

Integrated Japanese 1	
Registration Code	1a: 0061111, 1b: 0061112
Course Category	Credits 3.0
Course Category	Basic GE, Language I
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Mon., Wed., Thu. / 1 (8:45~10:15)
Instructor	1a: TOKUHIRO 1b: HAJIKANO
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)
<p>●Objectives of the course This course aims to provide a basic knowledge of Japanese which will enable students to function effectively in everyday life.</p> <p>●Course Prerequisites Students are required to take a placement test before the beginning of the Fall semester. The course level is decided upon in consultation with teachers. Those students who register for this course should also register for the Japanese Language Seminar (Communication) 1 in the same semester.</p> <p>●Course Contents ①Students will learn comprehensive Japanese, necessary to live both on and off campus. Each lesson will cover new grammar, expressions and vocabulary (including Hiragana, Katakana and Kanji). A short test will be given each lesson. ②Students are required to read textbooks (especially "Elementary Japanese 1 DAICHI Translation of the Main Text and Grammar Notes") as preparation for each lesson.</p> <p>●Evaluation methods Attendance 30%, Class Participation 30%, Mid-term Examination and Final Examination 40%</p> <p>●Notice for students Students must maintain course attendance rates of 80% or higher and are required to take mid-term and final examination. Those who fail to meet these requirements will not earn credits. Students are not permitted to withdraw from this course for any reason after the registration. In general, in the case of absence, make-up tests and examinations will not be possible (except in the case of extenuating circumstances). Three late arrivals or early departures of 15 minutes or more will be regarded as a one-lesson absence.</p>	
Textbook	1. 『日本語初級 1 大地 メインテキスト』 スリーエーネットワーク Elementary Japanese 1 DAICH Main Text 2. 『日本語初級 1 大地 文型説明と翻訳<英語版>』 スリーエーネットワーク Elementary Japanese 1 DAICH Translation of the Main Text and Grammar Notes 3. 『日本語初級 1 大地 基礎問題集』 スリーエーネットワーク Elementary Japanese 1 DAICH Work Book 4. 『Write Now! Kanji for Beginners』 スリーエーネットワーク
Reference Book	

Linear Algebra I			
Registration Code	0061211	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Mon. / 2 (10:30~12:00)		
Instructor	BACHMANN Henrik		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Linearity one of the most fundamental concepts for the handling of quantities in current natural science. Indispensable in quantum mechanics & relativity or fields like computer graphics & machine learning, its use has spread across all branches of natural science and beyond. Linear algebra, developed in the nineteenth century, is the mathematical theory of linearity. The first half of this one-year course focuses on techniques for manipulating systems of linear equations, and the application of these techniques to analytic geometry (in arbitrary dimensions). Emphasis is placed on the ability to think abstractly.</p> <p>●Course Prerequisites No formal prerequisites. Some ability to manipulate systems of linear equations and understanding of elementary geometry will be useful for the understanding of the course material.</p> <p>●Course Contents Linear systems, Gaussian elimination, matrices, vectors, linear maps, matrix multiplication, the inverse of a linear map, subspaces of \mathbb{R}^n, image and kernel, linear independence, bases, dimension, coordinates, orthogonal bases, the Gram–Schmidt algorithm, QR factorization, orthogonal complement, orthogonal maps, least square approximations.</p> <p>●Evaluation methods There will be two main, written exams: midterm (35%) and final (45%). Additionally, there will be homework assignments (10%) and quizzes (10%). The final grade will be determined by the total amount of points obtained according to the following scale: S: 90-100, A: 80-89, B: 70-79, C: 60-69, F:0-59.</p> <p>Students do not need to submit a Course Withdrawal Form for course withdrawal. Anyone who does not attend the final exam will receive the grade “Absent”.</p> <p>●Notice for students The Reference Book is available in the Main library and in the Science library (enough copies in total for all students). Additional helpful references will be presented at the beginning of the first lecture.</p> <p>It is <i>strongly</i> recommended to also follow the course Mathematics Tutorial I b.</p>			
Textbook	None		
Reference Book	Otto Bretscher: <i>Linear Algebra with Applications</i> , fourth edition, Pearson 2009. ISBN: 978-0-13-600926-9		

Fundamentals of Chemistry I			
Registration Code	0061311	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Mon. / 3 (13:00~14:30)		
Instructor	BUTKO Peter		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course The purpose of this course is to grasp what chemistry is all about and to learn important principles and facts in chemistry. The course begins with atomic structure, proceeds next to bonding and molecules, and further to bulk physical properties of substances.</p> <p>●Course Prerequisites: None</p> <p>●Course Contents 1 Chemistry: Matter and Measurement (Ch. 1) 2 Atoms, Molecules and Ions (Ch. 2) 3 Mass Relationships in Chemical Reactions (Ch. 3) 4 Reactions in Aqueous Solutions (Ch. 4) 5 Pre-exam Review & EXAM 1 (Chs. 1 – 4) 6 Periodicity & the Electronic Structure of Atoms (Ch. 5) 7 Ionic Bonds & Some Main-Group Chemistry (Ch. 6) 8 Covalent Bonds and Molecular Structure (Ch. 7) 9 Thermochemistry: Chemical Energy (Ch. 8) 10 Pre-exam Review & EXAM 2 (Chs. 5 – 8) 11 Gases: Their Properties and Behavior (Ch. 9) 12 Liquids, Solids, and Phase Changes (Ch. 10) 13 Solutions and Their Properties (Ch. 11) 14 Pre-final Review 15 FINAL EXAM (Chs. 1 – 11)</p> <p>●Evaluation methods Two Exams: 100 points each. Final Exam (comprehensive): 200. Homework: 50. TOTAL: 450. Grade "S": 100-90% (405 or more points), "A": 89-80% (404 - 360 pts), "B": 79-70% (359 - 315 pts), "C": 69-60% (314 - 270 pts), "F": 59-0% (fewer than 270 pts).</p> <p>-Course Withdrawal Yes. The last day to withdraw without academic penalty is the last class day in November.</p> <p>-Criteria for “Absent” & “Fail” Grades The “Absent” grade is reserved for students that withdraw by last class day in November. After that day, a letter grade will be awarded based on grades earned from all assignments during the semester.</p> <p>●Notice for students It is essential to sit in each exam during the scheduled class time. There will be NO make-up exam. In the event of a missed exam due to a serious illness, accident or family emergency, compelling written documentation of the reason for the absence will be required. If the reason is accepted, the final grade will be calculated from the appropriately weighted average from the rest of the exams. If the reason will be deemed insufficient, the absence will be unexcused, and zero points will be awarded for the missed exam. WARNING: Missing more than one exam (it does not matter whether excused or not) means automatically failing the course. Attendance is necessary for successful completion of this course. No points will be awarded for attending lectures, but attendance may be taken. Sleeping in the lecture hall will be actively discouraged. Homework is crucial for mastering new material and developing skills in applying concepts. Weekly homework will be either on paper or electronic. Homework is due at the beginning of class on the due date. A general guideline says an average of 2 to 3 hours of study time per week is necessary for each 1 credit hour. Exams focus on problem solving, and exam questions will be similar to the homework problems. Exam grades will be posted in the Gradebook on the Course website before next class period. Cell phones must be turned off during lecture.</p>			
Textbook	Chemistry (J. McMurry and R.C. Fay), 7th Ed. (Global Edition E-Text , bundled with Mastering Chemistry) Pearson, 2016, approximately ¥4,500		
Reference Book			

Fundamentals of Earth Science I			
Registration Code	0061411	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Mon. / 4 (14:45~16:15)		
Instructor	HUMBLET Marc Andre		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>● Objectives of the course</p> <p>The study of planet Earth embraces a wide range of topics, from the formation of rocks to the evolution of life, from continental drift to the study of earthquakes and volcanoes. In this course, fundamental concepts of earth science will be covered. Students will be introduced to plate tectonics, the fundamental theory underlying the geological processes which have shaped the environment in which we live and continue to modify the landscape, from the slow, progressive uplift of mountains to violent earthquakes and volcanic eruptions. Students will learn how the Earth recycles matter and how minerals and rocks form and are transformed. One chapter is dedicated to the issue of time, more specifically the question of how the age of rocks and geological events can be determined, which is central to earth science. We will then take a step back and look at Earth's 4.5-billion-year history to see how the Earth's geography has changed and how life has evolved. Besides providing a basic and up-to-date knowledge of the essential concepts of earth science, the aim of this course is to stimulate the interest and curiosity of the students for the study of planet Earth and provoke questions, comments, and discussions about issues related to earth science.</p>			
<p>● Course Contents</p> <ol style="list-style-type: none"> 1. Earth Sciences: an introduction 2. The solar system 3. Plate tectonics 4. Minerals: rock's elementary building blocks 5. Rocks and rock cycle I: igneous rocks 6. Rocks and rock cycle II: sedimentary rocks 7. Rocks and rock cycle III: metamorphic rocks 8. The age of rocks 9. Earth history I: paleogeography 10. Earth history II: origin and evolution of life 			
<p>● Practical classes</p> <p>The students will examine hand-size rock samples and rock thin sections chosen to illustrate the different rock types and geological structures seen during the course. In addition, the students will also participate in a one-day field trip to examine the geology of Mizunami area (Gifu Prefecture), examine Miocene fossils and sediments (20-15 million years old), and learn how geologists collect data in the field.</p>			
<p>● Evaluation methods</p> <p>Four quizzes (multiple choice and short-answer questions): each worth 25% of the final grade Students will be graded following the five-step S-A-B-C-F grade evaluation system. S: 90-100%, A: 80-89%, B: 70-79%, C:60-69%, F: 59-0%</p> <p>A student will be given an "Absent" grade if he or she submits a Course Withdrawal Form by the 15th of November. This deadline does not apply to students who drop the class part-way through for an exceptional reason (e.g. illness, accident).</p>			
<p>● Notice for Students</p> <p>Handouts of lecture notes and slides will be distributed during the class. Students can refer to the reference books indicated if they wish to have complementary information about the subjects covered by the course. The books are available at the science library.</p>			
Textbook	---		
Reference Book	John Grotzinger, Understanding Earth 6/e (ISBN:9781429240031 or 9781429219518) Diane Carlson, Physical Geology International Edition (ISBN:9780071221849)		

International Society of Globalization Age			
Registration Code	0061511	Credits	2.0
Course Category	Arts Liberal		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Mon. / 5 (16:30~18:00)		
Instructor	MCGINTY Sean Michael		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course</p> <p>In this course we look at twelve selected global problems that human society faces in the 21st century. The process of globalization since the late 20th century has brought about many benefits for societies across the planet ranging from those of major importance, like the spread of democratic norms and institutions to former dictatorships, to the more trivial, like the ability to buy Kit Kats pretty much anywhere in the world you go. It has also gone hand in hand, however, with the spread of problems of a global scale which pose significant threats to the viability of the very globalized civilization humanity seems to be aspiring to create. Whether this globalized world survives the 21st century in large part depends on our collective ability to confront and deal with these problems. The main aims of the course are 1) to familiarize students with each of the problems faced, 2) to understand potential solutions to them from a variety of disciplines (legal, political, economic and technological)exist, and 3) to understand what hurdles international society faces in attempting to implement the varying solutions which are potentially available. The course is cross-disciplinary, and relies on literature from the fields of law, politics, economics and others.</p> <p>●Course Prerequisites</p> <p>None.</p> <p>●Course Contents</p> <p>Week 1. Introduction Week 2. Income and Wealth Inequality Week 3. Urbanization Week 4. Demographics and overpopulation Week 5. Refugees Week 6. Artificial Intelligence Week 7. Risks to Global Financial System Week 8. Risks to Global Trade Week 9. Loss of Biodiversity Week 10. Threats to our food system Week 11. Resource depletion Week 12. Plastic pollution Week 13. Climate Change Week 14. TBA Week 15. Review</p> <p>●Evaluation methods</p> <p>50% Term Paper 50% Final Exam</p> <p>●Notice for students</p>			
Textbook	None. Reading materials will be distributed in class.		
Reference Book	None.		

Japanese Language Seminar(Communication) 1			
Registration Code	1a: 0062112, 1b: 0062111	Credits	3.0
Course Category	Basic GE, Language I		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue., Fri. / 1 (8:45~10:15)		
Instructor	1a: HAJIKANO 1b: TOKUHIRO		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course This course aims to provide a basic knowledge of Japanese which will enable students to function effectively in everyday life. It emphasizes oral practice utilizing the material students learned in Integrated Japanese 1. This course also aims to cover reading and writing of simple sentences. The textbooks are the same as Integrated Japanese 1.</p> <p>●Course Prerequisites Students are required to take a placement test before the beginning of the Fall semester. The course level is decided upon in consultation with teachers. Those students who register for this course should also register for Integrated Japanese 1 in the same semester.</p> <p>●Course Contents ①Each lesson will cover grammar, expressions and vocabulary learned in Integrated Japanese 1 and practiced in short skits. Reading and writing are also covered. A short test will be given each lesson. ②Students are required to read textbooks (especially "Elementary Japanese 1 DAICHI Translation of the Main Text and Grammar Notes") as preparation for each lesson.</p> <p>●Evaluation methods Attendance 30%, Class Participation 30%, Mid-term Examination and Final examination 40%</p> <p>●Notice for students Students must maintain course attendance rates of 80% or higher and are required to take mid-term and final examination. Those who fail to meet these requirements will not earn credits. Students are not permitted to withdraw from this course for any reason after the registration. In general, in the case of absence, make-up tests and examinations will not be possible (except in the case of extenuating circumstances). Three late arrivals or early departures of 15 minutes or more will be regarded as a one-lesson absence.</p>			
Textbook	1. 『日本語初級1 大地 メインテキスト』 スリーエーネットワーク Elementary Japanese 1 DAICH Main Text 2. 『日本語初級1 大地 文型説明と翻訳<英語版>』 スリーエーネットワーク Elementary Japanese 1 DAICH Translation of the Main Text and Grammar Notes 3. 『日本語初級1 大地 基礎問題集』 スリーエーネットワーク Elementary Japanese 1 DAICH Work 4. 『Write Now! Kanji for Beginners』 スリーエーネットワーク		
Reference Book			

Fundamentals of Physics I			
Registration Code	0062211	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Quarter 1) / Tue., Thu. / 2 (10:30~12:00)		
Instructor	SHIGEMORI Masaki		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Fundamentals of Physics I (FP I) is the first of four lecture courses (FP I–IV) designed to cover the basic classical physics to provide a firm foundation for learning science and engineering. This course introduces the concepts and laws of classical mechanics. Further topics in mechanics will be covered in FP II.</p> <p>●Course Prerequisites Students without a good background in high school physics and basic calculus are advised to review those materials as soon as possible and would be expected to spend more time and effort for the course. This must be considered when deciding your course load. Students are expected to participate actively in class activities throughout the course.</p> <p>●Course Contents The topics include kinematics, vectors, force and motion, energy, work and momentum, and are based on the following chapters in the textbook: Chapter 2: Motion Along a Straight Line Chapter 3: Vector Chapter 4: Motion in Two and Three Dimensions Chapter 5: Force and Motion I Chapter 6: Force and Motion II Chapter 7: Kinetic Energy and Work Chapter 8: Potential Energy and Conservation of Energy Chapter 9: Center of Mass and Linear Momentum Some examples of problem solving will be discussed in lectures, but the companion course, Fundamental Physics Tutorial Ia, is designed to develop students' problem solving skills.</p> <p>●Evaluation methods Class attendance is required. Absentees must give a valid reason (e.g. doctor's certificate). Students need to submit a Course Withdrawal Request Form when requesting course withdrawal. The "Absent" grade is reserved for students who withdraw just after the final exam. After that day, a letter grade will be awarded based on marks earned from all assessment during the semester. Class attendance: 5%, Assignments: 25%, Exams (midterm and final): 70%.</p> <p>●Notice for students Concurrent registration of Fundamental Physics Tutorial Ia is strongly advised because it is necessary for mastering the content of the lectures.</p> <p>Related courses: Calculus I & II, Linear Algebra I & II, Fundamentals of Physics II–IV.</p>			
Textbook	Fundamentals of Physics Extended 10th Edition International Student Version with WileyPLUS Set (John Wiley & Sons, 2014 ISBN: 9781118230749)		
Reference Book	Feynman Lectures On Physics (Vol.1) by Richard P. Feynman (Pearson PTR)		

Fundamentals of Physics II			
Registration Code	0062212	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue., Thu. / 2 (10:30~12:00)		
Instructor	TAMA Florence Muriel		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Physics is at the foundation of science and engineering. This is the second of a series of four courses that cover the fundamentals of physics. The first 2/3 of this course covers further topics in mechanics: equilibrium and elasticity, gravitation, oscillations and the remaining 1/3 of the course introduces thermal physics. Besides learning to solve problems within each topic, students will also learn to solve problems that cut across these topics.</p>			
<p>●Course Prerequisites To take Fundamentals of Physics II, you must also enroll in Fundamentals of Physics I. (You cannot study Fundamentals of Physics II without taking Fundamentals of Physics I first.) -Note that this course commences after Fundamentals of Physics I; nevertheless, you must register for it during the normal registration period in the first few weeks of semester. -Concurrent registration for Fundamental Physics Tutorial is required. -Students are expected to participate actively in class activities throughout the course. Students without a good background in high school physics and basic calculus are expected to have to spend more time in this course and are advised to take this into consideration when deciding their course load.</p>			
<p>●Course Contents Chapter 10: Rotation Chapter 11: Rolling, Torque, and Angular Momentum Chapter 12: Equilibrium Chapter 13: Gravitation Chapter 15: Oscillations Chapter 18: Temperature, Heat, and the First Law of Thermodynamics Chapter 19: The Kinetic Theory of Gases Chapter 20: Entropy and the Second Law of Thermodynamics</p>			
<p>●Evaluation methods Class attendance is required. Absentees must give a valid reason (e.g. doctor's certificate). Students need to submit a Course Withdrawal Form when requesting course withdrawal. The "Absent" grade is reserved for students who withdraw just after the final exam. After that day, a letter grade will be awarded based on marks earned from all assessment during the semester. Intermediate tests: 50%; Final Exam: 50%</p>			
<p>●Notice for students Students gain a functional understanding of introductory mechanics and thermal physics. They are able to solve problems that may cut across the topics and are able to appreciate the physics underlying their studies in other science and engineering disciplines. They are prepared for the next course in the series: Fundamentals of Physics III.</p>			
<p>Related courses: Calculus I, Calculus II, Linear Algebra I, Linear Algebra II, Fundamentals of Physics I, III & IV.</p>			
Textbook	Fundamentals of Physics Extended 10th Edition International Student Version with WileyPLUS Set (John Wiley & Sons, 2014 ISBN: 9781118230749)		
Reference Book	Feynman Lectures in Physics (Vol.1) by Richard Feynman (Pearson P T R)		

Academic English Advanced 1			
Registration Code	0062311	Credits	2.0
Course Category	Basic GE, Language I		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue. / 3 (13:00~14:30)		
Instructor	MORITA Liang		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Ag(B)		
<p>●Objectives of the course To develop academic writing skills, presentations and foster intellectual development.</p> <p>●Course Prerequisites None.</p> <p>●Course Contents Paragraph writing, essay writing and presentations. Topics such as globalization and social issues will provide the context for discussion and writing. Students will also be assigned academic papers to read.</p> <p>●Evaluation methods 40% participation, 30% writing and 30% presentation. Please notify the instructor with a Course Withdrawal Form if you are dropping out of the course.</p> <p>●Notice for students None.</p>			
Textbook	None.		
Reference Book	None.		

Perspectives in Mathematical Science IV

Registration Code	0082381	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue. / 3 (13:00~14:30)		
Instructor	OHIRA Toru, KONDO Shigeyuki, OHTA Hiroshi		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·En(P·C·Au)·Ag(B)		

●Objectives of the course

This course is designed to be one of the English courses which the Graduate School of Mathematics is providing for the graduate and undergraduate students not only from foreign countries but also domestic students who wish to study abroad or to communicate with foreign scientists in English. All course activities including lectures, homework assignments, questions and consultations are in English. The purpose of this course is to introduce and explain various concepts and methods in mathematical sciences. This year, the course is provided by three instructors (Part I: Glimpse of Lagrangian Floer theory and Mirror Symmetry (Hiroshi Ohta), Part II: Bayes' Theorem (Toru Ohira), Part III: Mystery in 24 dimensions (Shigeyuki Kondo)).

●Course Prerequisites

Working knowledge of basic undergraduate mathematics including calculus and linear algebra is required.

●Course Contents

10/8, 10/15, 10/29, 11/5

Part I: Glimpse of Lagrangian Floer theory and Mirror Symmetry (Hiroshi Ohta)

Mirror Symmetry, which originally came from physics, predicts certain equivalence between symplectic geometry (symplectic invariants) of a symplectic manifold X and complex geometry (complex invariants) of its mirror complex manifold \check{Y} . Nowadays, various versions/levels of Mirror Symmetry conjecture are mathematically formulated and some of them are proved for some cases. In my part of this course, I plan to give a brief introductory lecture on Lagrangian Floer theory and mathematical aspects of Mirror Symmetry. Although many branches of mathematics are related to this subject, the symplectic geometric viewpoints will be emphasized.

References:

1. K. Fukaya, Y-G. Oh, H. Ohta, K. Ono, Lagrangian intersection Floer theory, AMS/IP (2009).
2. D. Cox, S. Katz, Mirror Symmetry and Algebraic Geometry, AMS (1999).
3. 深谷賢治, シンプレクティック幾何学, 岩波書店.

11/12, 11/19, 11/26, 12/3

Part II: Bayes' Theorem (Toru Ohira)

In this part of the lecture, we aim to understand the Bayes' theorem, which gives a way to infer a cause from outcomes statistically. The basic concepts such as expectation, conditional probability of the probability theory are reviewed as a preparation. We will discuss concrete examples and applications of the theorem as well.

12/10, 12/17, 1/14, 1/21

Part III: Mystery in 24 dimensions (Shigeyuki Kondo)

The sphere packing problem is the problem to find the most densest way to pack the spheres of the same size (coins in dimension 2, for example) in Euclidean space. This classical problem is still unsolved even today. However there are two sphere packings, one in 8 dimensions (E_8 lattice) and one in 24 dimensions (the Leech lattice), which are unexpectedly good and symmetric. Moreover there exists a finite sporadic simple group, called Mathieu group, acting naturally on the space of dimension 24. On the other hand, there is a 2-dimensional compact complex manifold, called K3 surface, which has the Euler number 24 and is related to the Mathieu group. I do not know the reason why these beautiful objects appear in dimension 24, but in this lecture, I will explain these phenomenon.

The plan of the lectures

1. The sphere packing problem and lattices (12/10)
2. The classification of even definite unimodular lattices (12/17)
3. The extended binary Golay code, Steiner system, Niemeier lattices and Mathieu group (1/14)
4. The Mathieu group and K3 surfaces (1/21)

References

[1] J.H. Conway, N.J.A. Sloane, Sphere packings, Lattices and Groups, 3rd ed., Springer-Verlag, Berlin, Heidelberg, New York 1999.
 [2] W. Ebeling, Lattices and Codes, Vieweg 1994.
 [3] S. Mukai, Finite groups of automorphisms of K3 surfaces and the Mathieu group, Invent. Math., 94 (1988), 183--221.
 [4] H. Cohn, A. Kumar, S.D. Miller, D. Radchenko, M. Viazovska, The sphere packing problem in dimension 24, Ann. Math., 185 (2017), 1017–1033.

12/24, 1/28, 2/4

Reserved days for extra lectures if necessary

•Evaluation methods

In each part, the instructor will assign exercises, problems, etc. during the lectures and determines grades (S, A, B, C, F) independently. At the end of the semester, for a student with two or more grades better than F, the best will be used as the final grade of the course. Details will be given on 1st day.

•Notice for students

None

Textbook	None
Reference Book	Recommended readings will be introduced in each lecture (see also Course Contents above).

View of Advanced Electrical, Electronic and Information Engineering			
Registration Code	0082382	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue. / 3 (13:00~14:30) , 4 (14:45~16:15)		
Instructor	HASEGAWA Hiroshi		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course</p> <p>This course discusses the fundamentals of, and current topics in each field of the advanced electrical, electronic and information engineering, with an overview of the status of their researches and developments in Japan. This course consists of two parts: six lectures in the classroom which will be given by faculty members and tours to three laboratories of companies and/or research organizations. These six lectures are divided three pairs of lectures and each pair is on one of Electrical Engineering, Electronics, and Information and Communication Engineering. Each lecture covers from the fundamental to the cutting-edge topics of the research area of the faculty member responsible to it. During three tours, students will visit laboratories on energy generation and novel materials.</p> <p>This course is mainly for foreign students including G30 programs in the faculty of Engineering; however it is open to all foreign/Japanese students of Nagoya university.</p> <p>●Course Prerequisites Physics, Electromagnetics, Mathematics</p> <p>●Course Contents Six lectures on Electrical Engineering, Electronics, and Information and Communication Engineering in addition to three laboratory tours.</p> <p>●Evaluation methods</p> <p>Submission of a report after each lecture and tour is mandatory. The final score is determined based on scores of these reports.</p> <p>●Notice for students</p> <p>Although the time slots assigned to this course are 3rd period (13:00~14:30) and 4th period(14:45~16:15), the tours may take longer time and finish after 16:15. Students must attend all lectures and join all tours. If there is a student who missed a tour without notice, it compromises the reputation of Nagoya university.</p>			
Textbook	None		
Reference Book	None		

Mathematics Tutorial 1a			
Registration Code	0062411	Credits	1.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue. / 4 (14:45~16:15)		
Instructor	RICHARD Serge		
Target Schools (Programs)	La(S)·Ec(S)		
<p>●Objectives of the course The aim of this course is to deepen the understanding of calculus and to cultivate the ability to apply mathematical knowledge. The course is mainly intended for students taking Calculus I.</p> <p>●Course prerequisites Some basic knowledge on calculus from high school is assumed, including differentiation and integration of polynomial functions.</p> <p>●Course Contents Exercises sheets will be provided each week before the tutorial, and will be available on the web site of the course. Homework will be due every week during the tutorial. Solutions to the exercises will then be posted on the web site.</p> <p>●Evaluation methods Your final grade will be determined by homework (50%) and quizzes (50%).</p> <p>●Notice for students This course uses the course withdrawal system. To withdraw from the course and obtain the grade Absent the student must submit a written Course Withdrawal Form before the end of November. After that time any student who participated in any part of the examination will be graded S, A, B, C or F.</p> <p>●Additional information See http://www.math.nagoya-u.ac.jp/~richard/fall2019.html</p>			
Textbook	None		
Reference book	None		

Mathematics Tutorial 1b			
Registration Code	0062412	Credits	1.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Tue. / 4 (14:45~16:15)		
Instructor	BACHMANN Henrik		
Target Schools (Programs)	La(S)·Ec(S)		
<p>●Objectives of the course The aim of this course is to provide essential mathematical knowledge necessary to further study mathematics and other sciences at university level. The course is intended for students taking Linear Algebra I.</p> <p>●Course Prerequisites High-school level mathematics.</p> <p>●Course Contents Linear systems, Gaussian elimination, matrices, vectors, linear maps, matrix multiplication, the inverse of a linear map, subspaces of \mathbb{R}^n, image and kernel, linear independence, bases, dimension, coordinates, orthogonal bases, the Gram–Schmidt algorithm, QR factorization, orthogonal complement, orthogonal maps, least square approximations.</p> <p>●Evaluation methods The assessment of this course coincides with the assessment of the course Linear Algebra I.</p> <p><i>Course withdrawal:</i> Any student who does not participate in the final exam will receive the grade “Absent”. It is not necessary to submit a Course Withdrawal Form.</p> <p>●Notice for students The reference book is available in the Main library and in the Science library (enough copies in total for all students).</p> <p>It is <i>strongly</i> recommended to register also to Linear Algebra I.</p>			
Textbook	None		
Reference Book	Otto Bretscher: <i>Linear Algebra with Applications</i> , fourth edition, Pearson 2009. ISBN: 978-0-13-600926-9		

German 1				Instructor	MURAMOTO Mai
Registration Code	0022502	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

French 1				Instructor	TORIYAMA Teiji
Registration Code	0022503	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Russian 1				Instructor	YAMAJI Asuta
Registration Code	0022504	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Chinese 1				Instructor	YU Ping
Registration Code	0022505	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Spanish 1				Instructor	SHIBA Ayako
Registration Code	0022506	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Korean 1				Instructor	UTSUGI Akira
Registration Code	0022507	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Tue. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

First Year Seminar A			
Registration Code	0063211	Credits	2.0
Course Category	Basic GE,1Y Seminar		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 2 (10:30~12:00)		
Instructor	OGAWA Shota		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)		
<p>●Objectives of the course In this course, we will examine what kind of responses human migration and mobility have elicited from filmmakers, media industries, and critics and researchers. Through exercises, discussions, and essays, the course will also assist students to improve their skills in writing, reading, and speaking in academic contexts (in the humanities), and to foster critical communication skills (which include the skills to ask hard questions and to express disagreement). By the end of the course, students will have acquired the skills and the habit of “close reading” films (primary source) as well as film analyses (secondary source).</p> <p>●Course Prerequisites None</p> <p>●Course Contents The course is broken down into five units, each of which consists of film viewing exercises, two sets of reading (one on methodology and the other on the film and its context), and in-class discussions. Students are expected to take notes during film screenings, and to prepare for each class with discussion questions. Unit 1: Orientation Unit 2: Cinema and Mobility Unit 3: Immigrants’ Cinema (assignment: Paper 1, criticism article) Unit 4: Exile’s Cinema (assignment: Abstract, Presentation) Unit 5: Postcolonial Cinema (North America) (assignment: Peer-review, final paper)</p> <p>●Evaluation methods Attendance and discussion participation - 20%, Paper 1 (Criticism Article - 20%, Final Paper - 40% (10% proposal, 10% draft peer review, 20% final draft), Presentations: 20% (90-100%=S, 80-89=A, 70-79=B, 60-69=C, 0-59=F) <i>Need to submit a Course Withdrawal Form when students have no intention of finishing a course during the semester</i></p> <p>●Notice for students None</p>			
Textbook	None		
Reference Book	TBA		

First Year Seminar A			
Registration Code	0063212	Credits	2.0
Course Category	Basic GE,1Y Seminar		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 2 (10:30~12:00)		
Instructor	DOI Yasuhiro		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)		
<p>●Objectives of the course To study social sciences, it is necessary to understand social problems and analyze them with appropriate academic tools. In this First Year Seminar students have to pick up one particular social problem, conduct a short research and make a presentation in a manner of the social science. Students study how to use data, academic methods and also how to create a good presentation.</p> <p>●Course Prerequisites None</p> <p>●Course Contents At first, students will learn the frameworks of the presentation and how to make a research. Each student has to give a 30 Min presentation of a topic which he/she chooses.</p> <p>●Evaluation methods Attendance and Evaluation of each student's presentation. Students who decide to withdraw from the course should inform me in writing by November 25th, and provide me with a copy of the designated form ("Course Withdrawal Form").</p> <p>●Notice for students Please find a topic which you are interested in the most in our society. Students should try to explain the mechanism and the main factor(s) of the problem clearly. Any selected topic will be accepted to give a presentation, even the instructor is from the School of Economics and advices mainly from the view point of the economics and academic perspectives in general.</p>			
Textbook	None		
Reference Book	None		

First Year Seminar A			
Registration Code	0063213	Credits	2.0
Course Category	Basic GE,1Y Seminar		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 2 (10:30~12:00)		
Instructor	HUMBLET Marc Andre		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>● Objectives of the course</p> <p>The goal of this seminar is (1) to teach students how to search for scientific information, (2) to encourage critical thinking, (3) to improve presentation skills, (4) to nurture scientific curiosity, and (5) to promote exchange of ideas about various scientific topics. The seminar is divided into two parts. The first part provides tips on how to search for information and how to give an oral presentation. This is followed by a discussion centered on the definition of science and the difference between science and pseudoscience. A few lectures on coral reef ecosystems will serve as examples of how science can be communicated. The students will learn about the different kinds of reefs, the biology of corals and coral reefs, the factors controlling reef growth, the present-day threats on coral reefs, and the geological evolution of reefs. Students will also be able to examine hand-sized samples of coral reef limestones and observe thin sections under a microscope. During the second part of the seminar, the students will give two presentations each about any scientific subjects of their choice related to the marine or freshwater world. The fields covered can be as varied as underwater exploration technologies, marine biology, water in the solar system, hydroelectric energy... Each presentation is followed by a Q&A session. Class participation is strongly encouraged.</p>			
<p>● Course Prerequisites</p> <p>None</p>			
<p>● Course Contents</p> <ol style="list-style-type: none"> 1. Introduction: tips on information search and oral presentation 2. What is science? 3. Science vs. pseudoscience 4. Coral reefs: diversity, past evolution and future trends 5. Lab session 6. Oral presentations by students 			
<p>● Evaluation methods</p> <p>There is no written examination. The grading is based on class participation (30%) and oral presentations (70%).</p> <p>Students will be graded following the five-step S-A-B-C-F grade evaluation system. S: 90-100%, A: 80-89%, B: 70-79%, C:60-69%, F: 59-0%</p> <p>A student will be given an "Absent" grade if he or she submits a Course Withdrawal Form by the 15th of November. This deadline does not apply to students who drop the class part-way through for an exceptional reason (e.g. illness, accident).</p>			
<p>● Notice for students</p> <p>None</p>			
Textbook			
Reference Book			

First Year Seminar A			
Registration Code	0063214	Credits	2.0
Course Category	Basic GE,1Y Seminar		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 2 (10:30~12:00)		
Instructor	TAMA Florence Muriel		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course This course aims to discuss contemporary scientific issues. The students will be given the opportunity to work in group to exchange ideas as well as to develop presentation skills. Students will have to research information related to the weekly theme. In addition, the students will give presentations choosing a topic from a provided list.</p> <p>●Course Prerequisites None</p> <p>●Course Contents The course will focus/discuss on several aspects including: scientific news, interdisciplinary research, research ethics, reviewing process of scientific publications, funding and science.</p> <p>●Evaluation methods Criteria for Absent and Fail grade: Students need to submit a Course Withdrawal Form when requesting course withdrawal. The “Absent” grade is reserved for students who withdraw at any point during the course. Students will be graded following the S-A-B-C-F grade evaluation system with S: 90-100%, A: 80-89%, B: 70-79%, C:60-69%, F: 59-0% The grade will be based on class participation and presentation.</p> <p>●Notice for students None</p>			
Textbook	None		
Reference Book	None		

First Year Seminar A			
Registration Code	0063215	Credits	2.0
Course Category	Basic GE,1Y Seminar		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 2 (10:30~12:00)		
Instructor	DARPOE Erik Olof		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course The principal objectives of this course are:</p> <ol style="list-style-type: none"> 1. to gain knowledge of some of the fundamental notions underlying modern mathematics; including sets, integers, rational, real and complex numbers; 2. to get acquainted with mathematical methods and reasoning, including proofs; 3. to practice oral and written presentational skills. <p>●Course Prerequisites High school mathematics.</p> <p>●Course Contents Propositional and predicate logic, sets, natural numbers, integers, rational numbers, real numbers, complex numbers. Additional subjects may be covered depending on the interests of the participants.</p> <p>●Evaluation methods The participants will be required to submit homework, and to give one or several oral presentations during the course. A total score between 0 and 100 will be given, based on the performance on the homework and oral presentations. The final grade is determined by the total score, according to the following scale: S: 90–100, A: 80–89, B: 70–79, C: 60–69, F: 0–59.</p> <p><i>Course withdrawal:</i> Participating students may withdraw from the course by submitting a course withdrawal form to the teacher, no later than the 29th November 2019.</p> <p>●Notice for students None</p>			
Textbook	None		
Reference Book	Written material and references will be provided during the course.		

Fundamentals of Biology I			
Registration Code	0063311	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 3 (13:00~14:30)		
Instructor	CARTAGENA Joyce Abad		
Target Schools (Programs)	Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course The objective of this course is to introduce the key concepts of basic biology and provide the foundation for specialized courses. Furthermore, this course aims to encourage students to think like scientists and develop scientific reasoning and literacy skills.</p> <p>●Course Prerequisites None</p> <p>●Course Contents</p> <p>I. THE LIFE OF THE CELL The Chemical Basis of Life The Molecules of Cells A Tour of the Cell The Working Cell How Cells Harvest Chemical Energy Photosynthesis: Using Light to Make Food</p> <p>II. CELLULAR REPRODUCTION AND GENETICS The Cellular Basis of Reproduction and Inheritance Patterns of Inheritance Molecular Biology of the Gene How Genes Are Controlled DNA Technology and Genomics</p> <p>III. CONCEPTS OF EVOLUTION How Populations Evolve The Origin of Species Tracing Evolutionary History</p> <p>IV. THE EVOLUTION OF BIOLOGICAL DIVERSITY Microbial Life: Prokaryotes and Protists The Evolution of Plant and Fungal Diversity The Evolution of Invertebrate Diversity The Evolution of Vertebrate Diversity</p> <p>V. PLANTS: FORM AND FUNCTION Plant Structure, Growth, and Reproduction Plant Nutrition and Transport Control Systems in Plants</p> <p>●Evaluation methods Attendance and class participation 30% Home works 20% Examinations 50%</p>			

●Notice for students

1. Course webpage

NUCT (Nagoya University Collaboration and Course Tools; <https://ct.nagoya-u.ac.jp/portal>) is an online system that will be used for this course. PowerPoint slides, other learning materials (such as videos, websites, etc.) and home works will be accessible through this page.

2. Attendance

In case of emergency or absence from class, students should notify the instructor as soon as possible either by email or phone.

3. Make-up exam

Make-up exams may be given on condition that the student can provide acceptable reasons for his/her absence.

4. Personal electronics policy

Personal electronic devices should not be visible or audible during class time.

5. Academic honesty and original work

Cheating and copying (including plagiarism) will not be tolerated in this class.

6. Course withdrawal

Students who wish to withdraw from the course will have to submit a duly accomplished Course Withdrawal Form by November 28, 2019.

7. Reading assignments

Students are expected to read one to two chapters of the textbook every week, and come to class prepared for discussion.

Textbook	Campbell Biology Concepts and Connections 9/e 2019 (Pearson New International Edition) ISBN-10: 1292229470 *or older edition Authors: J. Reece, M. Taylor, E. Simon, J. Dickey
Reference Book	

Outline of Engineering 3			
Registration Code	0083381	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 3 (13:00~14:30)		
Instructor	LELEITO Emanuel		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·Ag(B)		
<p>●Objectives of the course This course introduces the history, the current state and future prospects of R&D (research and development) in various sectors related to the field of engineering in Japan. This class consists of “omnibus-style” lectures, all provided in English.</p> <p>●Course Prerequisites No prerequisites. Students are expected to actively engage in class discussions</p> <p>●Course Contents</p> <p>1.The innovative factors of technologies in Japan (Kiyohisa NISHIYAMA) -This lecture provides the participants with the concept of 40 innovation principles. Some Japanese technologies are broken down into the combination of the principles as examples. -The students each are asked to analyse a technology of interest found in Japan. The students will be able to grab the concepts of any technological innovations after completing this lecture.</p> <p>2.Science, Technology and Innovations in Disaster Risk Reduction (Emanuel LELEITO) -This lecture gives students an overview of the Scientific and Technology Innovations that have contributed to Japan’s leading role in Disaster Risk Reduction (DRR). -DRR related discussions and presentation in class will help students exercise their creative thinking and problem solving skills.</p> <p>3.Science, Technology and Innovations in Embedded Computing Systems (Gang ZENG) -This lecture gives an overview of the embedded computing systems related technologies in Japan. In particular, the latest innovations on the low-energy and automotive applications will be introduced. -The students are asked to participate in group discussion to share their ideas and thoughts about energy conservation and future automobiles.</p> <p>●Evaluation methods Attendance 30%, One report per lecture: 40% , Final presentation: 30%</p> <p>●Notice for students No notice for students</p>			
Textbook	Lecture materials will be distributed during the lectures.		
Reference Book	Michael Barr and Anthony Massa, Programming Embedded Systems, Second Edition, O`Reilly Media, 2006. Henkel, Jeorg and Sri Parameswaran, Designing Embedded Processors: A Low Power Perspective, Springer, 2007. Disaster Management in Japan, Cabinet Office, Government of Japan (available online) http://www.bousai.go.jp/linfo/pdf/saigaipanf_e.pdf		

Pre-college Mathematics			
Registration Code	0063411	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 4 (14:45~16:15)		
Instructor	RICHARD Serge		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course This course is a companion course to Calculus I. It aims to help students with little or no precalculus knowledge to master the basic calculus material in preparation for the more advanced course of Calculus I.</p> <p>●Course prerequisites No prerequisites.</p> <p>●Course Contents The content of this course will depend on the initial level in mathematics of the students attending it. It will mainly consist in a review of high school mathematics and in an additional help for students attending the course Calculus I.</p> <p>●Evaluation methods Your final grade will be determined by your active participation during the lectures. It is necessary to submit a Course Withdrawal Form when a student has no intention of finishing the course during the semester.</p> <p>●Notice for students This course is an optional subject which does not count towards the number of credits required for graduation in any program at Nagoya University.</p> <p>●Additional information See http://www.math.nagoya-u.ac.jp/~richard/fall2019.html</p>			
Textbook	None		
Reference book	None		

Introduction to Career Development Theory			
Registration Code	0063511	Credits	2.0
Course Category	InterD Liberal		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 5 (16:30~18:00)		
Instructor	NISHIYAMA Kiyohisa, SAKAI Nobuaki, ITO Akiko, LELEITO Emanuel		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the Course This course, which mainly composed by lectures and group works, provides an understanding of the working world of Japan. It also focuses on creating a strategy for effective career development taking advantage of the various backgrounds of the international students.</p> <p>●Course Prerequisites No prerequisites, but the students are expected to proactively exchange opinions in group discussions.</p> <p>●Course Contents The students firstly analyze the challenges faced by currently existing occupations and learn scientific approaches for problem solving (such as the 40 inventive principles defined by the theory of inventive problem solving) in group work activities. Then, they will be asked to make strategies to get over the challenges to raise awareness on the importance of career planning. The students each finally independently researches on the strategy for own future career path referring the experience in the group work activities and introduces the research results at final presentation.</p> <p>●Evaluation Methods Class attendance and participation: 40% Report: 30% Final presentation: 30%</p> <p>●Notice for Students</p> <ol style="list-style-type: none"> 1. In order to conduct activities and group work effectively, the class capacity is limited to a maximum of 30 students. Please ensure to attend the first class. If the number of students exceeds the stipulated class size, the course coordinator will advise students on registration policy. 2. Students are required to have a course attendance rate of 80% or higher. In the absence of extenuating circumstances, students failing to meet this attendance requirement will earn a 'fail'. 3. Students who come to class 15 minutes late without an acceptable excuse will be counted as absence. 4. Any instance of a student falsely presenting work that is not their own (e.g. plagiarism, cheating) is academic fraud and taken seriously by the University. Consequences may include failure of the assignment or course, suspension, or expulsion. 5. Need to submit a Course Withdrawal Form when students have no intention of finishing a course during the semester. 			
Textbook	None. Course materials will be distributed in the class		
Reference Book	Richard N. Bolles, What Color Is Your Parachute? 2014: A Practical Manual for Job-Hunters and Career-Changers. Ten Speed Press, 2013		

Agricultural Sciences			
Registration Code	0083581	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 5 (16:30~18:00)		
Instructor	INOUE Naoko		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)		
<p>●Objectives of the course We are beset by an array of global concerns such as the depletion of food and energy resources, poverty and health problems, and the destruction of the natural- and living-environments. This course, by taking as its base recent developments in the field of life sciences, aims to propose possible solutions to the above, through the analysis of biological production, symbiosis, and frontier technology in the field of bioscience.</p> <p>●Course Prerequisites None</p> <p>●Course Contents Introduction Physiology of Animal Reproduction Current Trend in Crop Production in Japan Insecticides and pest management Discussion 1 Genetically Modified Crops 1 Genetically Modified Crops 2 Interaction between plants and climate Ecology of Irrigated Rice Fields Enzyme Engineering Biomass Chemistry Nutrition and food sciences International Cooperation for Agricultural Development Discussion2 Remarks</p> <p>●Evaluation methods Evaluation will be based on in-class participation and assignments.</p> <p>●Notice for students None</p>			
Textbook	None		
Reference Book	None		

Special Mathematics Lecture (Introduction to functional analysis)

Registration Code	0063611	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Wed. / 6 (18:15~19:45)		
Instructor	RICHARD Serge		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objective of the Course Functional analysis is a useful tool for many physical theories, and has been partially developed concomitantly with quantum mechanics. The aim of this course is to provide the necessary background for a good understanding of the mathematics behind any course of quantum mechanics. During this one semester course, the notions of distributions, of Lebesgue integral, and the foundation of spectral theory will be introduced. Depending on the interest of the audience, different tools of spectral theory will be further developed.</p> <p>●Course Prerequisites Basic knowledge on calculus and linear algebra, as provided in Calculus I & II and in Linear algebra I & II. Motivated 1st year students can also attend without these prerequisites but after a discussion with the instructor.</p> <p>●Course Contents Distribution theory Lebesgue integrals Hilbert spaces and bounded operators Unbounded operators</p> <p>●Evaluation Methods The final grade will be based on the active participation during the lectures and on some written reports.</p> <p>●Notice for Students This course is an optional subject which does not count towards the number of credits required for graduation in any program at Nagoya University.</p> <p>●Additional information See http://www.math.nagoya-u.ac.jp/~richard/SMLfall2019.html</p>			
Textbook	Material will be provided during the lectures		
Reference Book	Reference books will be provided during the lectures		

Advanced Japanese (Written Presentation) 2				Instructor	NAGASAWA Itsuki
Registration code	0044118	Credits	2.0	Course Category	Basic GE, Language II
Term(Semester) / Day / Period	G-I (1st year, Fall semester) / Thu / 1 (8:45~10:15)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only)					
http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Biotechnology			
Registration Code	0064311	Credits	2.0
Course Category	Sciences Liberal		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Thu. / 3 (13:00~14:30)		
Instructor	CARTAGENA Joyce Abad		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course</p> <ol style="list-style-type: none"> 1. To provide basic knowledge on biological processes that will help students understand the science behind the technologies 2. To present examples of actual technology used in the industry 3. To discuss the benefits and drawbacks of Biotechnology to humanity and the environment 4. To provide a venue for students to express their opinions regarding the issues related to Biotechnology <p>●Course Prerequisites None</p> <p>●Course Contents</p> <p>I. Introduction: The nature of Biotechnology</p> <ol style="list-style-type: none"> 1. Basic Science of Biotechnology 2. Technologies and Tools in Biotechnology I 3. Technologies and Tools in Biotechnology II <p>II. Products of Biotechnology:</p> <ol style="list-style-type: none"> 1. Microbial Biotechnology 2. Plant and Animal Biotechnology 3. Aquatic Biotechnology and Bioremediation 4. DNA Fingerprinting and Forensic Analysis 5. Medical Biotechnology <p>III. Biotechnology Regulations</p> <p>IV. Ethics and Biotechnology</p> <p>●Evaluation methods Attendance and class participation 30%, Group presentation 20%, In-class work/homework 20%, Examination 30%</p> <p>●Notice for students</p> <ol style="list-style-type: none"> 1. Course webpage NUCT (Nagoya University Collaboration and Course Tools; https://ct.nagoya-u.ac.jp/portal) is an online system that will be used for this course. PowerPoint slides, other learning materials (such as videos, websites, etc.) and home works will be accessible through this page. 2. Attendance In case of emergency or absence from class, students should contact the instructor as soon as possible either by email or phone. 3. Make-up exam Make-up exams may be given on condition that the student can provide acceptable reasons for his/her absence. 4. Personal electronics policy Personal electronic devices should not be visible or audible during class time. 5. Academic honesty and original work Cheating and copying (including plagiarism) will not be tolerated in this class. 			

6. Course Withdrawal

Students who wish to withdraw from the course will have to submit a duly accomplished Course Withdrawal Form by November 21, 2019.

Textbook	Introduction to Biotechnology 4/e 2019 (Pearson) ISBN 9780134650197 *or older edition Authors: W.J. Thieman and M.A. Palladino
Reference Book	

Calculus I			
Registration Code	0064511	Credits	2.0
Course Category	Sciences Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Thu. / 5 (16:30~18:00)		
Instructor	RICHARD Serge		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Analysis is the field of mathematics that describes and analyzes quantitative changes, and the central methods are differential and integral calculus. These methods are essential techniques in natural science, and have recently found increasing applications also in social sciences. The aim of the first half of this one-year course is to provide a solid understanding of functions of a single variable.</p> <p>●Course Prerequisites Some basic knowledge on calculus from high school is assumed, including differentiation and integration of polynomial functions.</p> <p>●Course Contents</p> <ol style="list-style-type: none"> 1. Limits and continuity Basic properties of limits of sequences and functions, continuous functions and their basic properties, maxima and minima, asymptotic properties of functions. 2. Differentiation Basic properties of the derivative and its interpretation, mean value theorem, higher derivatives, Taylor series. 3. Integration Riemann integral and its properties, improper integrals, the fundamental theorem of calculus. <p>●Evaluation methods The final grade will be determined by quizzes (30%), the midterm (30%) and a final exam (40%).</p> <p>●Notice for students This course uses the course withdrawal system. To withdraw from the course and obtain the grade Absent the student must submit a written Course Withdrawal Form before the end of November. After that time any student who participated in any part of the examination will be graded S, A, B, C or F.</p> <p>●Additional information See http://www.math.nagoya-u.ac.jp/~richard/fall2019.html</p>			
Textbook	None		
Reference book	None		

Health and Sports Science: Lecture			
Registration Code	0065211	Credits	2.0
Course Category	Basic GE, Sports		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri / 2 (10:30~12:00)		
Instructor	KOIKE Teruhiko, SAKAI Takashi		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course In recent years “health” is a primary concern. This is because people are afraid of being obese and developing other lifestyle-related diseases, as a result of overeating and sedentary lifestyles. Good habits (lifestyle) from a young age are critical to having a long healthy life. The purposes of this lecture are to support the health care of each student by addressing ①lifestyle-related issues such as nutrition, exercise, alcohol and smoking, ②metabolic and endocrine disorders caused by an unhealthy lifestyle, ③mental disorders, and ④infectious diseases.</p> <p>●Course Prerequisites None</p> <p>●Course Contents Session 1 – 11: Lifestyle (Koike) ① Alcohol and Smoking ② Diet ③ Exercise ④ Obesity and diabetes ⑤ Infection and HIV/AIDS Session 12-14:Brain and Mental Disorder (Sakai) ① Sleep ② Depression ③ Psychoanalysis</p> <p>●Evaluation methods Final exam (80%); Assignment (20%) Students who are absent from final examination will get “Absent” grade. Students do not need to submit a Course Withdrawal Form for course withdrawal.</p> <p>●Notice for students None</p>			
Textbook	None (Reading materials will be available from the Website.)		
Reference Book	Nagoya University Collaboration and Course Tools (NUCT)		

Comparative and International Education (Principles and Strategies)			
Registration Code	0085381	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 3 (13:00~14:30)		
Instructor	TANIGUCHI Norihito		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course This course aims to understand the overview of comparative and international education for the undergraduate student to graduate student, and focuses on the definition, history, theories, research perspectives and recent education phenomena under the impact of globalization and internationalization of education. Through comparing and examining various internal and external factors surrounding the educational system, students are expected to clarify the social causal relationship and structure behind it and contribute to building a better society on its own initiative. Particularly, the education systems of many countries are used as case studies, including Japan, and students are also expected to capture the educational phenomena as their own issues.</p>			
<p>●Course Prerequisites: Maximum number of students: 30</p>			
<p>●Course Contents</p> <ol style="list-style-type: none"> 1. Introduction (Structure of this course) 2. Comparative and international education: Research, epistemology, framework, selected theme 3. Education and development 4. Use of international surveys on student achievement 5. Case studies 6. Group presentation 7. Group presentation/Feedback 8. Internationalization of higher education 9. Internationalization of higher education: Case studies 10. Globalization and internationalization 11. Globalization and internationalization: Case studies 12. Internationalization at home, Internationalization of curriculum 13. Education abroad, Push-pull theory, Transnational Education, Distance Learning 14. International student advising 15. Meaning of Education 			
<p>●Evaluation methods Participation/Group discussion:10%, Group presentation:20%, Mid-term paper (1,500-2,000word):30%, Final paper (2,500-3,000word):40% Students need to submit a Course Withdrawal Form when requesting course withdrawal.</p>			
<p>●Notice for students This class will be held together with NUPACE and G30 students. This course is suitable for the undergraduate student to graduate student as well as those who will study abroad in the near future. By the conclusion of this course, students will have developed the following skills:</p> <ul style="list-style-type: none"> • An understanding of the nature of comparative and international education, which are its definition, history, and structure • A critical understanding of analytical perspective of comparative and international education for a future advanced research • An awareness of key trend in educational phenomena in the field of comparative and international education • A study of the relationship between globalization effects on education and its relationship, between this and the development of internationalization in education • Independent academic skills with group work skills in the context of international co-learning 			
Textbook	A list of reference texts will be distributed in class.		
Reference Book	A list of reference materials will be distributed in class.		

Introduction to Civil Engineering and Architecture			
Registration Code	0085384	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 3 (13:00~14:30) , 4 (14:45~16:15)		
Instructor	TOMITA Takashi		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·Ag(B)		
<p>●Objectives of the course The objectives of this course are (1) to establish scenarios for certain social infrastructure projects, and thereby introduce relevant civil engineering theories and construction technology, as well as conduct site-visits; (2) to survey, through technical site visits, various aspects of urban and architectural studies, including building material experiments, energy conservation, and the recent development of regional disaster mitigation activities.</p> <p>●Course Prerequisites None</p> <p>●Course Contents</p> <p>Oct 4 Orientation (S. Nakamura)</p> <p>Oct 11 Lecture and Site-visit 1: Preservation of Historical Area – “The Cultural Path” located in the downtown of Nagoya (Y. Nishizawa)</p> <p>Oct 18 Lecture & Site-visit 2: Architecture and culture –Nagono and Shike-michi district (near Nagoya Station) (H. Komatsu)</p> <p>Oct 25 Lecture and Site-visit 3: Nagoya University Disaster Mitigation Research Canter (J. Tobita)</p> <p>Nov 1 Lecture 4: Social infrastructure and civil engineering (1) Expressway Development in Japan (T. Makita <Central Nippon Expressway Co., Ltd>)</p> <p>Nov 29 Lecture 5: Social infrastructure and civil engineering (2) Maintenance and Operation of Expressway (T. Makita <Central Nippon Expressway Co., Ltd>)</p> <p>Dec 20 Site-visit 6: Maintenance and Operation of Expressway (Central Nippon Expressway Co., Ltd) (T. Makita <Central Nippon Expressway Co., Ltd>)</p> <p>Jan 10 Site-visit 7: Traffic Control Center of Expressway (Central Nippon Expressway Co., Ltd) (T. Makita <Central Nippon Expressway Co., Ltd>)</p> <p>●Evaluation methods Students will be evaluated on attendance and written reports.</p> <p>●Notice for students None</p>			
Textbook	None		
Reference Book	None		

Literature			
Registration Code	0065411	Credits	2.0
Course Category	Arts Basic		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. /4 (14:45~16:15)		
Instructor	IWATA Kristina		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Literature is one of the many concepts that were (re)invented upon contact with the West during the Meiji period. However, not only was the definition of literature modeled on the Western example, but experiences with foreignness soon began to play a role on the plot level as well. In this course we will explore issues surrounding intercultural encounters through the lens of literary texts. The selected works cover roughly a century, beginning during the modernization period when Japan sent its brightest minds abroad to study, and ending with a foreigner's experiences in post-bubble Japan. The texts are discussed in close relation to their respective social and political contexts, providing students with good background knowledge of modern Japanese society. Students will understand what makes modern Japanese literature "modern" and "Japanese", get a good overview of a specific aspect of Japanese literary history, and acquire basic skills in literary analysis and interpretation.</p> <p>●Course Prerequisites None, except for the willingness to read (and discuss) lots of good literature.</p> <p>●Course Contents Japanese modern and contemporary literature written between 1890-1996. With two exceptions, the focus is on short stories and short novellas all of which are provided in English translation. The course combines lecture (1/3) and seminar (2/3), meaning that the outcome significantly depends on students' preparation and active discussion in class.</p> <p>●Evaluation methods Weekly written reading responses 30%; Class participation 40%; Final written examination 30%.</p> <p>●Notice for students 1. As the study of literature by nature involves a certain amount of reading, students should be prepared to read and discuss a different literary text each week (with two exceptions, all are short novellas). This means that students with a genuine interest both in "literature" and in "Japan" will benefit most from the course. 2. In keeping with NU policies, students must attend 80% of classes in order to receive credit for the course. For a 15-week semester, this means that more than 3 absences may lead to you failing the course (absences for medical reasons, certain school functions, etc., will be excused if proper documentation is provided). 3. Students must submit a Course Withdrawal Form by the deadline when they have no intention of finishing a course during the semester.</p>			
Textbook	No required textbook for purchase. Readings will be made available on the first day of class.		
Reference Book	Listed on the final version of the syllabus (distributed on the first day of class)		

Lecture on Cross-cultural Education

Registration Code	0085481	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. /4 (14:45~16:15)		
Instructor	TANIGUCHI Norihiro		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		

●Objectives of the course

This course aims to understand the overview of theory and practice in intercultural education for the undergraduate student to graduate student. Handling on micro to macro-level issues in intercultural education, students are expected to deeply learn the intercultural perspectives in personal to international context. In the second part of the class, acquiring intercultural analytical insights such as diversity, equity and transnationalism, to the end, students will be able to apply these skills and insights in the real world educational phenomena. After an enrollment, students are requested to take an IDI (Intercultural Development Inventory). IDI is a psychometric test to assess the intercultural development of students, providing a roadmap to increase intercultural competencies. Students will receive the individual report with feedback and instead must submit their own action plan. Increasing intercultural competencies, several intercultural training will be provided, depending on their developmental stage. In the end, students are again requested to take IDI for their growth.

●Course Prerequisites

Maximum number of students: 30

●Course Contents

1. Introduction (Structure of this course)
2. Intercultural education: Research, epistemology, framework, method, selected theme
3. Intercultural competence
4. Intercultural competence
5. Intercultural Training and Intercultural competence / Debriefing
6. Case Study: intercultural education in Japan
7. Case Study: intercultural education in other countries: Asia, US, and EU
8. Immigration
9. Group Presentation
10. Group Presentation
11. Stereotype, prejudge, discrimination
12. Cultural globalization
13. Diversity and inclusion by IKEA store manager
14. Site visit to IKEA Nagakute Store: Multicultural team work
15. Interculturalist and intercultural mindedness

●Evaluation methods

Group discussion/Active participation in training	10%
IDI action plan	10%
Group presentation:	20%
Mid-term paper (1,500-2,000 word):	30%
Final paper (2,500-3,000 word):	30%

Students need to submit a Course Withdrawal Form when requesting course withdrawal.

●Notice for students

This class will be held together with NUPACE and G30 students.

This course is suitable for the undergraduate student to graduate student as well as those who will study abroad in the near future.

By the conclusion of this course, students will have developed the following skills:

- A deep understanding of the working definition of culture and intercultural education
- A critical understanding of intercultural perspectives for an advanced academic research

	<ul style="list-style-type: none"> • An awareness of having applied intercultural skills and analytical insights • A self-confidence to increase intercultural competence based on your own action plan through taking IDIs and receiving intercultural training • Independent academic skills with group work skills in the intercultural co-learning
Textbook	<p>UNESCO, U.N.E., Scientific and Cultural Organization (2006). UNESCO Guidelines on Intercultural Education. Paris, France: Section of Education for Peace and Human Rights.</p> <p>Intercultural Development Inventory 1 times (about 1, 600yen/per)</p> <p>※Details will be informed in the class.</p>
Reference Book	Additional materials to be announced later.

German 2				Instructor	NISHIKAWA Tomoyuki
Registration Code	0025501	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

French 2				Instructor	OKUDA Tomoki
Registration Code	0025502	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Russian 2				Instructor	YAMAZAKI Tachiana
Registration Code	0025503	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Chinese 2				Instructor	KASAI Naomi
Registration Code	0025504	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester)/Day/Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Spanish 2				Instructor	MENDEZ GUERRA Carlos
Registration Code	002550 5	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Korean 2				Instructor	KIM Hyunjin
Registration Code	002550 6	Credits	1.5	Course Category	Basic GE, Language I
Term(Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 5(16:30~18:00)				
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)				
For information on syllabus, please go to the following address. (In Japanese only) http://www.ilas.nagoya-u.ac.jp/syllabus/syllabus2019/syllabus-top.html					

Special Lecture (Studium Generale I)			
Registration Code	0065511	Credits	2.0
Course Category	InterD Liberal		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 5 (16:30~18:00)		
Instructor	VASSILEVA Maria		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course Studium Generale is a unique course that focuses on “diversity”. The course offers exposure to various topics presented in an accessible way. It provides an opportunity to explore topics outside students’ majors or research fields, including topics related to career paths, performing arts and business. The name comes from a similar concept in old European universities, still prevalent in German universities. Studium Generale is also unique in its audience diversity. The course is offered as (1) a credit-course to undergraduate students, AND as (2) an Open Course to all members of Nagoya University and Gifu University. Students are given opportunity through discussion sessions to interact with people outside their major. The goal of the course is to expose students to different ideas – from the different speakers and topics, and from interaction with different participants during discussion sessions. ヨーロッパで800年の伝統を持つ「開かれた大学」の理念に基づいた講義を体験することを狙う。使用言語は英語。学内留学の気分!</p> <p>●Course Prerequisites No prerequisites!</p> <p>●Course Contents The format of the course includes guided discussions among participants and talks by invited speakers. A different invited speaker, from Nagoya University or elsewhere, gives each talk thus the content of each session is different. Topics are renewed every semester. <i>Detailed course information - time schedule and lectures information - available on the course website:</i> http://www.bio.nagoya-u.ac.jp/G30StudiumGenerale/ <i>Videos of some previous talks may be seen on Nagoya University OCW page:</i> http://ocw.nagoya-u.jp/index.php?lang=en&mode=c&id=624&page_type=index <i>Some lectures have been translated into Japanese and added to the NUAcL webpage:</i> http://nuact.ilas.nagoya-u.ac.jp/ocw/index.html</p> <p>●Evaluation methods Participation (50%); written reports (50% of the grade). Attendance is taken every class. Short written reports are submitted at the end of EVERY CLASS by the attending students. Report forms will be distributed during class. Each report should summarize the main idea of the talk and describe what the student liked most about/ learned from the talk. Reports grading is based on understanding of the lecture content and logical organization of ideas.</p> <p>●Notice for students 1. Reminder of basic manners: talking with friends and working on the computer during lectures is very disruptive for the rest of the audience and especially for the speakers. Such behavior will not be tolerated. 2. Students who join but do not intent to complete the course need to submit a Course Withdrawal Form. This can be done at any time during the course. Students who register but never come to class will receive an Absent grade. この講義を最後まで履修しない場合には、履修取り下げ届を提出すること。この手続きは、授業期間中いつでも可能。 3. Please note that this course is also an Open Course! Audience who are not credit-seeking undergraduate students register through the course website. ILAS students do not need to register there. Participants registering for the open course (through the course website) follow separate requirements to receive a Certificate of Completion. These requirements DO NOT apply to ILAS students.</p>			
Textbook	None		
Reference Book	None		

A Multicultural Approach to Contemporary Issues			
Registration Code	0085581	Credits	2.0
Course Category	Open		
Term (Semester) / Day / Period	G-I (1st year, Fall Semester) / Fri. / 5 (16:30~18:00)		
Instructor	HENAULT-MORRONE Michelle		
Target Schools (Programs)	Hu(J)·La(S)·Ec(S)·Sc(P·C·B)·En(P·C·Au)·Ag(B)		
<p>●Objectives of the course This class reviews classic writings on Japanese society and culture, providing a perspective from which to better understand contemporary Japanese social issues. Student understanding will develop by mixing an academic base with hands-on experience in Japanese cultural events and practices. Investigating in depth a particular area of interest will culminate in a final presentation and report.</p> <p>●Course Prerequisites Japanese anthropology, cultural studies, sociology, education, history, politics, economics, aesthetics</p> <p>●Course Contents Class 1 Introduction Class 2 What is Culture Class 3 What is Society Class 4 Ritual and the Matsuri community Class 5 Shinto, Buddhism, and the Festival Class 6 Japanese Society of Nakane Chie Class 7 Space – notion of space and time Class 8 City Shrine and its function in society Class 9 The idea of Amae by Takeo Doi Class 10 Amae Continues – exploring terms Class 11 The Japanese “self” and school and society Class 12 Presentaion prep Class 13 Presentations prep Class 14 Presentations Class 15 Final Papers due</p> <p>●Evaluation methods Class participation 30%, Group participation 35%, Final Paper 35%</p> <p>●Notice for students This is a general introduction to contemporary Japanese issues. No previous expertise with Japanese culture and society is required but interest in the subject and in basic field research is beneficial.</p>			
Textbook	To be announced first day of class; reading materials (copied articles) available from NUPACE office		
Reference Book	To be announced first day of class; reading materials (copied articles) available from NUPACE office		