Class style	Lecture		Year/semesters	2020 • Second semester	
Days and periods			Target year	All students		Eligible students	For all majors
[Overview and purpose of the course]							
Effective and efficient utilization of information is one key point for studying at university. This course introduces various resources and methods that help students find valuable information for study. The practical topics include formulating a study strategy, developing search skills, evaluating sources, and referring sources.							
[Course objectives]							
Students will be able to conduct effective decision making and problem solving in their academic studies by learning the methodologies of identifying, searching, evaluating, using, and presenting information.							
[Course schedule and contents]							
1. Introduction of information literacy (about 1 week) This section introduces the fundamental concepts of information literacy, the standards of information literacy for higher education, and the relation between university studies and information literacy.							
2. Study strategies (about 2 weeks) This section discusses how a student sets up an appropriate procedure to complete an assigned study/research task, such as determining the information needed, identifying the topic, developing a search strategy, collecting related information and accomplishing the task.							
3. Searching in Library (about 1 week) This section first introduces the general organization of a library, and then provides methods of locating the information needed at library, which include browsing shelves, checking card catalog, and using online catalog.							
4. Searching Databases (about 1 week) This section introduces the basic architecture of a database first, then the key items and methodologies for indexing. Afterwards, finding an article from magazines, newspapers, journals, and reference books in full text or reference databases is discussed.							
5. Searching internet (about 2 weeks) This section first introduces the architecture of World Wide Web, then explains the search engines including their foundation, principles, elements, and working flow (crawling, indexing, and query). Through explaining how search engines rank results and how PageRank measures individual web page, we discuss the method of precisely locating information from internet.							
Continue to Information Literacy for Academic Study-E2(2) ↓ ↓ ↓							

Information Literacy for Academic Study-E2(2)

6. Evaluating sources (about 3 weeks) This section explains the differences of various information materials and their formats, and introduces the evaluation criteria that one need to apply to sources.
7. Referring sources and academic integrity (about 2 weeks) This section introduces the reasons, rules and types of citing sources. The issues of copyright and plagiarism, and their relation are discussed as well.
8. Presenting information (1 week) This section provide tips as to how efficiently present the information gathered in a research work
9. Practice: future study design using problem solving models (1 week)
10. Feedback (1 week)
[Course requirements]
None
[Evaluation methods and policy]
Evaluation is based on class participation (20 %) and assignments (80 %).
[Textbooks]
Instructed during class Lecture handouts will be provided in the class.
[References, etc.]
(Reference book) Introduced during class
[Study outside of class (preparation and review)]
The instructor expects students to spend over 60 minutes after each class to review the content and build up their own logic.
[Other information (office hours, etc.)]
No office hours specified. But, questions and requests are welcome by email.

Lecture code: T054001

Course number		U-LAS30 20034 LE13					
Course title (and course title in English)	Art, Culture and Technology (英語講義)			Instructor's name, job title, and department of affiliation	Graduate School of Advanced Integrated Studies in Human Survivability Program-Specific Professor,TOSA NAOKO		
	Art, Culture and Technology						
Group	Informatics		Field(Classification)		(Issues)		
Language of instruction	English		Old group	Group B	Number of credits	2	
Number of weekly time blocks	1	Class style	Lecture		Year/semesters	2020・Second semester	
Days and periods	Wed.5		Target year	All students		Eligible students	For all majors
[Overview and purpose of the course]							
<p>We will discuss several serious issues, starting from the topic of art and technology, proceeding to the topic of culture and technology, and finally reaching to the topic of the new world based on the integration of these different concepts where both creators and viewers can reach deep mutual understandings.</p> <p>When we talk about art that achieves this mutual understanding, we have to admit that cultural issues would play a major role there. We can call the 1970's and the immediately following decades as the era where the relation between art and technology was the main topic. Now, in the early era of the twenty-first century, we should consider the relationship between culture and technology, in other words, culture in the Internet era.</p> <p>Each specific culture is strongly related to its region and race. Therefore, it is necessary to actually live there to really understand the culture specific to each place. At the same time, humans have been trying to realize virtual experiences of such ways of living by utilizing strong computing technology and by introducing sophisticated interaction technologies. Based on this, it would become possible for technology to clarify what culture is and, on the other hand, cultures could push technology forward. As a result, we are now approaching the stage where technologies could extract structures that hide behind each culture and try to realize communications among different cultures.</p> <p>In the twenty-first century, in the area of computer technology, the basic trend involves us moving from the era of calculation, database processing, information processing, etc., to the era of addressing culture, expressing culture, handling types and structures behind several cultures, and, as a result, letting people understand different cultures at a spiritual level. In other words, I can say that we are getting into the era of Cultural Computing.</p>							
[Course objectives]							
<p>Basic study of Art & Technology. Students will understand Japanese Culture through making digital art works.</p>							
[Course schedule and contents]							
<p>We want to introduce and discuss the still-unveiled possibilities of Cultural Computing which would express, in the interactive way, such substantial cultural issues such as sensitivity, memory, spirituality, storytelling, racial characteristics, etc., that have not been addressed in computer science and engineering so far. There are various possibilities in this area. From an artistic point of view, Cultural Computing can go beyond the present day media art by treating cultural issues described above. From the viewpoint of technology, it would open a new area in computer technologies, which so far has only been addressing the digitization of cultural</p>							
Continue to Art, Culture and Technology (英語講義) (2) ↓ ↓							

Art, Culture and Technology (英語講義) (2)	
<p>heritages/contents for the purpose of preserving them. The digitization of cultural issues would make it possible for people to understand different cultures,bridging the gaps between time and space, consequently creating new cultures.</p> <p>We particularly examine Japanese culture, although it is only a small subject of computing.</p> <ul style="list-style-type: none"> 1・ Japanese tastes for simple and quiet surroundings(WabiSabi) 2・ Relations between Japanese and Asian cultures 3・ Assuming the separation of Buddhism and Shintoism as a basis of Japanese cultural structure 4・ Peculiar features of Japanese literature such as the 31- syllable poem, Haiku poem, and Noh play 5・ Japanese designs (crests, textile, color, form, Noh play and Kabuki) 6・ Understanding the depths of feeling and culture from communication through computers 	
[Course requirements]	
Skill: internet search, e-mail, word, power point, Interest about Art	
[Evaluation methods and policy]	
<p>Art work, report, attendance(number of days). More detailed instructions will be provided in class.</p>	
[Textbooks]	
<p>NAOKO TOSA 『Cross-Cultural Computing: An Artist's Journey』 (Springer UK) ISBN:978-1-4471-6512-5</p> <p>(Related URL) http://tosa.gsais.kyoto-u.ac.jp/</p>	
[Study outside of class (preparation and review)]	
<p>Preparations and review : Perform it for 2 hours More detailed instructions will be provided in class.</p>	
[Other information (office hours, etc.)]	
Sometime, students go to recommend of Art exhibition at Kyoto area.	

Lecture code: U106001

Course number	U-LAS40 10008 LE26				
Course title (and course title in English)	Introduction to Lifestyle Related Diseases-E2		Instructor's name, job title, and department of affiliation	Not fixed	
	Introduction to Lifestyle Related Diseases-E2				
Group	Health and Sports		Field(Classification)	Health and Sports Sciences(Foundations)	
Language of instruction	English		Old group		Number of credits 2
Number of weekly time blocks	1	Class style	Lecture	Year/semesters	2020 • Second semester
Days and periods		Target year	All students	Eligible students	For all majors
[Overview and purpose of the course]					
The course provides a global overview of major chronic diseases and their risk factors, providing students with an understanding of the individual and societal disease burden. It also covers concepts of socio-epidemiology, social marketing, and behavioral theories, and their application for health promotion and prevention strategies. The course sessions are a mixture of lectures, guest speakers, small-group discussions, readings, written assignments, and student presentations.					
[Course objectives]					
* To understand the global burden of the most common chronic diseases					
* To understand the common risk factors					
* To understand the socioeconomic impact of the most common chronic diseases					
* To describe approaches for prevention of the most common chronic diseases					
[Course schedule and contents]					
In principle, the course will cover the following topics:					
1. Global overview of chronic diseases					
2. Determinants of health					
3. Cardiovascular diseases. Hypertension					
4. Chronic respiratory diseases					
5. Cancer					
6. Obesity and diabetes					
7. Unhealthy diets					
8. Physical inactivity					
9. Alcohol and tobacco					
10. Socio-epidemiology. Behavioral theories					
11. Social marketing for health promotion					
12. Media and technology					
13. Prevention and control					
14. Prevention and control (cont.)					
15. Feedback					
----- Continue to Introduction to Lifestyle Related Diseases-E2(2) ↓ ↓ ↓					

Introduction to Lifestyle Related Diseases-E2(2)	
[Course requirements]	
It is NOT a prerequisite, but students are encouraged to take "Sociology of Chronic Diseases" to enhance the understanding of chronic diseases.	
[Evaluation methods and policy]	
The course is presented in lecture/group discussion format; include videos and guest speakers.	
Grading will be based on the following factors:	
Class participation/Group discussions (20%)	
Presentation (20%)	
Written assignments (60%)	
* Further details will be provided in the first class.	
[Textbooks]	
Not used	
[References, etc.]	
(Reference book)	
Introduced during class	
The course may use chapters from textbooks and readings from academic literature. Students will be provided with a list of recommended readings. Lecture handouts will be available.	
[Study outside of class (preparation and review)]	
* Students are expected to come to class having completed the assigned reading and writing, and ready to contribute to group discussions.	
[Other information (office hours, etc.)]	
* Students are expected to actively participate in class.	
* Please visit KULASIS to find out about office hours.	

Lecture code: W220003 for Thu.3
W220004 for Thu.4

Course number	U-LAS51 10010 SE48				
Course title (and course title in English)	科学コミュニケーション (理・英) -E3 Science Communication (Science, English)-E3		Instructor's name, job title, and department of affiliation	Part-time Lecturer, James de Witt Graduate School of Science Professor, NAGATA TETSUYA	
Group	Career Development		Field(Classification)	International Communication	
Language of instruction	English		Old group	Group C	Number of credits 2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters 2020・Second semester
Days and periods	Thu.3/Thu.4		Target year	2nd year students or above	Eligible students For science students
[Overview and purpose of the course]					
The primary focus of this course will be on understanding scientific materials presented in an all-English environment. Coursework will emphasize group study and discussion, vocabulary-building, and clear description of scientific ideas through a variety of activities. Enrollment will be open, but is intended mainly for Rigakubu second-year students.					
英語の環境下で日本語を通さずに、科学に関する文献や資料を理解するための授業です。グループ学習と議論、語彙の習得、科学的考え方の明確な記述に重点を置きます。誰でも受講できますが、理学部2回生が主な対象です。					
[Course objectives]					
To acquire methods to improve your understanding of English-language scientific information and your skills in presenting them, for later educational and professional purposes.					
[Course schedule and contents]					
Materials will be selected from the fields of mathematics, physics/astrophysics, earth science, chemistry, and biology, and include authentic works by and about significant achievements of famous scientists.					
Lessons will include the content below. The planned number of lectures for each topic are indicated in the parentheses.					
Orientation (1) Summarizing information and collaborative discussion (3) Event/observation/description: limitations in scientific communication (2) - Thought experiments conducted in class Organization of ideas in scientific literature (5) - Improving reading comprehension through understanding of logical structure - Standards in journal article structure - Understanding and creating abstracts Importance of clarity in writing, demonstrated through rewording challenge exercises (1) Presentation of a model, and description of a scientific principle it demonstrates (1) (optional) Riddles, brain puzzlers, and other scientific/linguistic mental exercises Final quiz, future directions (1) Feedback (1)					
Continue to 科学コミュニケーション (理・英) -E3(2) ↓ ↓ ↓					

科学コミュニケーション (理・英) -E3(2)
Reading and discussion of journal articles and students' choice of Nature News articles will be given from each of the five basic Faculty of Science divisions of mathematics, physics/astrophysics, earth science, chemistry, and biology. De Witt is always present in the lessons, with Nagata occasionally present.
[Course requirements]
None
[Evaluation methods and policy]
Preparedness, daily participation, and final quiz. Daily in-class grades based on 0, 1, 2, or 3 points will be given as follows: 0-no participation or preparation, 1-some but inadequate participation or preparation, 2-normal, expected level of participation and preparation, 3-extra participation and preparedness, beyond the basic requirement. Plus and minus indicators may also be given, to indicate in-between levels, with 3 such indicators adding to one grade point. One in-class grade point may be subtracted or tardiness, speaking too much Japanese in class, breaking basic rules, etc., for each day with incidence.
[Textbooks]
Not used Topics will be selected from the scientific literature for discussion, summarization, and presentation.
[References, etc.]
(Reference book) Introduced during class
[Study outside of class (preparation and review)]
Read and summarize assigned articles handed out or online, write an article abstract, prepare a simple model to demonstrate, etc.
[Other information (office hours, etc.)]
Students are encouraged to actively participate in discussions and preparations of topics, primarily in small groups or pairs.

Lecture code: W221002

Course number	U-LAS51 10011 SB48				
Course title (and course title in English)	英会話・英作文基礎-E3 Fundamentals of English Writing and Speaking-E3		Instructor's name, job title, and department of affiliation	Graduate School of Science Senior Lecturer, ARNO SUZUKI	
Group	Career Development		Field(Classification)	International Communication	
Language of instruction	Japanese and English		Old group	Group C	Number of credits 2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters 2020・Second semester
Days and periods	Thu.2		Target year	2nd year students or above	Eligible students For all majors
[Overview and purpose of the course]					
This interactive English language course is to improve your speaking and writing skills. It will also prepare you for English-medium/English-taught courses, English proficiency tests (e.g., TOEFL, IELTS), and studying abroad. We will discuss topics such as studying abroad, working abroad, Japanese culture, and current social issues in Japan. Lectures on English skills will be in Japanese, lectures on studying/working overseas, and on Japanese culture/society will be in plain English, and discussions will be in English.					
英語の作文と会話が苦手な方のための参加型の授業です。E2科目の受講準備、IELTSやTOEFLiBTなど各種試験対策、留学準備も視野に入れていきます。トピックは、学生生活などの身近な話題から、日本文化や日本事情まで取り扱います。英語技能に関する講義は日本語で解説しますが、トピックに関する講義と討論は平易な英語で行います。					
[Course objectives]					
To demonstrate the followings: - Make a two-minute speech without reading - Write 100-250 word paragraphs and e-mails - State opinions in group discussion - 2分間スピーチが暗唱でできること - 100-250語程度の短い文章やeメールがわかりやすく書けること - グループ討論の中で自分の意見が明確に述べられること					
[Course schedule and contents]					
Tentative Schedule, Discussion topics					
Week 1 Orientation: How to enroll and study in this class Week 2 Rhythm of English Week 3 Studying in USA #1 Week 4 Studying in USA #2 Week 5 Study-abroad application Week 6 Studying in other countries Week 7 Working in USA #1 Week 8 Working in USA #2 Week 9 Introducing Japan #1					
Continue to 英会話・英作文基礎-E3(2) ↓ ↓ ↓					

英会話・英作文基礎-E3(2)	

Week 10 Japanese culture #1 Week 11 Japanese culture #2 Week 12 Japanese culture #3 Week 13 Japanese society #1 Week 14 Japanese society #2 Week 15 Japanese society #3	
Classes will consist of some of the following: <ul style="list-style-type: none"> • Conversation practice in pairs • Students' speech followed by Q&A • Audio-visual lecture • Presentation and class discussion 	
Outside Class Assignments: <ul style="list-style-type: none"> • Prestudy the topic of the week (homework on PandA) • Pop quiz (homework on PandA) • Rhythm and intonation training (can be used for extra credit) 	
授業計画（暫定案）	
Week 1 受講方法と課題の説明 Week 2 英語のリズム Week 3 米国留学事情 #1 Week 4 米国留学事情 #2 Week 5 留学準備講座 Week 6 その他の国の留学事情 Week 7 米国就職事情 #1 Week 8 米国就職事情 #2 Week 9 日本を説明する Week 10 日本文化 #1 Week 11 日本文化 #2 Week 12 日本文化 #3 Week 13 日本社会 #1 Week 14 日本社会 #2 Week 15 日本社会 #3	
授業内容： <ul style="list-style-type: none"> • ペア会話練習／グループ討論練習 • 学生のスピーチとQ&A • 映像や音声教材を用いた講義 • プレゼンテーションとクラス全体での討論 	
授業外の課題 <ul style="list-style-type: none"> • 話題の予習（授業前、PandAにて） • 抜き打ち復習テスト（授業後、PandAにて） • リズム・イントネーション歌唱（救済用の追加課題として提出可） 	
Continue to 英会話・英作文基礎-E3(3) ↓ ↓ ↓	

英会話・英作文基礎-E3(3)
[Course requirements]
Students must attend the first class. E-mail the instructor in advance if you have to miss the first class meeting. Students who miss the first and second classes will not be permitted to enroll.
Auditing without enrollment is not allowed because this is an interactive class using the PandA system.
Those who expect to miss more than two classes for reasons such as job searching and fieldwork should not enroll because regular participation is critical in this class.
Essential and urgent announcements will come via KULASIS or PandA. Students, therefore, MUST register the latest and regularly used e-mail address and check their mail every day. Those who cannot do this should not take this class.
受講者のレベルと課題の希望を勘案して授業計画を決めますので、必ず1回目の授業に出席してください。どうしても無理な場合には、事前に担当教員にeメールで連絡してください。遅くとも2回目までに出席しない学生は受講できません。
PandAを使用する参加型授業のため、履修登録無しの聴講はできません。
就職活動や実習等の理由で3回以上欠席する予定の方は、クラス運営に支障をきたしますので、履修しないでください。
重要あるいは緊急の連絡をKULASISやPandAから流しますので、いつも使っているメールアドレス(大学のアドレスでなくてもよい)を登録し、毎日チェックしてください。これができない人は受講しないでください。
[Evaluation methods and policy]
Assignments (100pts. total) 1) Discussion participation 30pts. (# of comments and questions) 2) Speech draft writing 10pts. 3) 2-minute speech 10pts. 4) Group presentation 10pts. 5) Communication writing (business e-mail) 10pts. 6) Paragraph writing (statement, opinion) 10pts. 7) Pop quiz 20pts. extra credit) Chanting 10pts.
3)Speech and 4)Presentation will be scheduled individually. Being absent will automatically result in failure of the entire course unless it happened due to a contingency such as illness, accident, natural disaster, bereavement, crime involvement and so on.
課題 (合計100点) : 1) ディスカッションへの参加 30点 (発言回数自己申告制) 2) スピーチ原稿 10点 3) 2分間スピーチ 10点 4) グループ・プレゼンテーション(日本文化) 10点 5) ビジネスeメール 10点
Continue to 英会話・英作文基礎-E3(4) ↓ ↓ ↓

英会話・英作文基礎-E3(4)
6) パラグラフ・ライティング 10点 7) 抜き打ち復習テスト 20点 救済課題) リズム歌唱 10点
発表を伴う課題(3)(4)は予定を決めて行います。担当日の無断欠席や課題放棄は、急病・事故・災害・身内の不幸・犯罪に巻き込まれた場合など不測の事態の場合を除き、即不合格となります。
[Textbooks]
PandAに掲示、各自ダウンロード Downloadable from PandA
[References, etc.]
(Reference book) PandA
[Study outside of class (preparation and review)]
Students must have access to the Internet because we use PandA, YouTube, and other online materials outside of the class. We may also use the Internet during an exercise; therefore, bring your smartphone, tablet or laptop PC if you have one. If you don't have any of these, consult with the instructor.
授業外でYouTubeなどのインターネット教材を使いますので、良好なインターネット環境が必要です。演習にもインターネットを使うことがありますので、ノートPC、タブレットまたはスマホを持っている人は持参してください。持っていない人は教員にご相談ください。
[Other information (office hours, etc.)]
Students may ask quick questions after class. Office hours will be held at International Advisors Office for Faculty of Science in North Campus by appointment. Students may ask questions in English or Japanese.
If you are interested in taking this course, add it to your class registration page on KULASIS as soon as you can. The access to the class website on PandA will open 48 hours after that.
授業の後で質問に来てくれてもいいですし、オフィスアワーの予約を取って北部の理学部留学支援室まで来てくださっても良いです。質問は日本語でも英語でも結構です。
履修しようかなと考えている人は、KULASISで履修候補科目に入れてください。その48時間後に、PandAが利用できるようになります。

Course number		U-LAS51 10015 SB48			
Course title (and course title in English)	科学コミュニケーションの基礎と実践 (薬・英) B-E3		Instructor's name, job title, and department of affiliation	Not fixed	
	Theory and Practice in Scientific Writing and Discussion (Pharmaceutical Sciences, English)B-E3				
Group	Career Development		Field(Classification)	International Communication	
Language of instruction	Japanese and English		Old group	Group C	Number of credits 2
Number of weekly time blocks	1	Class style	Seminar		Year/semesters 2020・Second semester
Days and periods		Target year	2nd year students or above		Eligible students For science students
[Overview and purpose of the course]					
<p>The purpose of this course is to give a group of 2-3 students an opportunity to present, in English, a scientific paper of their choice. Not only students will need to read the paper they have chosen, but also to understand and to be able to explain its content.</p> <p>When giving a presentation or a seminar, or writing a report or research manuscript, it is critical to use a well organised and precise language so that the ideas and discoveries are well communicated. While 科学コミュニケーションの基礎と実践 (薬・英) A gave the basics of the language, here the students will have the opportunity to practice their own English.</p> <p>This course is mainly targeted to students who wish to pursue a scientific career, especially in research.</p>					
[Course objectives]					
This course will provide an opportunity for the students to practice their Scientific English and presentation skills. Students will learn the format and structure of a scientific paper, as well as the language and vocabulary used in Science.					
[Course schedule and contents]					
<p>A typical 科学コミュニケーションの基礎と実践 (薬・英) B course:</p> <ul style="list-style-type: none"> -One group of 1-2 students choose beforehand a research paper they want to present. -On the day of presentation, the group of students gather at the front of the classroom and give their presentation. Copy of the paper and a vocabulary list will be given to all students via Kulasis. -After the presentation, all students and the teacher ask questions to the presenting students. -There will be two presentations, 30 minutes each and followed by 15 min question time, during each lecture. <p>-Students who fail their presentation will be given one another chance on a later date.</p> <p>Schedule:</p> <ol style="list-style-type: none"> 1: presentation of first 2 groups. 2: presentation of next 2 groups. 3: presentation of next 2 groups. 4: presentation of next 2 groups. 5: presentation of next 2 groups. 					
Continue to 科学コミュニケーションの基礎と実践 (薬・英) B-E3(2) ↓ ↓ ↓					

科学コミュニケーションの基礎と実践 (薬・英) B-E3(2)	
<p>6: presentation of next 2 groups. 7: presentation of next 2 groups. 8: presentation of next 2 groups. 9: presentation of next 2 groups. 10: presentation of next 2 groups. 11: presentation of next 2 groups. 12: presentation of next 2 groups. 13: presentation of next 2 groups. 14: presentation of next 2 groups. 15: feedback</p>	
[Course requirements]	
<p>Only students who took 科学コミュニケーションの基礎と実践 (薬・英) A can follow 科学コミュニケーションの基礎と実践 (薬・英) B. Students should ideally have the desire to learn English as an international language that can help them secure high-profile jobs in our increasingly global society.</p>	
[Evaluation methods and policy]	
<p>Students will be evaluated mainly (70%) on their ability to present a research paper in English. The main points students will be evaluated on are: ability to formulate complete English sentences, giving a smooth presentation without reading a pre-written text, preparing clear slides, responding accurately to questions.</p> <p>Participation of all students will also be evaluated by calculating the number of questions the students in the audience have asked during the year (20%). In addition, a final vocabulary test will take place (10%).</p> <p>IMPORTANT NOTE: student who did not give the presentation at all or who failed their presentation WILL NOT receive credit for this course and will be required to give a presentation the next year.</p>	
[Textbooks]	
Not used	
[References, etc.]	
<p>(Reference book) Introduced during class</p>	
[Study outside of class (preparation and review)]	
<p>Groups of students will need to choose and submit a research paper and prepare their presentation before the day of their presentation.</p> <p>Students will need to prepare a vocabulary list composed of 10 words taken from their chosen paper.</p> <p>The paper and vocabulary list will be sent to the teacher at the latest the day before the presentation.</p>	
[Other information (office hours, etc.)]	