

NUPACE
Academic Policies
& Syllabi
Autumn 2013

名古屋大学短期交換留学プログラム

NUPACE Academic Calendar & Policies – Autumn 2013

1. Calendar

Oct 1 ~ Jan 27	NUPACE (Japan area studies; majors) & regular university courses
Oct 14 ~ Feb 3	University-wide Japanese Language Programme (UWJLP)
Jan 28 ~ Feb 10	Examination period for regular university courses
Dec 28 ~ Jan 7	Winter vacation for NUPACE & regular university courses
Dec 20 ~ Jan 5	Winter vacation for UWJLP programme

Apr 11 Spring 2014 semester commences

National Holidays (No classes will be held on the following days)

Oct 14	体育の日	(Health-Sports Day)*
*Japanese language courses and 'Introductory Courses Taught in Japanese' will be held as normal		
Nov 4	振替休日 (文化の日)	(Holiday in lieu for Culture Day)
Nov 23	労働感謝の日	(Labour Thanksgiving Day)
Dec 23	天皇誕生日	(Emperor's Birthday)
Jan 13	成人の日	(Coming-of-Age Day)
Feb 11	建国記念日	(National Foundation Day)
Mar 21	春分の日	(Vernal Equinox Day)

2. List of Courses Open to NUPACE Students

1. <NUPACE Programme>

Japanese Language Programmes

Standard Course in Japanese (7 Levels: SJ101~SJ301)	p 10~
Intensive Course in Japanese (6 Levels: IJ111~IJ212)	1~5 crdts p 11
Academic Japanese I, III	2~10crdts p 12
Business Japanese I, III	1.5 crdts p 13
漢字<Kanji>1000, 2000	1.5 crdts p 13
	1 credit p 14

入門講義 <J>* (ECIS Introductory Courses Taught in Japanese)

国際関係論 I (Global Society I)	2 credits p 14
日本文化論 I (Introduction to Japanese Society & Culture I)	2 credits p 15
日本語学・日本語教育学 I (Introduction to Japanese Linguistics I)	2 credits p 15
言語学入門 I (Introduction to Linguistics I)	2 credits p 16
日本文学 I (Japanese Literature I)	2 credits p 17

*<J> Courses taught in Japanese and which require level 2/N2 of the Japanese Language Proficiency Test (JLPT), or equivalent.

Other Foreign Language Courses (Graduate School of Languages & Cultures) 2 credits p 17

Education Center for International Students/International Education and Exchange Directorate

Career and Life Development (Graduate)	2 credits p 19
Independent Thinking and Decision Making	2 credits p 19
Teaching Practice in the Japanese Community	2 credits p 20

School of Agricultural Sciences:

Agricultural Science	2 credits p 21
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School of Economics

Advanced Income Theory II	2 credits p 21
Economic Theory and Applications II	2 credits p 22
International Accounting A	2 credits p 22
Law and Economics Workshop (1-year course)	2 credits p 23

School of Engineering:

Academic, Scientific, and Technical English	1 credit	p 24
Civil Engineering & Policies for Developing Countries I (Graduate)	2 credits	p 25
Introduction to Civil Engineering & Architecture	2 credits	p 25
Motor Control and Information Processing in the Biological System (Graduate)	2 credits	p 26
Overview of Advanced Electrical, Electronic & Information Engineering	2 credits	p 26
Science & Technology in Japan	2 credits	p 27
Space Electromagnetic Environment (Graduate)	2 credits	p 28

Graduate School of Environmental Studies

Climate Change Policies	2 credits	p 29
Ecosystem Management	2 credits	p 30
Environmental Industry Systems	2 credits	p 30
Planning and Design Studio for Historical Environment (2 nd quarter; Graduate)	2 credits	p 31
Politics and Diplomacy in the International Environment (Graduate)	2 credits	p 31
Studio Workshop of Architectural Design (1 st quarter; Graduate)	2 credits	p 32
Sustainability and Environmental Studies	2 credits	p 32
Water and Waste Engineering	2 credits	p 33

Graduate School of Information Science

Advanced Lectures on Quantum Information	2 credits	p 35
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Graduate School of International Development (GSID):

Educational Development Planning and Evaluation	2 credits	p 36
Human Security and Law	2 credits	p 36
Japan's Development Experience	2 credits	p 37
Law and Development Studies	2 credits	p 37
Lecture on International Development 1: International Migration Theory	2 credits	p 38

Graduate School of Languages & Cultures (GSLC):

Introduction to Sociolinguistics b: Introduction to Bilingualism	2 credits	p 39
Topics in Geography and Culture 1: Ameriglish as a tool for Understanding American Culture	2 credits	p 39

In addition to the above, the following GSLC G30 courses have been made available to NUPACE students. Access <http://www.lang.nagoya-u.ac.jp/G30/clc/pdf/course-descriptions-13fall.pdf> for further details or view copies of the syllabi in the NUPACE Office. NB. NUPACE students are not eligible for courses other than those listed below.

- Second Language Development; Thu/3
- A Comparative Approach to Media Discourse I: Concepts, theories, and methods <Graduate>; Wed/3 *Maximum NUPACE capacity: 4 students
- Cultural and Intellectual History of Japan I; Mon/2
- Word and Image in Japanese Narrative I; Mon/5
- Analysing Cultures I: Postmodern Play and Beyond; Wed/4
- Literary Modernism and the Avant-Garde: Innovative Writing and Translation; Thu/5
- A Comparative History of Broadcasting; Fri/2; **NB.** After sitting in on the first session, students wishing to enrol in this course are required to submit a 1-2 page essay to the NUPACE Office, outlining their reasons for wishing to take the course.

School of Law:

Comparative Studies in Jurisprudence II: Uses of the Public Sphere – Good Practice vs. Corruption	2 credits	p 40
Introduction to Private International Law	2 credits	p 41
Prof. Studies in Int'l Human Rights Law II: Human Rights & Refugee Law	2 credits	p 42
Special Lecture and Seminar: Workshop on International Negotiation	2 credits	p 42

Special Lecture and Seminar: <i>Yomiuri Shimbun</i> Special Lecture – Comparative Asian Corporate Theory	2 credits	p 43
Studies in Jurisprudence: Law as Political Theory II	1 credit	p 45

School of Letters:

Asian Film History Before 1945	2 credits	p 46
Aspects of Contemporary Japanese Culture	2 credits	p 46
Cinema and Cultural Theory	2 credits	p 46
Japanese Culture: Language and Communication II	2 credits	p 47
Modern Japanese Literature from an East Asian Perspective	2 credits	p 48
Seminar: Cinema and Practice – City, Urban Culture and Cinema in Contemporary Asia	2 credits	p 48
Seminar: Theory and Practice of Literary Translation	2 credits	p 49
日本語文化入門 II (Introduction to Japanese Language & Culture II) <J*>	2 credits	p 49

<J> Course which requires at least level 2/N2 of the Japanese Language Proficiency Test (JLPT), or equivalent.

Graduate School of Mathematics:

Perspectives in Mathematical Sciences II (Graduate)/IV (Undergraduate)	2 credits	p 49
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School of Science:

Advanced Quantum Chemistry	2 credits	p 51
Computational Chemistry	2 credits	p 52

Class Time-table: NUPACE Programme (Courses in the Student's Major, Academic Japanese, Business Japanese, Kanji, and 入門講義 <Introductory Courses J*>)

Unless indicated otherwise, the following courses commence on Tuesday, October 1, 2013. Students should refer to the course descriptions in this pamphlet for details on course content and eligibility, and the enclosed floor maps for the locations of classrooms. Please note that, as of October 1, 2013, the Education Centre for International Students (ECIS) will officially be renamed as the International Education and Exchange Centre (IEEC).

	Mon	Tue	Wed	Thu	Fri
(I) 08:45-10:15		Educational Development Planning & Evaluation (GSID, Sem Rm 6 (515))		Water and Waste Engineering (Env. Studies, Lect. Rm 1) Planning & Design Studio for Historical Env. <2 nd qtr> (ES, 435) Studio Workshop of Architectural Design <1 st qtr> (ES, 435) Computational Chemistry (ES Bldg Rm 032 <Satellite Lab>) Workshop on Int'l Negotiation (Law, Sem. Rm 911)	
	Aspects of Contemporary Japanese Culture (Communal Bldg for Humanities & Soc. Sc., Rm 1AB)	Topics in the Geography of Culture 1 (IRB Humanities & Soc. Sc., Rm 623)	Advanced Quantum Chemistry (Sc. Bldg. B, Lecture Rm 3 <B-116>)	Workshop on Int'l Negotiation (Law, Sem. Rm 911)	Sustainability & Environmental Studies (Env. Studies, Lect. Rm 2)
		Space Electromagnetic Environment (IB Bldg, Rm 071)	Seminar: Theory & Practice of Literary Translation (Inter-dept. Ed. Bldg./Info & Sc. <N>, Rm 310)	Env. Industry Systems (Env. Studies, Lect. Rm 1)	International Accounting A (Economics, Lecture Rm 3)
				Planning & Design Studio for Historical Env. <2 nd qtr> (ES, 435)	Law & Development Studies (GSID, 5F, Sem. Rm 7 (516))
				Studio Workshop of Architectural Design <1 st qtr> (ES, 435)	
			Asian Film History Before 1945 (Letters, Rm 127)		
(II) 10:30-12:00	国際関係論 I<J> (ECIS, Rm. 207E) From Oct. 14	Int'l Human Rights Law II: Human Rights & Refugee Law (Law, Sem. Rm 905)	Japan's Development Experience (GSID, 8F, Auditorium)	Intro to Sociolinguistics b (IRB Humanities & Soc. Sc., Rm 522)	言語学 I<J> (ECIS, Rm 207E) From Oct. 18
	Climate Change Policies (Env. Studies, Lect. Rm 2)	Japanese Culture: Lang. & Communication II (IRB Humanities & Soc. Sc., Rm 305)	Science & Technology in Japan (Eng. Bldg. 1, Rm 131)	日本文化論 I<J> (ECIS, Rm 207W) From Oct. 17	Comparative Studies in Jurisprudence II: Uses of the Public Sphere (Law, Sem. Rm 905) From Oct. 11
	Economic Theory and Applications II (Economics, Lecture Rm 3)	Advanced Income Theory II (Economics, Lecture Rm 3)	Ecosystem Management (Liberal Arts & Sciences – Main Bldg, 3F, Rm S155)		Adv. Lectures on Quantum Information (Information Sc., Rm.2)
	Modern Japanese Lit. from an East Asian Perspective (Letters, Rm 128)	Overview of Adv. Electrical, Electronic & Information Eng. (Eng. Bldg. 1, Rm 132)	Civil Engineering & Policies for Developing Countries I (Eng Bldg. 7, Rm 703)		Intro to Civil Eng. & Architecture (Env. Studies, Sem. Rm 2)
(III) 13:00-14:30	Politics and Diplomacy in the Int'l Environment (Informatics & Sc., Rm C445)	Overview of Adv. Electrical, Electronic & Information Eng. (Eng. Bldg. 1, Rm 132)	Civil Engineering & Policies for Developing Countries I (Eng Bldg. 7, Rm 703)	Lect. on Int'l Development 1: Int'l Migration Theory (GSID, 6F Lecture Rm 1)	Intro to Civil Eng. & Architecture (Env. Studies, Sem. Rm 2)
	Motor Control and Info Processing in the Biological System (ES, 031)	Perspectives in Mathematical Sc. II/IV (Grad. School of Mathematics Bldg., Rm 109)	漢字 1000 (ECIS, Rm 201) From Oct. 16	日本文学 I (ECIS, Rm 207E) From Oct. 17	Introduction to Private International Law (Law, Sem. Rm 905)
	漢字 2000 (ECIS, Rm 207W) From Oct. 14		Special Lect. & Sem: Yomiuri Shimbun Special Lect. - Comp. Asian Corporate Theory (Law, Sem. Rm 911) From Oct. 9	Cinema and Cultural Theory (Letters, Rm 129)	
	日本語学・日本語教育学 I<J> (ECIS, Rm 207E) From Oct. 14			Independent Thinking & Decision Making (Ace Lab, Liberal Arts & Sc. – Main Bldg)	
(IV) 14:45-16:15	Studies in Jurisprudence: Law as Political Theory II (IRB Humanities & Soc. Sc., Rms 409/410)	Seminar: Cinema & Practice (Communal Bldg for Humanities & Soc. Sc., Rm 1AB)	Special Lect. & Sem: Yomiuri Shimbun Special Lect. - Comp. Asian Corporate Theory (Law, Sem. Rm 911) From Oct. 9	Academic, Scientific, & Technical English (Eng. IB Bldg, Rm IB012) From Oct. 10	
		Human Security and Law (GSID, Sem. Rm 8 (512))	Teaching Practice in the Japanese Community (Poppins-After-School)	Career & Life Development (Ace Lab, Liberal Arts & Sc. – Main Bldg)	
		日本語文化入門 II<J> (Letters, Lect. Rm 237)	Agricultural Science (Agric. Sc., Lect. Rm. 8)		
			Law and Economics Workshop (Economics, Sem. Rm 20) 17:00-19:00		
(V) 16:30-18:00		Academic Japanese (L&P) I (ECIS, 301)	Academic Japanese (R&W) I (ECIS, 301)	Business Japanese I (ECIS, Rm 207E)	
		Academic Japanese (L&P) III (ECIS, 207E)	Academic Japanese (R&W) III (ECIS, 207W)	Business Japanese III (ECIS, Rm 207W)	
(VI) 18:15-19:45					

2. <Additional Courses Taught in English (Global 30 <G30> International Programmes)>

Website for G30 programmes: <http://admissions.g30.nagoya-u.ac.jp/en/Program/>

Detailed information on undergraduate G30 programmes, including course lists and syllabi:
<http://admissions.g30.nagoya-u.ac.jp/en/Program/undergraduate/>

Undergraduate Programmes:

- Automotive Engineering Mechanical & Aerospace Engineering
Electrical, Electronic, & Information Engineering
- Biological Sciences Biological Science
Applied Biosciences
- Chemistry Chemistry
Chemical and Biological Engineering
- Fundamental & Applied Physics Physics
Physical Science and Engineering
- Social Sciences Law and Political Science
<http://www.law.nagoya-u.ac.jp/en/curriculum/g30/>
Economics and Business Administration
- Japan-in-Asia Cultural Studies Modern Literature, Cinema, Modern History
* *Japan-in-Asia Cultural Studies will commence in October 2014*

Graduate Programmes:

Detailed information on graduate G30 programmes:

<http://admissions.g30.nagoya-u.ac.jp/en/Program/graduate/>

Information on research groups and laboratories:

http://admissions.g30.nagoya-u.ac.jp/en/Program/graduate/laboratories_groups.html

- Science/Bioagricultural Sciences/
Medicine Biological & Bioagricultural Sciences
- Science/Engineering Chemistry
- Languages and Cultures Comparative Studies of Language and Culture
(syllabi: <http://www.lang.nagoya-u.ac.jp/G30/clc/>)
- Economics Economics & Business Administration
- Medicine Medical Science
- Science/Mathematics Physics & Mathematics
- Japan-in-Asia Cultural Studies Humanities

3. <Courses in the Student's Major Taught in Japanese >

Students participating in NUPACE are eligible to register for most courses offered to degree-seeking students at Nagoya University, provided that they have a suitable academic background and possess level N1 of the Japanese Language Proficiency Test (JLPT). Access to online information on individual schools and departments is available at <http://www.nagoya-u.ac.jp/about-nu/org/sch-list/>.

The following is a list of Nagoya University's schools and corresponding departments, with details on courses and syllabi available at the URLs listed beneath the departments:

学部レベル:

文学部: 哲学、文明論、歴史学、文化史学、文学、言語学、環境・行動学
<http://www.lit.nagoya-u.ac.jp/education/syllabus/>

教育学部: 生涯教育学科、学校教育学科、国際教育文化学、心理行動学科、発達臨床学科
<http://www.educa.nagoya-u.ac.jp/school/index.html>

法学部:	基礎実定法学、基礎政治学、現代基礎法学、紛争処理法制、企業経済法制、公共政策、国際関係、法政情報 http://infosv.law.nagoya-u.ac.jp/syllabus/as/v/ngo/law/ug/13/pubList
経済学部:	理論経済、応用経済、企業経営、情報会計 http://www.soec.nagoya-u.ac.jp/btm/under_gr/school.html
情報文化学部:	複雑システム、数理情報、環境システム、環境法系システム、社会地域環境、心理システム、メディア社会 http://www.sis.nagoya-u.ac.jp/aboutsis/gakka.html
理学部:	数学、物理学、化学、生物科学、地球惑星科学 http://www.sci.nagoya-u.ac.jp/about/rigaku.html
医学部:	解剖学、生理学、生化学、病理学、微生物学、医動物学、免疫学、法医学、衛生学、公衆衛生学、予防医学、内科学、神経内科学、外科学、胸部外科学、整形外科学、産婦人科学、眼科学、精神医学、小児科学、皮膚科学、泌尿器科学、耳鼻咽喉科学、放射線医学、麻酔学、口腔外科学、脳神経外科学、老年科学、救急医学、臨床検査医学 http://www.med.nagoya-u.ac.jp/medical/1804/index.html (medicine) 基礎看護学、臨床看護学、発達看護学、地域・住宅看護学、基礎放射線技術学、医用放射線技術学、基礎検査学、病因・病態検査学、基礎理学療法学、病態理学療法学、基礎作業療法学、病態作業療法学 http://www.met.nagoya-u.ac.jp/SCHOOL/kyoiku.html (health sciences)
工学部:	応用科学、分子化学工学、生物機能科学、材料工学、応用物理学、量子エネルギー工学、電気電子工学、情報工学、機械システム工学、電子機械工学、航空宇宙工学、環境土木工学、建築学 http://www.engg.nagoya-u.ac.jp/school/index.html
農学部:	生物環境科学、資源生物科学、応用生命科学 http://www.agr.nagoya-u.ac.jp/agricultural/age-program.html
大学院レベル:	
文学研究科:	比較人文学、日本文化学、てつがく、言語学、東洋学、日本私学、東洋史学、西洋史学、美術史学、考古学、日本文学、日本語学、西洋文学、西洋語学 http://www.lit.nagoya-u.ac.jp/outline/graduate/
教育発達科学研究科:	生涯教育学、学校情報環境学、相関教育科学、高等教育学、生涯スポーツ科学、心理社会行動科学、精神発達臨床科学、スポーツ行動科学 http://www.educa.nagoya-u.ac.jp/graduate/index.html
法律研究科:	基幹法、政治学、現代法システム論、国際・比較法政、アジア法政 http://infosv.law.nagoya-u.ac.jp/syllabus/as/v/ngo/law/gs/13/pubList
経済学研究科:	市場・制度分析、社会経済分析、制作システム分析、社会環境システム、企業システム、経営改新、情報創造 http://www.soec.nagoya-u.ac.jp/btm/graduate/grad_sch.html
理学研究科:	素粒子宇宙物理学専攻、物質理学専攻、生命理学専攻 http://www.sci.nagoya-u.ac.jp/graduate/rigaku.html
医学系研究科:	分子総合医学専攻、細胞情報医学専攻、機能構築医学専攻、健康社会医学専攻、医科学専攻医療行政コース、看護学専攻、医療技術学専攻、リハビリテーション療法学専攻 http://www.med.nagoya-u.ac.jp/medical/1854/igakubakushikatei.html (medicine)

<http://www.met.nagoya-u.ac.jp/NAVI/entrance-g.html> (health sciences)

- 工学研究科: 科学・生物工学専攻、マテリアル理工学専攻、電子情報システム専攻、機械理工学専攻、航空宇宙工学専攻、社会基盤工学専攻、結晶材料工学専攻、エネルギー理工学専攻、量子工学専攻、マイクロ・ナノシステム工学専攻、物質制御工学専攻、計算理工学専攻
<http://www.engg.nagoya-u.ac.jp/graduate/index.html>
- 生命農学研究科: 生物圏資源学専攻、生物機構・機能科学専攻、応用分子生命科学専攻、生命技術科学専攻
<http://www.agr.nagoya-u.ac.jp/graduate-school/grsc-4major.html>
- 国際開発研究科: 国際開発専攻、国際協力専攻、国際コミュニケーション専攻
<http://www.gsid.nagoya-u.ac.jp/global/faculty/index.html>
- 多元数理科学研究科: 基幹数理、自然数理、社会数理、数理分析、高次元相
<http://www.math.nagoya-u.ac.jp/ja/admission/2013/research.html>
- 国際言語文化研究科: 日本語文化学、日本語教育学、応用言語学、比較日本文学、現代日本語学、日本語教育方法論、多元文化論、先端文化論、アメリカ言語文化、東アジア言語文化、ヨーロッパ言語文化、ジェンダー論、メディアプロフェッショナル論
<http://www.lang.nagoya-u.ac.jp/koza.html>
- 環境学研究科: 地球環境科学専攻、都市環境学専攻、社会環境学専攻
<http://www.env.nagoya-u.ac.jp/syllabus/cur/syllabus.php>
- 情報科学研究科: 計算機数理科学専攻、情報システム学専攻、メディア科学専攻、複雑系科学専攻、社会システム情報学専攻
<http://www.is.nagoya-u.ac.jp/intro/dept.html>
- 創薬科学研究科: 創薬有機化学、創薬生物科学、創薬分子構造学
<http://www.ps.nagoya-u.ac.jp/education/>

3. Notes on Other Courses/その他の授業について

Students participating in NUPACE are eligible to register for other courses offered to degree-seeking students at Nagoya University. Prior to registration, however, students are requested to consult their academic advisors (pp. 53~54) and confirm with the instructor(s) of the course(s) in question that they meet the academic and language requirements of the class. Where students obtain such approval and decide to register for the course, they should pick up a 'NUPACE Student Course Admission Request Form' at the NUPACE Office, and submit it to the relevant instructor.

Pre-requisites and Restrictions Regarding Registration for Other Courses:

1. Students may not register for any sport/physical exercise courses.
2. Students may not take more than one foreign

NUPACE に参加する学生は、名古屋大学の正規学生を対象に開講されている授業を履修することができます。しかし事前に指導教員(53-54 ページ)と相談し、同意を得る必要があります。また、その授業に必要な言語やバックグラウンド等の条件を満たしているかについて、その授業の担当教員に判断してもらい、受講の許可を得る必要があります。許可を得たうえで履修することを決定した場合、「履修登録・成績評価に関するお願い」をNUPACE オフィスで受け取り、授業担当教員へ提出してください。

NUPACE で提供される授業以外のコースを登録するための条件と制限

1. スポーツあるいは運動の授業を履修することはできません。
2. 日本語の授業を除き、一学期に履修できる

language course per semester. (Japanese is not included in this requirement.)

外国語の授業は一つまでです。

Guided Independent Study

In their second semester of study at Nagoya University, NUPACE students can opt to take advantage of our 'Guided Independent Study (GIS)' system. After consulting and obtaining permission from their academic advisors, students may, with the co-operation of an academic supervisor, pursue independent research in their major field of study. This research work will be evaluated and credits awarded accordingly. The maximum number of credits awarded for GIS is set at eight, and a rough guide to the expected length of GIS reports and corresponding credits is as follows:

10 pages → 2 credits 30 pages → 6 credits
20 pages → 4 credits 40 pages → 8 credits

When discussing GIS with your academic advisor, please ask him/her to refer to pp. 17~18 of the following manual for more details: 『指導教員・留学生担当者のための短期留学生受入れマニュアル』。

GIS(個人勉強指導)

名古屋大学での勉強が二学期目に入ると、GIS(個人勉強指導)制度を活用することができます。指導教員に相談し許可を得た場合には、自らの専門領域に関する調査研究を指導教官の協力を得て実施することができます。研究成果は指導教員によって評価され、その評価に従って単位が与えられます。GISでは最大8単位まで取得することが認められています。GISの単位数は成果報告のおおよその分量によって、下記のように規定されています。

(日本語の場合)

6 ページ→2 単位 18 ページ→6 単位
12 ページ→4 単位 24 ページ→8 単位

指導教員とGISについて相談をする際には、『指導教員・留学生担当者のための短期留学生受入れマニュアル』の17-18ページを参照するようお願いをしてください。

4. Grading System/成績について

Credit-seeking Students:

With the exception of 'Special Research Students', NUPACE students are required to register for a minimum of 15 credit hours per semester, or a total of 30 credit hours per academic year. Those students who fail to obtain the required number of credits shall not be presented with a 'Certificate of Completion' once they have concluded their term of exchange.

All NUPACE students will receive two academic transcripts, one of which will be sent directly to their home institutions. The transcript will contain the names of courses studied, class contact hours, number of credits awarded, letter grades and scores out of one hundred. Grades for achievement will be given using a modified form of the ECTS (European Credit Transfer and Accumulation System). Hereby, NUPACE students will earn two sets of grades in courses taken for credit: Grades based on Nagoya University's system, and their equivalent on the ECTS scale.

単位取得希望学生:

「特別研究学生」を除いて、すべてのNUPACE生は一学期に最低 15 単位以上、あるいは二学期間(1年間)で 30 単位以上を取得しなければいけません。この履修単位の条件を満たさなかった場合、交換留学期間の終了時に「修了証(Certificate of Completion)」が授与されません。

すべてのNUPACE生には成績証明書が二通発行され、そのうち一通は所属大学へ直接郵送されます。成績証明書には履修した授業の科目名、履修時間数、単位数、成績(ABC)、スコア(%)が表示されます。達成度を示す成績はECTS(ヨーロッパ単位互換制度)を適用したものを使用しています。したがってNUPACE生は名古屋大学の評価方式によるものと、それをECTSの尺度に合わせた評価の二種類の表記で成績を得ることになります。

NUPACE Grading System		ECTS Equivalent Scale
A* (Excellent)	90~100	A (Excellent)
A (Very Good)	80~89	B (Very Good)
B (Good)	70~79	C (Good)
C (Satisfactory)	60~69	D (Satisfactory)
F (Fail)	0~59	F (Fail)
Au (Audit)	N/A	N/A

Students who take subjects for credit 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'.

Students, who during the semester find that they wish to 'drop' a class, should notify the NUPACE Office by **Friday, 25 October 2013**. Requests for amendments to course registration details after this date will not be accepted.

Students engaging in Research or Guided Independent Study:

'Special Research Students' and students who engage in 'Guided Independent Study (GIS)' are required to provide the NUPACE Office with the results of their research work at the end of each semester. Research work presented to the NUPACE Office must have the stamp of the student's academic advisor on the title page.

Report submission deadline for autumn 2013 semester: Friday, February 7, 2014

When discussing research or GIS with your academic advisor, please ask him/her to refer to p. 19 (research) or pp. 17~18 (GIS) of the following manual for more details: 『指導教員・しどうきょういん留学生担当者のための短期留学生受入れりゅうがくせい たんとうしやマニュアル』.

授業科目を履修登録した場合は、80%以上の出席率が求められます。欠席理由に情状酌量の余地がないケースは、出席率の条件を満たさなかったとみなされ、その授業の成績は「F」となります。

授業の履修を止める際には、**2013年10月25日(金)**までに必ず NUPACE オフィスに報告しなければいけません。

研究あるいは GIS(個人勉学指導)を行う学生:

「特別研究学生」と GIS(個人勉学指導)を行う学生は、各学期末に研究成果の報告書を NUPACE オフィスへ提出しなければいけません。また報告書の表紙には指導教員の印が捺印されていなければなりません。

報告書の提出締切り(2013年度後期):2014年2月7日(金)

調査研究や GIS に関して指導教員と相談する際は、『指導教員・留学生担当者のための短期留学生受入れマニュアル』の 19 ページ(調査研究)あるいは 17-18 ページ(GIS)を参照するようにお願いをしてください。

University-wide Japanese Language Programme

Co-ordinator: KINUGAWA Takao
Place: Education Centre for International Students (As of October 2013, International Education and Exchange Centre <IEEC>). Refer to class schedule for rooms.

Nagoya University offers two comprehensive Japanese language programmes to all international students, researchers and faculty members affiliated to this University: 1) *Standard Course in Japanese* and, 2) *Intensive Course in Japanese*. In the *Standard Course*, classes are divided into seven levels ranging from Elementary Japanese I to Advanced Japanese, and students attend one class a day for up to five days a week. The *Intensive Course* has six levels from Elementary Japanese I to Intermediate Japanese II with students attending two classes a day for up to five days a week. The programme offers flexibility and choice, and places priority on meeting the various academic needs of students. Please note that students with previous Japanese language experience will be required to sit a placement test and undergo an interview to determine their Japanese language level.

In addition to the above, NUPACE students are also welcome to participate in Nagoya University's *Kanji*, Business Japanese, and Online Japanese classes to further hone their Japanese language skills

1. Description of Levels

1. Elementary Japanese I

This course is designed for students who have little or no knowledge of Japanese. It aims to develop the students' working knowledge of Japanese to the level where they can function effectively in everyday life. Emphasis is placed on improving oral skills, although students will also be required to master the fundamentals of elementary grammar and a limited number of *kanji* (Chinese characters). The written content of the course (150 *kanji*, vocabulary of 800 words) is approximately equivalent to level four of the Japanese Language Proficiency Test.

Textbook:

A Course in Modern Japanese (Revised Edition) Vol. 1, compiled and edited by the Japanese Language Education Research Group, Nagoya University (2002)

2. Elementary Japanese II

This course is designed for those students who have had approximately 150 hours of Japanese instruction at university level or who have completed *Elementary Japanese I* at Nagoya University. The main objective is to enable students to master the fundamentals of pre-intermediate grammar patterns and to acquire a working knowledge of Japanese to help them function smoothly in Japanese society. Upon completion of the course students should have mastered a total of 300 *kanji* and possess a vocabulary of 1,800 words (approximately equivalent to level three of the Japanese Language Proficiency Test).

Textbook:

A Course in Modern Japanese (Revised Edition) Vol. 2, compiled and edited by the Japanese Language Education Research Group, Nagoya University (2002)

3. Pre-intermediate Japanese

This course is designed for those students who have had approximately 300 hours of Japanese instruction at university level or who have completed *Elementary Japanese II* at Nagoya University. The main objective is to enable students to consolidate their knowledge of basic Japanese grammar, vocabulary and *kanji*, so that they are better prepared to proceed to intermediate Japanese. Emphasis is placed on applying knowledge of Japanese in the four skill areas. Students should have mastered a total of 400 *kanji* and 2,600 words by the end of the course.

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Textbook:

Materials compiled and edited by ECIS, Nagoya University

4. Intermediate Japanese I

This course is designed for those students who have had approximately 400 hours of Japanese instruction at university level or who have completed *Pre-intermediate Japanese* at Nagoya University. The course aims to enable students to master grammatical patterns and expressions found at the beginning to mid-intermediate level and to develop proficiency in the four skill areas. Upon completion of the course, students should have mastered a total of 550 *kanji* and possess a vocabulary of 3,800 words.

Textbook:

「名古屋大学日本語コース中級I」compiled and edited by the Japanese Language Education Research Group, Nagoya University (2012)

5. Intermediate Japanese II

Designed for students who have received approximately 500 hours of Japanese instruction at university level, or who have completed *Intermediate Japanese I* at Nagoya University. Although emphasis is placed on developing a high command of oral skills for the purpose of communication in academic and non-academic situations in Japan, students are also required to improve their competency in listening, reading and writing. Upon completion of the course, students should have mastered a total of 700 *kanji* and have acquired a vocabulary of approximately 5,000 words.

Textbook:

「名古屋大学日本語コース中級II」compiled and edited by the Japanese Language Education Research Group, Nagoya University (2012)

6. Pre-advanced Japanese

This course is designed for those students who have had approximately 600 hours of Japanese instruction at university level or who have completed *Intermediate Japanese II* at Nagoya University. The course aims to enable students to increase their vocabulary to approximately 6,000 words and 900 *kanji*, and to improve the four language skills to the equivalent of level two of the Japanese Language Proficiency Test.

Textbook:

Materials compiled and edited by ECIS, Nagoya University.

7. Advanced Japanese

Designed for students who have received approximately 750 hours of Japanese instruction at university level or who have completed *Pre-advanced Japanese* at Nagoya University. Students are required to increase their vocabulary to 7,500 words and 1,100 *kanji*. Upon completion of the course, students should be able to join general education classes for Japanese students with minimum assistance from a Japanese tutor.

Textbook:

Materials compiled and edited by ECIS, Nagoya University.

2. Course Structure

I. Standard Course in Japanese

1. Elementary Japanese (5 credits; 10 hours per week x 14 weeks)

Two comprehensive classes, Elementary Japanese I and Elementary Japanese II, encompassing all four skill areas, are offered at this level.

2. Pre-intermediate to Advanced Japanese (1 credit per class <2 hours>, maximum five classes <10 hours> per week x 14 weeks)

At these higher levels, students are encouraged to devise their own Japanese language curriculum

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according to individual needs. Twenty-five classes covering five levels are offered, which are divided amongst the skill areas of conversation (C), reading (R), listening (L), grammar and discourse (G), and writing (W). Students may opt to take between one and five of these classes at a level determined by the result of their placement test.

Standard Japanese Course Structure

Japanese Level	Class Name					Textbook
Elementary I	SJ101					<i>A Course in Modern Japanese Vol. 1</i>
Elementary II	SJ102					<i>A Course in Modern Japanese Vol. 2</i>
Pre-intermediate	SJ200 (C1 & C2)	SJ200(R)	SJ200(L)	SJ200(G)	To Be Announced	
Intermediate I	SJ201 (C1 & C2)	SJ201(R)	SJ201(L)	SJ201(G)	『名古屋大学日本語コース中級I』	
Intermediate II	SJ202 (C1 & C2)	SJ202(R)	SJ202(L)	SJ202(G)	『名古屋大学日本語コース中級II』	
Pre-Advanced	SJ300(C1)	SJ300(C2)	SJ300(R)	SJ300(L)	SJ300(G)	To Be Announced
Advanced	SJ301(C)	SJ301(W1)	SJ301(W2)	SJ301(R)	SJ301(L)	To Be Announced

- NB.** 1. Students wishing to attend conversation classes at the pre-intermediate or intermediate levels (SJ200/SJ201/SJ202) must register for both C1 & C2
2. Students may not take the same skill class at two different levels.

II. Intensive Course in Japanese

1. Elementary to Pre-intermediate Japanese (10 credits; 20 hours per week x 14 weeks)

Two comprehensive classes, Elementary Japanese I (covering elementary levels I and II) and Elementary Japanese II (covering the elementary II and pre-intermediate levels), are offered. They encompass all four skill areas.

2. Pre-intermediate to Intermediate Japanese II (2 credits per class <4 hours>, maximum five classes <20 hours> per week x 14 weeks)

At these higher levels, students are encouraged to devise their own Japanese language curriculum according to individual needs. Ten classes covering three levels are offered, which are divided amongst the skill areas of conversation (C), reading (R), listening (L), and grammar and discourse (G). Students may opt to take between one and five of these classes at a level determined by the result of their placement test.

Intensive Japanese Course Structure (Elementary I to Pre-intermediate)

Japanese Level	Class Name		Textbook
Elementary I	IJ111		<i>A Course in Modern Japanese Vol. 1</i>
Elementary II		IJ112	<i>A Course in Modern Japanese Vol. 2</i>
Pre-intermediate			To Be Announced

Intensive Japanese Course Structure (Pre-intermediate to Intermediate II)

Japanese Level	Class Name/Skill								Textbook	
	Conversation 1	Conversation 2	Reading		Listening		Grammar/Discourse			
Pre-intermediate		IJ211 (C1 & C2)		IJ211 (R)		IJ211 (L)		IJ211 (G)	To Be Announced	
Intermediate I	IJ212 (C1)		IJ212 (C2)		IJ212 (R)		IJ212 (L)		IJ212 (G)	『名古屋大学日本語コース中級I』
Intermediate II										『名古屋大学日本語コース中級II』

- NB.** Students wishing to attend conversation classes at the pre-intermediate~intermediate I level (IJ211) must register for both C1 and C2.

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3. Academic Japanese (Listening and Presentation) I

In this course, students will acquire listening comprehension skills for longer audio segments and learn how to make simple academic presentations. Students will develop a basic understanding of presentations using presentation software while learning pertinent vocabulary and expressions. Class materials are designed for lower-level intermediary students.

Course material: *Saisho no ippo kara hajimeru nihongogakushusha to nihonjingakusei no tame no akademikku prezenteshon nyumon*, Hituzi Shobo KK

Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

4. Academic Japanese (Reading and Writing) I

In this course, students will acquire fundamental reading and composition skills to read and write simple reports in specialized fields as well as analytical texts such as dissertations. The course aims to develop skills to comprehend and compose texts ranging in length from short to long, while at the same time reviewing beginner-level vocabulary, grammar, and Japanese characters. Class materials are designed for lower-level intermediary students.

Course material: 『大学・大学院 留学生の日本語①読解編』アルク

『大学・大学院 留学生の日本語②作文編』アルク

Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

5. Academic Japanese (Listening and Presentation) III

In this course, students will practice listening to longer audio segments (in the form of lectures, TV programs, presentations, and the like), and formulate their opinion on these. The course also aims to teach students how to respond appropriately (agree, disagree) to opinions presented by fellow students. Class materials are designed for advanced students.

Course material: 『聴解・発表ワークブック —アカデミック・スキルを身につける』犬飼康弘著 スリーエーネットワーク

Chokai Hapyo Workbook – Academic skill wo minitsukeru, 3A Corporation

Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

6. Academic Japanese (Reading and Writing) III

In this course, students will acquire the skills to read reports in specialized fields and academic articles as well as write reports or dissertations related to their own research focus. The course aims to develop skills to comprehend the relationship between paragraphs, and comprehend and write longer coherent texts. Class materials are designed for higher-level intermediate to lower-level advanced students.

Course material: 『大学・大学院 留学生の日本語③論文読解編』アルク

『大学・大学院 留学生の日本語④論文作成編』アルク

Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

7. Business Japanese I

In this course, students will learn business Japanese starting from the fundamentals. Based on various themes, students will develop the communication styles and conversational ability required in Japanese business settings. The course also covers fundamental business expressions. The course is designed for upper-level beginner to lower-level intermediate students.

Course material: 『新装版 ビジネスのための日本語 初中級』スリーエーネットワーク

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Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

8. Business Japanese III

In this course, students will learn Japanese expressions required for business, as well as cultural elements inherent in Japanese business practices. Students will develop business manners and expressions by watching applicable footage and engaging in other activities that approximate real business situations. They will also read and write short business texts. The course is designed for upper-level intermediate to lower-level advanced students.

Course material: 『新装版 商談のための日本語 中級』 米田隆介・藤井和子・重野美枝・池田広子共著スリーエーネットワーク

Assessment criteria: Attendance: 30%, participation: 30%, midterm: 20%, final: 20%

9. 漢字< Kanji > 1000

This class is aimed at students who have mastered approximately 300 *kanji*, and concentrates on the 1000 *kanji* covered at levels N3~N2 of the Japanese Language Proficiency Test.

漢字300字程度を学習した学生を対象に、日本語能力試験N3-N2程度の漢字1000字を目標に学習する。

Textbook:

『漢字マスター Vol. 3 2級漢字 1000』

10. 漢字< Kanji > 2000

漢字1000字程度を学習した学生を対象に、日本語能力試験N2の上からN1程度の漢字約2000字およびその語彙を学習する。

Textbook:

『日本語学習のための よく使う順 漢字2100』

入門講義 <J> (Introductory Courses taught in Japanese)

NB. The following courses are taught in Japanese and require at least level N2 of the Japanese Language Proficiency Test (JLPT) or equivalent.

1. 国際関係論 I (Global Society I)

Co-ordinator: KIM Kyungmook

Class: Mondays, 13:00~14:30

Place: Education Centre for International Students (ECIS), Rm. 207E

人間が暮らすどの共同体や社会においても争いは絶えない。そのような争いをなくすことは可能なのだろうか。紛争と和解を国際政治学的な視点から扱う。

Topics to be covered:

- 1 文化とグローバル化
- 2 文化の違いと偏見
- 3 グローバル化のなかの伝統文化
- 4 東洋と西洋はどこにあるのか
- 5 世界は互いに結ばれて今日に至った
- 6 グローバル化の影

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- 7 人種と階級差別
- 8 性差別
- 9 難民の人権
- 10 私たちのなかの暴力文化
- 11 戦争と構造的暴力
- 12 平和文化の創造
- 13 ハンバーガーと消えゆく森
- 14 スーパーマーケットー近代的な食のシステムと商品化
- 15 食糧不足をどうみるか

Reference Materials:

韓敬具、桑山敬己『グローバル化時代をいかに生きるか』(平凡社、2008年)

Evaluation:

出席、小レポート、期末レポートなど

2. 日本文化論 I (Introduction to Japanese Society & Culture I)

Co-ordinator: UKIBA Masachika
Class: Thursdays, 13:00~14:30
Place: Education Centre for International Students (ECIS), Rm. 207W

まず、はっきり言いますが、茶道、歌舞伎、武士道などいわゆる「日本文化」(つまり、日本にしか無いもの)はやりません。「日本文化」という言葉は「日本人の生活様式」という広い意味でとらえてください。「文化」という言葉を私はある集団が世代を越えて伝えていく<癖(くせ)>のようなものだと考えています。

この講義では、家族、学校という現代の日本社会を理解するうえで重要な二つのトピックを取り上げ、そこに見られる日本人の<癖(くせ)>を考えていきます。また、時間に余裕があれば、皆さんがあまり目にすることが出来ない田舎の生活についても、紹介していきたいと思います。

この講義を通して、皆さんが日本や日本人に対するイメージを少しでも広げることが出来ればと考えています。

Topics to be covered:

1. オリエンテーション:「文化」という言葉をめぐって
2. 家族は会社、学校を両立するのか:映画『毎日の夏休み』に見る新しい家族像
3. 結婚しても入籍できない!?:夫婦別姓と国際結婚(戸籍制度と日本社会)
4. 学校に行かない子どもたち:いじめ、不登校、フリースクールなど
5. 働かなくちゃだめですか:フリーター、パラサイト・シングルなど
6. 田舎に行ってみよう:貴方の知らない日本の素顔

Reference Materials:

ハンドアウト随時配布

Evaluation:

出席と授業態度 40%
レポート 60%

3. 日本語学・日本語教育学 I (Introduction to Japanese Linguistics I)

Co-ordinator: LEE Tack Ung
Class: Mondays, 14:45~16:15
Place: Education Centre for International Students (ECIS), Rm. 207E

前半の講義では、日本教育で主に問題となる文法項目を取り上げ、整理・検討することによって、基礎的な文法知識を身につけることを目指す。毎回、簡単な課題を取り上げ、みんなで考える時間を設ける。そのため、受講者の積極的な参加が要求される。

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後半の講義では、日本語教育の基礎知識を身につけることを目標とする。日本語教育の現状を概観し、コース・デザイン、教材、誤用分析などを紹介する予定である。

この講義で学んだことがこれから日本語教育者(あるいは言語学者)を目指す人に少しでも役に立てることを願っている。

Topics to be covered:

1. 日本語学(前半)
 - (1) 品詞
 - (2) 活用
 - (3) 格助詞
 - (4) ヴォイス
 - (5) 人称
2. 日本語教育学(後半)
 - (1) コース・デザインと教材の紹介
 - (2) 誤用分析

Reference Materials:

ハンドアウト配布

Evaluation:

1. 出席・授業態度 40%
2. テスト 60%

4. 言語学入門 I (Introduction to Linguistics I)

Co-ordinator: MOMIYAMA Yosuke

Class: Fridays, 13:00~14:30

Place: Education Centre for International Students (ECIS), Rm. 207E

Focusing on Japanese, this lecture attempts to provide a basic knowledge of linguistics, including methodology. It focuses on selected fundamental characteristics of human language, semantics (linguistic meaning), sociolinguistics, and linguistic typology.

Topics to be covered:

1. 言語学の基本的な考え方: 日常見られる言葉に対する見方との違い
2. 人間の言葉の一般的特徴: 他の動物のコミュニケーションの手段と比較して
3. 言葉の意味: 認知意味論 (cognitive linguistics) を中心に
4. 言葉と社会: 社会方言 (social dialects) の諸相
5. 世界の言語と日本語: 言語類型論 (linguistic typology) における日本語の位置づけ

Textbook:

ハンドアウトを配布する

Reference Materials:

町田健・初山洋介『よくわかる言語学入門』バベル・プレス

町田健・初山洋介他『言語学大問題集 163』大修館書店

初山洋介『認知意味論のしくみ』研究社

(授業の際に、より詳しい参考文献を紹介する)

Evaluation:

1. 出席
2. 授業への貢献度・積極性
3. レポートまたはテスト

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5. 日本文学 I (Japanese Literature I)

Co-ordinator: TOKUHIRO Yasuyo
Class: Thursdays, 14:45~16:15
Place: Education Centre for International Students (ECIS), Rm. 207E

日本の詩歌について時代を追って鑑賞します。日本文学 I では、奈良時代から江戸時代までの和歌、俳句などをとりあげます。

Topics to be covered:

1. 日本の詩歌について
2. ふじのたかねに
 - ・『万葉集』1 長歌、短歌
3. あかねさす
 - ・『万葉集』2 雑歌、相聞、挽歌
4. 生きとし生けるもの
 - ・『古今和歌集』和歌の修辞 1
5. からころも
 - ・『伊勢物語』歌物語
6. 唯見る長江の天際に流るるを
 - ・唐詩 (李白、杜甫他)
7. はなももみじも
 - ・『新古今和歌集』和歌における美意識
8. 願はくは花の下にて
 - ・他の歌集から
9. せをはやみ
 - ・『百人一首』
10. むべ山風を嵐と
 - ・歌会 和歌の修辞 2
11. ほのかにゆめに
 - ・歌謡、連歌
12. 星崎の闇を見よとや
 - ・俳句 1 芭蕉
13. 月は東に日は西に
 - ・俳句 2 蕪村、一茶他
14. テスト (時間内に作文)

Reference Materials:

ハンドアウト 随時配布

Evaluation:

出席 20%
授業内提出物 60%
テスト 20%

Graduate School of Languages & Cultures (GSLC)

The Graduate School of Languages and Cultures offers a variety of language courses (Chinese, Dutch, English, French, German, Italian, Korean, Russian, Spanish, Vietnamese), which are, for the most part, open to NUPACE students. Students who are interested in taking any of these courses can enquire about the class content and time-table at the Office of the Graduate School of Languages and Cultures, NUPACE Student Helpdesk (ECIS Lobby), or NUPACE Office.

Course Registration – English

1. Continuing Students

Registration Period: Wed, Sep 18, Thu, Sep 19 at 09:00~17:00
Class Placement: Notice-board <university-wide courses>, 1F, Inter-departmental Education Bldg (School of Informatics & Sciences), 9:00 on Thu, Sep 26.

2. Newly-Arrived Students Only

- 1) On **Tue, Oct 1**, check the relevant announcement 「とくべつえいごせみならあきくらすいちらん特別英語セミナー空きクラス一覽」 on the “university-wide courses” (ぜんがくむけじゅぎょう全学向け授業) notice-board of the Inter-departmental Education Bldg. (School of Informatics & Sciences) (1F) for any English course vacancies. Please note that a class of 20 students is considered full, and that you cannot apply for it.
- 2) Students interested in taking a course, should obtain a yellow course registration form at the

Courses in Japanese & Other Languages

Graduate School of Languages & Cultures (GSLC) counter (Office, 1F, IRB Humanities & Social Sciences).

- 3) After filling out the form, submit it to the same counter during the following period: Tue, Oct 1 ~ Fri, Oct 4 (09:00~12:00; 13:00~17:00), making sure also to take along your original TOEFL/TOEIC score-sheet. The minimum requirement: is TOEFL 527 (iBT 71)/TOEIC 663.
- 4) Class allocation is based upon the course registration form data submitted by students. Due to oversubscription of certain classes, not all students can be guaranteed a place.
- 5) Class placement announcement: Mon, Oct 7 at 09:00 on the “university-wide courses” notice-board, 1F, Inter-departmental Education Bldg (School of Informatics & Sciences).

Course Registration – Other Languages

Pick up a blue course registration card at the Graduate School of Languages & Cultures (GSLC) counter (Office, 1F, IRB Humanities & Social Sciences). After filling the form in, and writing NUPACE in capital letters on it, submit one part of the divisible form to the relevant course instructor on the first day of class. If you are deemed eligible to participate in the course, insert another section of the registration form, labelled ‘For Office Use’, into the “course application box” at the GSLC counter between Tue, Oct 8 ~ Mon, Oct 21 (9:00~17:00).

NB. English language classes commence on Tue, Oct 1, 2013 (Tue, Oct 8 for newly-arrived students). Classes in languages other than English commence in the second week of the semester (i.e., in the week starting on Tue, Oct 8. Students who miss the first class of any language course are rendered ineligible to enrol.

Courses in the Student's Major

Education Center for International Students (ECIS)/International Education and Exchange Directorate (IEE)

1. Career and Life Development

Co-ordinator: Go YOSHIDA (goyoshida@gmail.com)
Class: Thursdays, 16:30~18:00
Place: ACE Lab, Liberal Arts and Sciences – Main Building
Maximum Capacity 1~2 NUPACE Students

NB: This class is intended for graduate students, but may be open to undergraduates, depending on enrolment.

Deciding on one's career is probably one of the most important decisions made in our lives. Yet, it is but one component of a person's life. The purpose of this class is to explore fundamental issues regarding career and life for students to develop a framework of thinking that would help them align their passion and strengths with their career and life goals. The ultimate goal of this class is to transform students' thinking so that their actions—aligned with purpose—are of value to others and that they are useful to their organizations and communities.

Desired Learning Outcomes:

1. Understanding the labor market and the professional work environment
2. Self-awareness and self-management
3. Deeper understanding of one's talents, strengths, and values
4. Developing a framework of thinking in aligning one's strengths and skills with goals
5. Ability to select suitable careers aligned with one's purpose and values

Topics to be covered:

- The Macro Labour Market
- Who Are You?
- Goals and Money
- Self-Assessment and Self-Branding
- Self-Management and Decision Making
- Success and Life Mission
- The Work Environment
- Is This The Right Job for Me?
- What Is The Good Life?

2. Independent Thinking and Decision Making

Co-ordinator: Go YOSHIDA (goyoshida@gmail.com)
Class: Thursdays, 14:45~16:15
Place: ACE Lab, Liberal Arts and Sciences – Main Building
Maximum Capacity 2~3 NUPACE Students

Whether it be deciding on which movie to rent, how to work things out with your obnoxious team member, or what career to pursue after graduation, our lives today are a result of the choices or decisions we made in the past. The decisions we make can be based on a number of factors, among them are the often used risk-reward analysis and choices based on values and priorities. In this class, we will examine how we naturally think and make decisions, through both theoretical and practical approaches, to enable better life decisions for both immediate and long term results.

Courses in the Student's Major

Desired Learning Outcomes:

1. Developing a broader understanding of the self
2. Developing an understanding of how we naturally think and make decisions
3. Ability to think clearly and independently
4. Ability to work in groups with broader awareness
5. Ability to make purposeful decisions

Topics to be covered:

- Curiosity
- Human Development
- Independent Thinking
 - o Identity
 - o Responsibility
- Decision Making
 - o Overview
 - o Strategic

3. Teaching Practice in the Japanese Community

Co-ordinator: Claudia ISHIKAWA (k46189a@cc.nagoya-u.ac.jp)
Class: Teaching Practice Sessions: 16:30~18:00 once per week (Wednesdays) from November 6, 2013 to January 15, 2014 (8 times). Each class will consist of 60 minutes of teaching time, and 30 minutes of interaction with the children.
Place: Teaching Practice Sessions: Nagoya University Poppins After-School
Maximum Capacity 6 Students

Prerequisites: Native English-speaker or TOEFL score of 600 PBT/100 iBT, or equivalent.

Students interested in registering for this programme should contact Claudia Ishikawa at k46189a@cc.nagoya-u.ac.jp or in ECIS Rm. 205 by Wednesday, October 2, 2013. Admission to the course is on a first-come-first-served basis.

This course involves teaching English to, and developing a rapport/playing with approximately twenty elementary school-aged children (aged six to twelve) at Nagoya University's childcare centre, "Poppins-After-School". Students will be required to devise an English-language curriculum (which may include the teaching of basic theme-oriented vocabulary using visual aids; playing educational games and simple sports, etc.), and then, in accordance with the curriculum, teach the pupils rudimentary-level English. Those students, who at the end of the semester submit a report describing their teaching practice experience, will receive 2 credits.

A brief orientation will be held for participants at 16:30 on Wednesday, October 9 in ECIS Room 207W, and a site-visit to Poppins-After-School will be arranged before the teaching sessions commence.

Evaluation:

1. English-Language Lesson Plan: 20% (2 sides A4-sized paper + Poppins prescribed lesson plan form; submission deadline: Wednesday, Wednesday October 23, 2013.)
2. Final Report: 80% (4~6 sides of A4-sized paper; submission deadline: Wednesday, January 22, 2014.)

Courses in the Student's Major

School of Agricultural Sciences

Agricultural Science

Co-ordinator: MURASE Jun
Class: Wednesdays, 16:30~18:00
Place: School of Agricultural Sciences, Lecture Room 8 (Guidance)

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 environment. 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.

Topics to be covered:

- | | |
|-------------------------------------|---|
| 1. Introduction | (MURASE Jun) |
| 2. Ecology of Irrigated Rice Fields | (MURASE Jun) |
| 3. International Co-operation | (ITO Kasumi) |
| 4. Basic Reproductive Endocrinology | (TSUKAMURA Hiroko) |
| 5. Molecular Insect Sciences | (NIIMI Teruyuki) |
| 6. Genetically Modified CropsI | (TANIGUCHI Mitsutaka; Joyce Abad CARTAGENA) |
| 7. Enzyme Engineering I | (IWASAKI Yugo) |
| 8. Basic Crop Science | (YAMAUCHI Akira) |
| 9. Group Discussion | (MURASE Jun) |
| 10. Remarks | (MURASE Jun) |

Evaluation:

Evaluation is based on attendance and written reports.

School of Economics

1. Advanced Income Theory II

Co-ordinator: ARAYAMA Yuko (Office Hours: Tue, 14:45~16:15)
Class: Tuesdays, 13:00~14:30
Place: School of Economics, Lecture Room 3

A simple economy consists of households, firms and government. Market is a manmade device to connect them each other. Income theory has been serving as a tool to analyse the determination of national income and the reasons for its fluctuation. This course intends not only to promote an understanding of the microeconomic foundation of macroeconomics, but also to enhance a sense of practical applications of income theory toward the real world.

Topics to be covered:

1. Introduction: Microeconomic Foundations of Macroeconomics
2. Introduction: Major Economic Indicators and National-Income Accounting
3. Economic Growth: Barro's Interpretation of the Solow Model (One-sector Growth Model)
4. Economic Growth: Long-Run Economic Growth
5. Markets in Macroeconomics: Household Budget Constraints
6. Markets in Macroeconomics: Consumption, Saving and Investment
7. Economic Fluctuations: Business Cycle Model
8. Money and Prices: The Demand for Money
9. Money and Prices: Inflation, Money Growth and Interest Rates
10. The Government Sector: Government Budget Constraint and Expenditure

Courses in the Student's Major

11. The Government Sector: Tax and Public Debt
12. Money and Business Cycles: The Price-Misperception Model
13. Money and Business Cycles: Sticky Prices and Nominal Wage Rates
14. International Macroeconomics: World Markets in Goods and Credit
15. International Macroeconomics: Purchasing-Power Parity (PPP) and Exchange Rates

Textbook/Reference Materials:

R.J. Barro, *Macroeconomics: A Modern Approach*, Thomson, 2008
N. Gregory Mankiw, *Macroeconomics*, Sixth Edition

Evaluation:

Mid-term and final examination.

2. Economic Theory and Applications II

Co-ordinator: ARAYAMA Yuko (Office Hours: Tue, 14:45~16:15)
Class: Mondays, 13:00~14:30
Place: School of Economics, Lecture Room 3

This lecture deals with the General Theory of Market Equilibrium with Household Production in order to foster a basic understanding of economics. This general equilibrium is intrinsically dynamic in its nature due to a household production formulated by Professor Becker.

Topics to be covered:

1. From Arrow to Becker: the General Equilibrium Theory with Household Behaviour
2. Production Function at Firm Level: Theory of Firm Behaviour Revised
3. Aggregated Production Function for an Industry
4. Defining a Household and Household Production Function
5. Dynamic One-sector Growth Model: Modified Golden Rule and Ramsey Model 1
6. Dynamic One-sector Growth Model: Modified Golden Rule and Ramsey Model 2
7. One-sector General Equilibrium Model without Using Time at Households for Given Time Preference and Technology 1
8. General Equilibrium Model: Labour as Numeraire and Dimension of Variables
9. One-sector General Equilibrium Model without Using Time at Households for Given Time Preference and Technology 2
10. A General Equilibrium Model with Explicitly Defined Household Production 1
11. A General Equilibrium Model with Explicitly Defined Household Production 2
12. One-sector Growth Model Based on Microeconomic Foundation:
13. Production Function with Capital Depreciation
14. One-sector Neo-classical Growth Model with Capital Depreciation
15. National Income Accounting Reconsidered
16. Toward the General Theory of Market Equilibrium

Textbook/Reference Materials:

G.S. Becker, *Economic Theory*, Alfred A. Knopf, 1971
R.J. Barro, *Macroeconomics: A Modern Approach*, Thomson, 2008

Evaluation:

Mid-term examination and term paper.

2. International Accounting A

Co-ordinator: NOGUCHI Akihiro (Office Hours: Fridays, 08:15~09:15, via appointment)
Class: Fridays, 10:30~12:00

Courses in the Student's Major

Place: School of Economics, Lecture Room 3

Prerequisites: Ability to discuss international accounting in English. Participation by NUPACE students is contingent upon there being places available in the class.

NB. The first class of this course is scheduled on Wednesday, October 2.

The lecture is intended to provide an opportunity for students to learn and understand international aspects of accounting.

Topics to be covered:

Oct 2	Introduction to International Accounting
Oct 11	International Harmonisation
Oct 18	Group Accounting
Oct 25	The concept of a 'group'
Nov 8	Techniques of consolidation
Nov 15	Foreign currency translation
Nov 29	The temporal method versus the closing rate method
Dec 6	Translation of comprehensive income
Dec 13	Segment reporting
Dec 20	Modes and models of enforcement of standards
Dec 27	International auditing
Dec 27	Disclosure practices in international financial reporting
Jan 10	Interpreting financial statements
Jan 24	Financial analysis and the capital market
Jan 31	Summary

Textbook:

Christopher Nobes & Robert B. Parker, *Comparative International Accounting*, Financial Times Prentice Hall; 12th Revised, ISBN-13: 978-0273763796.

Evaluation:

Attendance, oral presentation in English, homework, and essay.

3. Law and Economics Workshop

Co-ordinators: ARAYAMA Yuko (Office Hours: Tue, Wed, 8:30~9:00)
MATSUURA Yoshiharu (Office Hours: by appt via matuura@nagoya-u.ac.jp)
Class: Wednesdays, **17:00~19:00** (every two weeks; check the workshop calendar)
Place: School of Economics, Seminar Room 20

NB. This is a one-year course, which students may commence in either April or September. Those students attending for one semester only cannot receive credits. They may, however, sit in on the classes. The course calendar should be checked regularly on the School of Economics website.

This workshop is jointly-organised by the Schools of Economics and Law to promote a theoretical and practical understanding of legal regulations imposed on economic activities. A minimum of 15 sessions will be held during the year according to the class calendar. The workshop will discuss the following topics in Law & Economics to help promote an understanding of human behaviour, social contracts and legal structure in our modern society. The workshop will also invite several prominent scholars and practitioners in the field of law and economics to present their ideas.

Topics to be covered:

Introduction: Law and Economic Activities

Topic 1: Market Activities and Law

Economic Behaviour of Households and Firms

Courses in the Student's Major

- Projection of Economic Activities to Law
- Topic 2: Property Rights and Property Law
Institutional Arrangements of Law for Property
An Economic Theory of Property Rights
- Topic 3: Contract Law
Topics in the Economics of Contract Law
An Economic Theory of Contract
- Topic 4: Tort Liability and Tort Law
Automobile Accidents and Human Causalities
Economics of Tort Liability
Transaction Costs and Property Rights
- Topic 5: Special Topics in Law and Economics
Transaction Costs and Economic Efficiency of Institutional Arrangements
Abuse of Superior Bargaining Position: What is monopoly all about?
F. Hayek and the Rule of Law

Textbook:

Robert Cooter & Thomas Ulen, *Law and Economics 4th ed.*, Pearson (2003).

Reference Materials:

Students are strongly recommended to check the Becker-Posner Blog (<http://www.becker-posner-blog.com/>).

Evaluation:

One written term paper for credit. Active participation in classes will be reflected in the evaluation.

School of Engineering

1. Academic, Scientific, and Technical English

Co-ordinator: Laurence DRYDEN (dryden51@me.com)
Class: Thursdays, 16:30~18:00 (seven sessions in total: Oct 10, Oct 24; Nov 14; Nov 28; Dec 12; Jan 16; Jan 30)
Place: School of Engineering IB Building, Room IB012

NB. This class commences on Thursday, October 10.

This series of special lectures, conducted entirely in English, provides guided practice in written and spoken English in academic, scientific, and technical contexts. Lectures include illustrated presentations and activities for students to apply their learning. The series is open to native speakers and non-native speakers of English.

Topics to be covered:

1. Simplicity and clarity in English
2. English grammar: Common problems
3. Readability I: Sentences and paragraphs
4. Readability II: Parallelism and other matters of style
5. Readability III: Writing scientific papers
6. Public speaking at international conferences
7. Email, CVs, and job applications

Reference Materials:

Students receive all printed materials for each lecture from the instructor. They also receive extensive annotated bibliographies of resources for academic, scientific, and technical English.

Courses in the Student's Major

Evaluation:

Attendance and participation: Students who attend five or more lectures and participate earnestly in activities receive one credit. More detailed information will be given at the first lecture.

2. Civil Engineering and Policies for Developing Countries I

Co-ordinator: HAYASHI Kiichiro
Class: Wednesdays, 13:00~16:15
Place: School of Engineering, Building 7, Room 703

NB. This course is only open to students specialising in civil engineering. An orientation, at which a detailed course schedule will be distributed, is to be held on Wednesday, Oct 3, 2012.

The objective of this course is to study various issues, including sustainable development, environmental management, and international co-operation to acquire a fundamental knowledge of civil engineering in developing countries.

Topics to be covered:

1. The concept of sustainable development
2. Environment and resource issues in developing countries
3. International environmental management I (multilateral environmental agreements)
4. International environmental management II (international organizations)
5. International co-operation

Reference Materials:

To be distributed in class

Evaluation:

Students will be evaluated on attendance and written reports.

3. Introduction to Civil Engineering & Architecture

Co-ordinator: TANIKAWA Hiroki (789-3840)
Class: Fridays, 13:00~16:15 (Lessons will be held two to three times a month)
Place: Environmental Studies Hall, 3F, Seminar Room 2 (Guidance)

NB. An orientation for this course, at which a detailed course schedule will be distributed, will be held on October 4th, 2013.

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.

Topics to be covered:

- Oct 4 Orientation (H. Tanikawa)
Nov 1 Lecture and Site-visit 1: Architecture and culture – Nagoya Castle Hommaru Place
(H. Shimizu)
Nov 8 Lecture and Site-visit 2: Architecture and culture – Nagakute Culture Center (H. Shimizu)
Nov 15 Lecture 1: Social infrastructure and civil engineering (1)
(Y. Matsui <Central Nippon Expressway Co., Ltd>)
Nov 22 Site-visit 3: Construction of new expressway (Central Nippon Expressway Co., Ltd)
Nov 29 Site-visit 4: Highway Traffic Control Center and Highway
(Central Nippon Expressway Co., Ltd)

Courses in the Student's Major

- Dec 6 Lecture 2: Social infrastructure and civil engineering (2)
(Y. Matsui <Central Nippon Expressway Co., Ltd>)
- Jan 10 Lecture and Site-visit 5: Nagoya University Disaster Mitigation & Management Office
(J. Tobita)

Evaluation:

Students will be evaluated on attendance and written reports.

4. Motor Control and Information Processing in the Biological System

Co-ordinator: OBINATA Goro
Class: Mondays, 14:45~16:15
Place: ES, 031

NB. This course is open only to graduate students.

The goal of this lecture is to understand human movements as the interaction of a biological model with the physical world. Specific objectives include the following:

1. Structure of the nervous systems
2. Coding and processing of sensory information
3. Link between neural signals and muscle contraction
4. Strategies used by the nervous system to control muscle force
5. Neural basis of behaviour

Topics to be covered:

Oct 7 Structure of the nervous system
Oct 21 Synaptic transmission
Oct 28 Coding of sensory information 1
Nov 11 Coding of sensory information 2
Nov 18 Processing of sensory information
Nov 25 Visual system
Dec 2 Muscles and their control 1
Dec 9 Muscles and their control 2
Dec 16 Brain and motor output
Jan 20 Integration systems: neural basis of behaviour 1
Jan 27 Integration systems: neural basis of behaviour 1

Reference Materials:

Fred Delcomyn, W. H., *Foundation of Neurobiology*, Freeman and Company, New York, 1998.
To be distributed in class.

Evaluation:

Active participation and report

5. Overview of Advanced Electrical, Electronic & Information Engineering

Co-ordinator: YOKOMIZU Yasunobu
Class: Tuesdays, 13:00~14:30 (**13:00~17:00 during plant visits**)
Place: School of Engineering, Building 1, Room 132

This course comprises lectures and visits to technical plants in the Tokai area. In the lectures, current topics in advanced electrical, electronic and information engineering will be taught. The plant visits introduce students to advanced practices in vehicular, electronic power, and communication technologies.

Topics to be covered:

Courses in the Student's Major

1. Introduction to Japan's Electric Power System	(T. Matsumura)
2. Introduction to Energy Systems and Renewable Energies	(Y. Suzuoki)
3. Introduction of Opto-Electronics	(N. Nishizawa)
4. THz-Wave Generation and Applications	(K. Kawase)
5. 3-Dimensional Image Processing	(T. Fujii)
6. Introduction to Motor Drive Systems and Controls for Vehicles	(S. Doki)
7. Brain Computer Interfaces	(T. Furuhashi)
8. Visit to Chubu Electric Power Co., Inc.	(S. Sugimoto)
9. Visit to Okuma Corporation	(M. Fukushima)
10. Visit to Santec Corporation	(K. Isamoto)

Evaluation:

Written reports after each lecture and plant visit.

7. Science & Technology in Japan

Co-ordinator: Emanuel LELEITO (leleito@nagoya-u.jp)
Class: Wednesdays, 13:00~14:30
Place: School of Engineering, Bldg. 1, Room 131

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.

Topics to be covered:

1. Information and Communication Technology in Disaster Risk Management (Emanuel LELEITO)
 - Introduction to Disaster Management
 - Information and Communication Technology in Disaster Risk Management (1)
 - Information and Communication Technology in Disaster Risk Management (2)
2. Embedded Computing Systems (ZENG Gang)
 - Fundamentals and Trends
 - Low Energy Design
 - Automotive Applications
3. Introduction to Micro Fabrication Technology (Kiyohisa NISHIYAMA)
 - Introduction to Micro Fabrication Technology
 - Application of Micro Fabrication Technology
 - Future of Micro Fabrication Technology

Textbook:

Lecture materials will be distributed during at each lecture.

References:

- 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/1info/pdf/saigaipanf.pdf>
Mohamed Gad-el-Hak (ed.), *Large-Scale Disasters: Prediction, Control, and Mitigation*, Cambridge University Press (2008/6/23), ISBN-10: 0521872936.
Marc Madou, *Fundamentals of Microfabrication*, CRC Press, 1997.

Evaluation:

Attendance	30%
One report per lecture:	40%
Final presentation:	30%

6. Space Electromagnetic Environment

Co-ordinator: SHIOKAWA Kazuo (shiokawa@stelab.nagoya-u.ac.jp)
Class: Tuesdays, 10:30~12:00
Place: IB Building, Room 071

NB. This advanced course is open to graduate students only.

This class deals with basic plasma physics, MHD theory, and structure and dynamics of the Solar-Terrestrial environment.

Topics to be covered:

Introduction - Structure and dynamics of sun-earth system

1. Basic Concepts of Plasma
 - 1.1 Plasma Oscillation
 - 1.2 Debye Shielding
 - 1.3 Plasma Parameter
2. Single Particle Motion
 - 2.1 Cyclotron Motion
 - 2.2 Particle Drift
 - 2.2.1 Electric Drift
 - 2.2.2 Polarization Drift
 - 2.2.3 Gradient B Drift
 - 2.2.4 Curvature Drift
 - 2.3 Adiabatic Invariants
 - 2.4 Mirror Point and Loss Cone
 - 2.5 Ponderomotive Force
3. MagnetoHydroDynamics
 - 3.1 Derivation of the MHD Equations
 - 3.2 Important Concepts of MHD Plasmas
 - 3.2.1 Frozen In
 - 3.2.2 MHD Equilibrium
 - 3.2.3 Diamagnetic Drift
 - 3.2.4 Inertia Current
 - 3.2.5 Field-Aligned Currents Driven by MHD Processes
 - 3.3 Alfvén Wave
 - 3.4 Plasma Wave
4. Structure and Dynamics of the Heliosphere, Magnetosphere, and Ionosphere
 - 4.1. Magnetic Field
 - 4.2. Heliosphere
 - 4.3. Magnetosphere
 - 4.4. Ionosphere

References:

Introduction to Plasma Theory, D. R. Nicholson
Introduction to Plasma Physics, F. F. Chen
The Earth's Ionosphere (2nd Edition), M. C. Kelley, Academic Press
Introduction to Space Physics, M. G. Kivelson and C. T. Russell, Cambridge University Press
Basic Space Plasma Physics, W. Baumjohann and R. A. Treumann, Imperial College Press
Space Physics, M.-B. Kallenrode (Springer)
Advanced Space Plasma Physics, R. A. Treumann and W. Baumjohann (Imperial College Press)

Evaluation:

Courses in the Student's Major

Written reports

Graduate School of Environmental Studies

1. Climate Change Policies

Co-ordinator: SUGIYAMA Noriko (n.sugiyama@nagoya-u.ac.jp)
Class: Mondays, 13:00~14:30
Place: Graduate School of Environmental Studies, Lecture Room 2

The objective of the course is to provide students with basic facts and knowledge on policy measures pertaining to climate change. Distinguished external lecturers will give lectures, in addition to lectures by the course coordinator. The basic facts that the students should know are contents of the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Furthermore, other related matters such as climate change and cities, and energy policy will be explained.

This course has a unique style. The course looks forward to the 19th Conference of the Parties (COP19) to the United Nations Framework Convention on Climate Change (UNFCCC) and will simulate the conference negotiations. All students are required to participate in a model UNFCCC COP19, assuming hypothetical roles of delegation parties, and make presentations on the parties' policies. Some lectures will be scheduled irregularly. Hence, kindly be advised to attend the first lecture/orientation.

Topics to be covered:

1. Introduction: Plan of the course
2. Science of Climate Change
3. History of Climate Policy
4. Climate Agreements (Kyoto, Bali, Copenhagen, Cancun)
5. Climate Policy of Japan
6. Presentation by students and discussion 1
7. Presentation by students and discussion 2
8. Presentation by students and discussion 3
9. Policy measures to reduce GHG Emissions
10. Local Climate Policy
11. International Climate negotiation
12. Model UNFCCC COP19 negotiation 1
13. Model UNFCCC COP19 negotiation 2
14. Model UNFCCC COP19 negotiation 3

Reference Materials:

IPCC (2007). *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment, Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Pachauri, R.K and A. Reisinger,(eds.)].

http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm

(Other references will be specified at each lecture.)

Evaluation:

Presentation: 50%
Reports: 50%.

NB. Credits will not be awarded where the student's attendance is less than 80%.

Courses in the Student's Major

2. Ecosystem Management

Co-ordinator: NATUHARA Yoshihiro (natuhara@nagoya-u.ac.jp)
Class: Wednesdays, 13:00~14:30
Place: Liberal Arts & Sciences – Main Building, 3F, Room SIS5

The objective of this class is to provide students with fundamental concepts of ecology for ecosystem management, which integrates scientific knowledge toward a goal of protecting ecosystem integrity without damaging its resilience. This class focuses on the ecological concepts and methods to realise societies in harmony with nature. Students are expected to learn methodology of ecosystem management for sustainable use of ecosystem services by integrating multiple disciplines.

Topics to be covered:

- 1 Ecosystem with evolutionary process
- 2 Population models and sustainable resource management
- 3 Inter-specific interaction
- 4 Uncertainty and non-equilibrium of ecosystems
- 5 Risk and adaptive management
- 6 Geographic Information System and landscape planning
- 7 Promotion of biodiversity by multi-stakeholders

Reference Materials:

Readings in Ecology, Oxford University Press
Essentials of Conservation Biology, Fifth Edition, Sinauer
Some basic references will be distributed in class.

Evaluation:

Report 50%, Class attitude 20%, Presentation 30%

3. Environmental Industry Systems

Co-ordinators: IMAI Seiju (imai@nuagr1.agr.nagoya-u.ac.jp)
SHIBAHARA Naoki (nshiba@urban.env.nagoya-u.ac.jp)
Class: Thursdays, 10:30~12:00
Place: Graduate School of Environmental Studies, Lecture Room 1

The course consists of, 1) lectures by environmental industries located in the Chubu area; 2) presentations and/or discussions amongst students, 3) discussions between students and industry representatives. The industries are prominent companies mainly in the field of manufacturing. Note that the students are strongly recommended to take “Theory of Environmental Resources Management”.

Topics to be covered:

1. Introduction to the course
2. Lecture by Brother Industries, Ltd.
3. Lecture by Mitsubishi UFJ Research and Consulting Co., Ltd.
4. Lecture by Katahira & Engineers Inc.
5. Lecture by JICA Chubu
6. Lecture by Toho Gas Co., Ltd.
7. Lecture by Seiko Epson Corporation
8. Lecture by Denso Corporation
9. Lecture by Sumitomo Mitsui Banking Corporation
10. Lecture by Saraya Co., Ltd.
11. Lecture by Kasahara Mokuzai/Somneed
12. Lecture by City of Nagoya
13. Group presentations and discussions 1

Courses in the Student's Major

14. Group presentations and discussions 2

Reference Materials:

References will be specified in each lecture.

Evaluation:

Presentation: 50%

Report: 50%

NB. Credits will not be awarded where the student's attendance is less than 80%.

4. Planning and Design Studio for Historical Environment

Co-ordinator: NISHIZAWA Yasuhiko

Class: Thursdays, 9:00~12:00 (2nd Quarter: 21 November 2013~30 January 2014)

Place: Engineering and Science Building (ES), 4F, Room 435, Graduate Student Studio

Class Capacity: Maximum of 2 NUPACE students

NB. This is an advanced studio workshop for graduate students with experience of architectural or urban design studios.

This design studio aims to teach design theory, methods of preservation of historical heritages, and urban planning in historical districts. In practice, this year students are requested to draw up proposals for the preservation and renewal of an old wooden building "Nakamura Koen (Park) Kinenkan" built in 1910 in Nakamura Park in western Nagoya. Students may propose to convert this building into a community centre, providing new facilities for neighbours, visitors, and Nagoya citizens.

Topics to be covered:

Nov 21 Explanation of works and introductory lecture

Nov 21 (p.m.) or 22 (p.m.) Research on the site and historical heritage of the work

Nov 28 First esquisse checking concept and outline of planning

Dec 5 Second esquisse checking concept and outline of planning

De. 12 Third esquisse checking plan, section and façade of buildings or townscape

Dec 19 First review of works

Jan 16 Fourth esquisse checking changing works, complying with first review

Jan 23 Fifth esquisse checking all of works

Jan 30 Final review of works

Evaluation:

Presentation of work in final review: 100%

5. Politics and Diplomacy in the International Environment

Co-ordinator: IGUCHI Haruo (iguchi@info.human.nagoya-u.ac.jp)

Class: Mondays, 14:45~16:15

Place: School of Informatics and Sciences, Room C445

NB. This course is open only to graduate students.

This course will explore historical and theoretical aspects of international politics in the Twentieth Century with emphasis on international relations since the end of the Second World War. During the first classroom session I plan to hand out or present a more detailed syllabus.

Textbook:

The following book is scheduled to be used as a textbook:

Courses in the Student's Major

Joseph S. Nye, Jr. and David A. Welch, *Understanding International Conflicts: An Introduction to Theory and History*. Eighth Edition. Longman, 2011.

- Chapter 1: Is there an Enduring Logic of Conflict in World Politics?
- Chapter 2: Explaining Conflict and Cooperation: Tools and techniques of the trade
- Chapter 3: From Westphalia to World War I
- Chapter 4: The Failure of Collective Security and World War II
- Chapter 5: The Cold War
- Chapter 6: Post-Cold War Conflict and Co-operation
- Chapter 7: Globalisation and Interdependence
- Chapter 8: Information Revolution and Transnational Actors
- Chapter 9: What Can We Expect in the Future?

Evaluation:

Grades will be based on active participation in class and a research paper at the end of the semester; details regarding these issues will be discussed during the first classroom session.

6. Studio Workshop of Architectural Design

Co-ordinators: KATAGI Atsushi
Class: Thursdays, 8:45~12:00 (1st Quarter: 3 October 2013 ~ 14 November 2013)
Place: Engineering and Science Building (ES), 4F, Room 435, Graduate Student Studio
Class Capacity: Maximum of 2 NUPACE students

NB. This is an advanced studio workshop for graduate students enrolled in architectural courses. Students with no experience of architectural studio workshops will not be admitted.

Studio workshop of an architectural project under a given site and program, that aims to develop the student's skills in analysis, design and presentation. This year we have a joint studio with Prof. Barrie Shelton of Melbourne University to survey some superblocks around Nagoya Castle at the heart of the City of Nagoya, and propose its improvement.

Evaluation:

Presentation of work evaluated by jury: 100%

7. Sustainability and Environmental Studies

Co-ordinator: Victor Shiholo MUHANDIKI (victor@urban.env.nagoya-u.ac.jp)
Class: Fridays, 10:30~12:00
Place: Graduate School of Environmental Studies, Lecture Room 2

The objective of the course is to provide students with several definitions, views, interpretations, and analyses of the notion of sustainability. The lectures are to be given by several lecturers, who may include external guest researcher(s).

Sustainability covers broad areas. It is, hence, inevitable that the course consists of various topics. Having said so, the course tries to clarify the topics from three viewpoints:

1. Society and/or social sciences;
2. Observation and data by natural sciences; and
3. Urban and spatial perspective.

One common element that should be noted here is 'safety'.

Topics to be covered (tentative):

1. Sustainability criteria by cost-benefit analysis with levels of environmental ethics
2. Integrated lake basin management (ILBM)
3. Global change monitoring by remote sensing

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4. Sustainable urban planning and design
5. Kosa and desertification
6. Natural disaster and the society: The 2004 tsunami and its impact on Aceh of Indonesia
7. Safe production and consumption of chemical products
8. Sustainable transport system
9. Toward environmental friendly and sustainable building
10. Environmentally responsible behaviour and subjective well-being
11. Lectures by a guest instructors

Reference Materials:

References will be introduced at the beginning of the course, and distributed at each lecture.

Evaluation:

Reports: 100%

8. Water and Waste Management Engineering

Co-ordinator: Victor Shiholo MUHANDIKI (victor@urban.env.nagoya-u.ac.jp)
Class: Thursdays, 08:45~10:15
Place: Graduate School of Environmental Studies, Lecture Room 1

Water pollution and solid waste are some of the major environmental problems facing our society today. In this class we will learn about various technologies and measures applied in drinking water supply, control of pollution of water bodies, and solid waste management.

Prerequisites: Water and Waste Management Policies, Environmental Transport Phenomena, Advanced Theory of River Basin Management

Topics to be covered:

- A) THE HYDROLOGIC CYCLE AND DRINKING WATER SUPPLY
 1. The Hydrologic Cycle and Pollution of Water Bodies
 - 1.1 Water cycle
 - 1.2 Pollution of water bodies
 - 1.3 Self purification of water bodies
 2. Drinking Water Supply
 - 2.1 Sources of water
 - 2.2 Water treatment and water supply systems
 - 2.3 Water demand forecasting
- B) POINT AND NON-POINT SOURCE POLLUTION AND POLLUTION LOAD ESTIMATION
 3. Point Source Pollution
 - 3.1 Domestic wastewater
 - 3.2 Industrial wastewater
 - 3.3 Livestock
 4. Non-point Source Pollution
 - 4.1 Agriculture
 - 4.2 Natural systems
 - 4.3 Urban non-point source pollution
 - 4.4 Atmospheric deposition
 5. Point and Non-point Source Pollution Load Estimation
- C) POINT AND NON-POINT SOURCE POLLUTION CONTROL
 6. Domestic Wastewater Treatment Systems
 - 6.1 Conventional treatment systems
 - 6.2 On-site disposal systems and ecological sanitation

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7. Industrial Wastewater Treatment Systems
 8. Basin Management for Non-Point Source Pollution Control
 - 8.1 Reforestation and afforestation
 - 8.2 Catchment protection
 - 8.3 Wetland restoration and construction
 9. Inside-Water Body Measures for Pollution Control
 - 9.1 Control of nuisance species
 - 9.2 Control of water quality
- D) SOLID WASTE MANAGEMENT
10. Solid Waste Generation, Collection and Disposal
 11. Waste Minimization, Recycling and Resource Recovery

Reference Materials:

Reference materials will be distributed during class.

- Davis, M.L. and D.A. Cornwell (1998). *Introduction to Environmental Engineering*. McGraw-Hill, Inc., New York, USA.
- Dixon J.A., L.F. Scura, R.A. Carpenter and P.B. Sherman (1994). *Economic Analysis of Environmental Impacts*. Earthscan, London, UK. (also available in Japanese)
- Helmer, R. and I. Hespanhol (1997). *Water Pollution Control: A Guideline for the Use of Water Quality Management Principles*. E&FN Spon, London, UK.
- Hester, R.E. and R.M. Harrison (2002). *Environmental and Health Impact of Solid Waste Management Activities*. The Royal Society of Chemistry, Cambridge, UK.
- International Lake Environment Committee Foundation, ILEC (2007). *Integrated Lake Basin Management: An Introduction*. International Lake Environment Committee Foundation, Kusatsu, Japan. (available online at <http://www.ilec.or.jp>) (also available in Japanese)
- International Lake Environment Committee Foundation, ILEC (2005). *Managing Lakes and their Basins for Sustainable Use: A Report for Lake Basin Managers and Stakeholders*. International Lake Environment Committee Foundation, Kusatsu, Japan. (available online at <http://www.ilec.or.jp>) (also available in Japanese)
- International Lake Environment Committee Foundation, ILEC (2003). *World Lake Vision: A Call to Action*. International Lake Environment Committee Foundation, Kusatsu, Japan. (available online at <http://www.ilec.or.jp>) (also available in Japanese)
- Metcalf & Eddy, Inc. (1991). *Wastewater Engineering: Treatment and Reuse*. McGraw-Hill, Inc., New York, USA.
- Ministry of the Environment, Japan (2003). *Annual Report on the Environment in Japan 2003: Local Communities Leading the Transition to a Sustainable Society*. Ministry of the Environment, Japan, Tokyo, Japan. (available online at: <http://www.env.go.jp>)
- Novotny, V. and P. Brown, eds. (2007). *Cities of the Future: Towards Integrated Sustainable Water and Landscape Management*. IWA Publishing, London, UK.
- Novotny, V. (2003). *Water Quality: Diffuse Pollution and Watershed Management*. John Wiley & Sons, Inc., New York, USA.
- Okada, M. and S.A. Peterson (1999). *Water Pollution Control Policy and Management: The Japanese Experience*. Gyosei, Tokyo, Japan. (also available in Japanese)
- Tchobanoglous G., H. Theisen and R. Eliassen (1977). *Solid Wastes: Engineering Principles and Management Issues*. McGraw-Hill, Inc., New York, USA.
- World Commission on Dams, WCD (2000). *Dams and Development: A New Framework for Decision-Making, The Report of the World Commission on Dams*. World Commission on Dams. (available online at <http://www.dams.org/>)
- World Water Council, WWC (2000). *World Water Vision Commission Report: Vision for Water, Life and the Environment*. (available online at <http://www.worldwatercouncil.org>)

Evaluation:

Report: 50%

Courses in the Student's Major

Examination: 50% (Students with an attendance rate exceeding 80% are eligible for the exam)

Graduate School of Information Science

Advanced Lectures on Quantum Information

Co-ordinator: Francesco BUSCEMI
Class: Fridays, 13:00~14:30
Place: Graduate School of Information Science, Room 2

The course will provide an introduction to quantum information and quantum computation, suitable for an audience with no specific background. The following topics will be covered: mathematical description of quantum systems – composite systems, purification, and quantum entanglement – evolution of open quantum systems – quantum channels – quantum measurement processes – simple quantum communication scenarios (noiseless channels, super-dense coding, quantum teleportation) – quantum circuit formalism – Deutsch's quantum algorithm – Deutsch-Jozsa quantum algorithm – Bernstein-Vazirani quantum algorithm – Shor's quantum algorithm (quantum factorization algorithm)

Topics to be covered:

First Set: Mathematical Tools

Lesson 1 complex vector spaces
Lesson 2 complex linear algebra I
Lesson 3 complex linear algebra II

Second Set: Introduction to Quantum Information

Lesson 4 mathematical description of quantum systems I: states, observables, Born rule
Lesson 5 mathematical description of quantum systems II: Schrödinger equation, composite systems, quantum entanglement
Lesson 6 processing of quantum information: quantum channels
Lesson 7 computation read-out: quantum measurements
Lesson 8 quantum teleportation
Lesson 9 quantum super-dense coding

Third Set: Introduction to Quantum Computation

Lesson 10 the quantum computer and quantum circuits formalism
Lesson 11 Deutsch and Deutsch-Jozsa algorithm
Lesson 12 Bernstein-Vazirani algorithm
Lesson 13 Shor's factorization algorithm I: quantum Fourier transform
Lesson 14 Shor's factorization algorithm II: quantum phase estimation
Lesson 15 Shor's factorization algorithm I: order finding and factoring

Textbook:

Chuang, I. L. and Nielsen, M. A., *Quantum Information and Quantum Computation* (Cambridge University Press).

Evaluation:

By attendance rate and by two homework sheets (one at the end of the second set of lectures, another at the end of the course)

Graduate School of International Development (GSID)

1. Educational Development Planning and Evaluation (教育開発計画・評価論)

Co-ordinator: YONEZAWA Akiyoshi
Class: Tuesdays, 08:45~10:15
Place: Grad. School of International Development (GSID), Seminar Room 6 (515)

This course aims to consider the role of higher education within the framework of educational development planning and evaluation. Higher education plays an essential role in the contemporary knowledge-based society, and has its own context distinguished from primary and secondary education. At the same time, education planning and evaluation is inevitably linked to issues of access to higher education, brain drain and brain gain typically occurring at the higher education level.

Topics to be covered:

1. Historical origins of modern higher education
2. Access and equity in higher education
3. Knowledge economy and higher education
4. Assessment of international cooperation in higher education.

Participants are expected to examine the role and value of international cooperation in higher education.

2. Human Security and Law (人間の安全保障と法)

Co-ordinator: YAMAGATA Hideo
Class: Tuesdays, 16:30~18:00
Place: Graduate School of International Development (GSID), Seminar Room 8 (512)

NB. This course is open to all NUPACE graduate students, and those undergraduate students affiliated to the School of Law.

The objective of this course is to understand security issues in the framework of the Charter of the United Nations. First, the collective security system is dealt with in comparison with the old balance of powers policy. Second, the changing system of the UN collective security after 1990 will be addressed. Last, lectures will be given on the newly-emerged concept of human security. The standpoint from which this course is offered is international law. This is a law course. If you have no knowledge of international law you are strongly advised to take the course "International Cooperation Law" in the spring semester.

Topics to be covered:

1. Introduction
2. Overview of the UN Collective Security System
3. Korean War and Voting Procedures in the SC
4. Uniting for Peace Resolution
5. Peace-keeping Operations
6. Non-Intervention Principle and the Binding Decision of the SC
7. The Concept of "Threat to Peace"
8. Authorisation to Use Force in the Gulf War
9. Humanitarian Intervention
10. Responsibility to Protect and Human Security
11. Writing Pleadings for Moot Court 1
12. Writing Pleadings for Moot Court 2
13. Moot Court Competition 1
14. Moot Court Competition 2
15. Moot Court Competition 3

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Reference Materials:

Materials to be used for this course will be distributed in class.

Evaluation:

Grades will be assessed on the basis of active participation in discussions (60%) and a report based on the pleading or judgement (40%).

3. Japan's Development Experience (日本の開発経験)

Co-ordinators: SHIMADA Yuzuru & SHINKAI Naoko
Class: Wednesdays, 13:00~14:30
Place: Graduate School of International Development (GSID), 8F, Auditorium

NB. This course is open to all NUPACE students.

This course examines the development and modernisation process of Japan from various perspectives, including both positive and negative. Lecturers from different disciplines deal with issues such as the economy, law, governments, rural areas, social security systems, education, peace-building, etc. Participants will understand the crucial issues pertaining to Japan's development experience, and consider the adaptability of this experience to other countries.

Topics to be covered*:

1. Introduction
- 2-3. Economics
4. Governance and Law
- 5-6. Education
- 7-8. Social Development
- 9-10. Agricultural/Rural Development
- 11-12. Peace-building
13. Wrap-up Session

*More details will be provided during the first session on October 2.

Reference Materials:

Relevant materials will be introduced in each class.

Evaluation:

Class participation and weekly comment papers.

4. Law and Development Studies

Co-ordinator: SHIMADA Yuzuru
Class: Fridays, 10:30~12:00
Place: Grad. School of International Development (GSID), 5F, Seminar Room 7 (516)

The aim of "Law and Development Studies (LDS)" is to analyse the role of legal systems and institutions in socio-economic development, or the relationship between development and legal systems in developing countries. This course focuses on relevant theories in LDS and case studies. Participants are required to read designated reading materials on LDS before each lecture. A reading list will be distributed in the first lecture.

Topics to be covered (tentative):

Part 1. History of LDS and Major Theories in Comparative Law Studies

- a. "Law and Development Studies/Movement" in the period between 1960 and 1970

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- b. "New Law and Development Studies" since the 1990s
- c. Legal pluralism
- d. Legal culture

Part 2. Development and the "Legal Transplants" Theory

- a. The role of "legal transplants" in the development of law
- b. Debates on pro-contra "legal transplants"
- c. "Legal transplants" during the colonial rule and their influence on the modern state
- d. "Legal transplants" in international cooperation programmes in the legal area

Part 3. Case Study: Legal Reform in Development Programmes

In this section, participants will read the following and other relevant materials, and will make a short presentation or prepare a report on legal reform in socioeconomic development programmes.

Reference Materials:

Handouts will be distributed.

Evaluation:

Class attendance and papers.

5. Lecture on Int'l Development 1: International Migration Theory (国際人口移動論)

Co-ordinator: ASAKAWA Akihiro
Class: Thursdays, 14:45~16:15
Place: Graduate School of International Development (GSID), 6F, Lecture Room 1

In this class, various aspects of the current phenomenon on international migration will be considered. Topics covered include immigration control, social integration, remittances, impact for accepting and sending countries, refugee recognition, etc. To understand current immigration issues, Australian radio news on immigration related topics will be introduced in every class.

Topics to be covered:

1. Introduction
2. Basic theory of international migration
3. Education and migration
4. South-South migration
5. Governance of migration policy
6. Unskilled migration
7. Student migration
8. Irregular migration
9. Demography and migration
10. Asylum (refugee) migration
11. "Migration" from Japan to North Korea
12. Demographic change and migration
13. Migration and the role of remittances
14. Women and international migration
15. Conclusion

Reference Materials:

Relevant materials will be introduced during the course.

Evaluation:

Participation: 30%
Presentation and Discussion: 70%

Graduate School of Languages and Cultures (GSLC)

1. Introduction to Sociolinguistics b: Introduction to Bilingualism

Co-ordinator: MORITA Chua Liang
Class: Thursdays, 13:00~14:30
Place: IRB Humanities & Social Sciences, Room 522

We will be focusing on bilingualism this semester. Bilingualism or multilingualism is a frequently misunderstood phenomenon. Many parents are afraid of letting their young children learn English because they think it will interfere with their Japanese language development. Some worry that learning other languages means there will be less space in our brains for subjects such as science and mathematics. Thanks to research in bilingualism in recent decades, we now know that these worries are unfounded.

Topics to be covered:

1. Early Development of Bilingualism or Multilingualism
2. Later Development of Bilingualism
3. Language Shift (Especially in Hokkaido and Okinawa)
4. Language Situation of Ethnic Minorities (Especially Koreans and Brazilians)
5. Language Minority Schools in Japanese Public Schools
6. Bilingual Education in Japan

Textbooks/References:

Baker, C, S. (2006). *Foundations of Bilingual Education and Bilingualism*. Clevedon: Multilingual Matters.
Noguchi, M.G. and Fotos, S (2001). *Studies in Japanese Bilingualism*. Clevedon: Multilingual Matters.

Evaluation:

Attendance, participation, preparedness for lessons and presentations.

Students are expected to complete the assigned reading before each lesson. In class, students are expected to engage in discussions based on what they have read. The instructor is more than happy to answer questions on the reading but since this is a graduate course, she hopes her students will come to class prepared and having reflected on what they read.

2. Topics in the Geography of Culture 1: Ameriglish as a tool for understanding American culture

Co-ordinator: Simon POTTER
Class: Tuesdays, 10:30~12:00
Place: IRB Humanities & Social Sciences, Room 623

The main objective of this course is to get insights into how important language is in culture, especially as a device which establishes values and mentalities. Students will be expected to consult the course book – a lexicon which has been specially prepared to be used in Japanese higher education – as well as other sources to write a sequence of essays that will be linked to themes in contemporary America. The essays – to be written as homework and submitted at the beginning of the assigned class meeting – will require students to take a list of vocabulary items, to search for supplementary material, and to link things together to create thoughtful, concise briefs which as a whole will hopefully lead to a better understanding of the United States. During class meetings, there are likely to be explanations or interpretations of various things American by the professor, which might include references to items, observations, and opinions written in the essays. Schedule: There is not a fixed sequence for the course, but the themes which are anticipated to be covered – in an American context – are geography, history, the concept of multiculturalism, types of people, freedom and liberty, government and politics, legalism,

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economics, sports, the mass media, and education.

Reference Materials:

Larger Ameriglish Dictionary (2012),

Evaluation:

Grades will be determined according to the content and quality of the written submissions, with in-class participation being weighted in for marginal cases.

School of Law

1. Comparative Studies in Jurisprudence II: Uses of the Public Sphere – Good Practice vs. Corruption

Co-ordinator: MORIGIWA Yasutomo
Class: Fridays, 13:00~14:30
Place: School of Law, Seminar Room 905

NB. This class will commence on Friday, October 11.

This class will provide a better understanding of the liberal democratic state by observing phenomena and theories of corruption in the context of the practicalities of (mainly) developing nations. Students will wrestle with such fundamental questions on law and the state as the following.

1. <violence>
 - 1) How can we protect the rights of the weak against threats of violence?
2. <power>
 - 1) What is the function of political power?
 - 2) What can keep political power from being abused?
3. <state>
 - 1) Is there a difference between the mafia and the state?
 - 2) If hostile military power is the greatest external threat to the state, what is the greatest domestic threat?
4. <justice>
 - 1) What is justice?
 - 2) What do you need to enforce your idea of justice?
5. <law>
 - 1) What is the difference between lawlessness and rule of law?
 - 2) What is law, and if it isn't law, what defines justice in a society?
6. <judiciary>
 - 1) Why is the judiciary important in a liberal democracy?
7. <public/private>
 - 1) Can there be corruption in a state which does not distinguish between the public and the private?
 - 2) Why distinguish between the public and the private?
8. <citizenship>
 - 1) How can we get rid of bullying in the classroom?
 - 2) How can we really respect the equal right to be free?

The course will be divided into four parts:

- A. Part 1: The course will begin with a lecture on the fundamentals of political, moral and legal philosophy.
- B. Part 2: The class will then discuss the concept of corruption and see how corruption erodes and destroys the basis of a just society.
- C. Part 3: The class will discuss and analyse the reality of corruption as portrayed in country reports in

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terms of economic, political, moral and legal theory.

To help better understand the concept of corruption and theories thereof, the students will prepare three essays:

- 1) Assignment 1: What is "rent-seeking"?
 - 2) Assignment 2: Country report
- D. Part 4: The class will engage in acting out a scenario depicting a situation where corruption is almost inevitable, and feel what it like to be in such circumstances. This should make the learning experience not only theoretical but also visceral.
- E. Final essay: Students should gain enough understanding of the workings of the modern state and the devastating effects of corruption so that such questions as below would seem elementary:
- 1) What is "rent-seeking" and how is it related to corruption?
 - 2) Why is an anti-corruption agency often a bad idea?
 - 3) Why is the "public/private" distinction important for understanding the liberal democratic state?
 - 4) Is the optimal state of affairs "no corruption" or should it be defined differently?
 - 5) Why is corruption so dangerous to the basic structure of a constitutional democracy?
 - 6) What would be the typical steps that should be taken to address corruption?

Providing concise replies in an essay to the above quiz comprise the final exercise for the course.

Evaluation:

Attendance and participation:	25%
Essay on rent-seeking:	10%
Country report:	20%
Client session:	10%
Final essay:	35%

2. Introduction to Private International Law

Co-ordinator:	KIM Eunsuk
Class:	Fridays, 16:30~18:00
Place:	School of Law, Seminar Room 905

NB. This class is open only to students majoring in law. A maximum of three NUPACE students may participate.

This is an introductory course to private international law (conflict of laws). The field of law called private international law deals with private-law relationship and civil proceedings having international implications. These days this field of law attracts special attention from both academia and practitioners as international disputes in private sector are increasing year by year. But still, it is considered that the rules of private international law remain too-technical and too complicated to understand. This introductory course will help you develop an overall understanding of the current private international law issues. In this course, we will examine the current conflict-of-laws system from a comparative and historical perspective and deal with private international law issues in terms of applicable law (choice of law), jurisdiction, recognition and enforcement of foreign judgments..

Reference Materials:

- J.H.C. Morris, *The Conflict of Laws*, 7th ed., Sweet & Maxwell, 2009.
C.M.V. Clarkson, Jonathan Hill, *The Conflict of Laws*, 4th ed., Oxford University Press, 2011.
Dicey, Morris and Collins, *The Conflict of Laws*, 14th ed., Sweet & Maxwell 2006.
Symeon C. Symeonides, *American Private International Law*, Kluwer Law International, 2008.

Evaluation:

Participation:	30%
Presentation:	30%

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Final Report 40%

3. Professional Studies in International Human Rights Law II:

Seminar on Human Rights and Refugee Law

Co-ordinator: OBATA Kaoru
Class: Tuesdays, 13:00~14:30
Place: School of Law, Seminar Room 905

NB. This class is open only to students majoring in law. Students interested in taking the course must make an appointment with the co-ordinator in advance.

In this seminar, we will select some topics related to current problems International Human Rights Law or Refugee Law, and read relevant textbooks and articles. In each class, a student will act as 'reporter', and make a presentation on the assigned subject matter. This will be followed by discussion amongst class members. Participants should have a basic knowledge of International Law in general and Human Rights Law, as provided in the courses on 'International Law' and International Human Rights Law'.

Textbook:

Hsien-Li Tan, *The ASEAN Intergovernmental Commission on Human Rights* (Cambridge UP, 2011)

Evaluation:

Presentation: 40%
Class Discussion: 30%
Attendance: 30% (an attendance rate of 80% is mandatory)

4. Special Lecture & Seminar: Workshop on International Negotiation

Co-ordinator: Frank BENNETT
Class: Thursdays, 8:45~12:00 (once every two weeks)
Place: School of Law, Seminar Room 911

This course provides an opportunity to study and to practice negotiation skills in an international context. Sessions will involve lectures, practical sessions, and discussions based on both. Topics to be covered may include:

1. The purpose of negotiation and the value of "negotiation skills"
2. The result of negotiation: Agreements and their forms
3. Zero-sum versus win-win bargains
4. Negotiation psychology and cross-cultural communication
5. Identifying and controlling risk
6. Positions versus interests
7. Option building and the importance of listening
8. Hard bargaining

Course content is of course open to negotiation.

Reference Materials:

Fisher, Ury & Patton, *Getting to Yes: negotiating agreement without giving in* (2nd ed. 1991)
(negotiation and arbitration problems to be distributed)

Evaluation:

Statement of objectives: 10%
Class attendance & participation: 40%
Final report: 50%

5. Special Lecture & Seminar: Yomiuri Shimbun Special Lecture – Comparative Asian Corporate Theory

Co-ordinator: OKOCHI Minori (ohkohchi@law.nagoya-u.ac.jp)
Instructors: Journalists from the *Yomiuri Shimbun's* Tokyo Office
Class: Wednesdays, 14:45~16:15 (~18:00)
Place: School of Law, Seminar Room 911

Journalists from the Tokyo Office of the *Yomiuri Shimbun* will conduct this course, based on their on-the-spot news coverage around the world and teaching experience in California. A series of topics related to Japan and other Asian countries will be included in this course.

Topics to be covered:

第1回 10月9日 読売新聞と海外報道/岡本道郎(国際部長)

1. October 9, Yomiuri and foreign news coverage

Instructor: Michiro Okamoto, managing editor

As the leading newspaper in Japan, the *Yomiuri Shimbun* has been reporting international news extensively with 52 overseas correspondents. We will look into how Japanese media like Yomiuri cover foreign news, and also compare Japanese foreign news coverage with that of the rest of the world.

Mr. Okamoto was Tehran Correspondent from 1990 to 1992, Cairo Correspondent from 1995 to 1999, and from 2003 to 2007, and General Bureau Chief of the Americas (Washington) from 2008 to 2011.

第2回 10月16日 アジアの宇宙時代/ 滝田恭子(科学部主任)

2. October 16, Space Race in Asia

Instructor: Kyoko Takita, Deputy Editor, Science News Department

China and India are emerging as space superpowers with rockets, manned spaceflights and lunar explorations. They may change the old scheme of space activities led by US and Russia in co-operation with Japan, EU and Canada. We will discuss the impact of the space race on world politics and the utilisation of resources in space and on the moon.

Ms. Takita covers space shuttle flights, rockets and satellites development, and science and technology policies.

第3回 10月23日 宮智 泉(生活部長)

3. October 23, “Family” in an Aging Society

Instructor: Izumi Miyachi, Editor, Lifestyle News Department

The family relationship has been changing in Japan, with its aging population and decreasing number of children. How did it change? How does it affect society? We will look into the background and cause of the change through the Yomiuri's popular column, “Troubleshooter”.

Ms. Miyachi has long been a staff writer of lifestyle & culture section and was a visiting lecturer at Graduate School of Journalism, UC Berkeley.

第4回 10月30日 一つの言葉で対話するアジア/高須賀茂文(英字新聞部次長)

4. October 30, English as a common language among newspapers in Asia

Instructor: Shigefumi Takasuka, assistant editor of The Japan News

Until recently, newspapers in Asian countries did not exchange their articles, editorials and commentaries among themselves on a regular basis. However, the advent of the Internet age and use of English as a common language have made this possible. This development is symbolised by the establishment in 1999 of the Asia News Network, an alliance of 21 newspapers in 18 countries including The Yomiuri Shimbun and The Daily Yomiuri in Japan. ANN member newspapers not only exchange articles among themselves but also operate their own news site and publish a weekly magazine with articles that they contribute to its Bangkok headquarters.

Mr. Takasuka, former Yomiuri Shimbun correspondent in Bangkok, will discuss this unique challenge to the world of international journalism that had been long dominated by Western media.

Courses in the Student's Major

第5回、6回 11月6日 (14:45~18:00) 世界のスポーツとアジア/結城和香子(編集委員)

5. & 6. November 6 (14:45~18:00), The Olympic Games and Asia

Instructor: Wakako Yuki, senior writer (Former Sydney and Athens bureau chief in charge of the Yomiuri Shimbun's Olympic Games coverage.)

The Beijing and London Olympic Games provided an opportunity for us to ponder and discuss what the positives and the negatives of the modern Olympic Games, a private sports movement which has miraculously lasted for over 100 years, actually are. Are the Olympic Games a legacy of humanity which should be carried on into the future? Or have its negative aspects caught up at last?

Taking into considerations aspects such as;

Positives

- Olympic Games can create initiatives for peace
- Olympic Games have considerable economic impact
- can aspire us to go beyond our limitation, value of life
- demonstrate passion for sports
- opportunity to overcome discrimination

Negatives

- too much pressure to win spurs doping problems
- has become too expensive and gigantic, riches' games
- bidding race is susceptible to corruptions
- sports have become a mere entertaining show
- can be used as political propaganda or tools

We will try to ascertain why we do or don't need the Olympic Games.

第7回 11月13日 福島利之(元カイロ特派員)

7. November 13, Japanese Religious Devotion and Mentality through SENGU

Instructor: Toshiyuki Fukushima, ex-Cairo correspondent, a staff writer of the city news department at the Nagoya Office.

The 62nd SENGU, installation of the sacred symbol of a deity in a new shrine, was conducted at the Grand Shrine of Ise in October 2013. It has continued every 20 years since the 7th century. What is the meaning of SENGU? Why do Japanese people preserve such a ritual? We will discuss Japanese religious devotion and mentality through this SENGU.

第8回、9回 11月20日 (14:45~18:00) 日本の安全 アジアの安全/ 笹島雅彦(調査研究本部主任研究員)

8. & 9. November 20 (14:45~18:00), Security in Asia and Japan

Instructor: Masahiko Sasajima, senior research fellow, Yomiuri Research Institute

Mr. Sasajima will provide an introduction, from the perspective of both policy analysis and journalism, to the structure of political and military affairs in Asia as well as a comparison of the national security policies of major nations of the region. Particular attention is given to the continuation of the Maritime Self-Defence Force's refuelling mission in the Indian Ocean.

Mr. Sasajima is a former correspondent of the Beijing Bureau and visiting lecturer at J-School, UC Berkeley.

第10回 11月27日 鶴原徹也(解説部長)

10. November 27, ASEAN on Its Way to a Community

Instructor: Tetsuya Tsuruhara, editor, commentary & analysis department

The regional association commits itself to establishing an ASEAN Community by 2015. The Community is comprised of three pillars, including a Political-Security Community, with the aim of moving closer to an EU-style community. We will raise a question. "Is there a good chance of success?"

Mr. Tsuruhara has worked as a correspondent in Jakarta, Paris, Brussels, Bangkok and London.

第11回 12月4日 日台関係 深い絆の背景/源一秀(前台北支局長)

11. December 4, Japan and Taiwan: The background of the Deep Bond

Instructor: Kazuhide Minamoto, former Taipei Bureau chief

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Taiwan was one of the largest donor countries to Japan at the time of the 2011 Great East Japan Earthquake. I will discuss the background of pro-Japan Taiwan from the perspective of politics and history. At the same time, I will also analyse the anti-Japanese sentiment in Taiwan.

第12回 12月11日 フクシマと原子力の未来/大塚隆一(編集委員)

12. December 11, Fukushima and the Future of Nuclear Energy

Instructor: Ryuichi Otsuka, senior writer

The Fukushima Daiichi incident, following the catastrophic earthquake and tsunami, has raised new questions about the safety of nuclear power. Does nuclear energy offer a path away from carbon-based fuels? Or are nuclear power plants too big a threat? We will discuss the merits and demerits of nuclear energy and its future.

Mr. Otsuka worked as a correspondent in Geneva, New York and Washington DC.

第13回 12月18日 国際課・日本の課題/南 砂(医療部長)

13. December 18, The Internationalisation of Japan - Foreign Student Policy and the JET Programme

Although the 1983 Government program to bring 100,000 students to Japan finally achieved its goal in 2002, many issues remain. As participants were given instruction in English, they had few opportunities to actually become part of Japanese society. In contrast, the JET program, which brought foreign English teachers to local communities, resulted in many foreigners developing a deeper affinity for Japan. This session will focus on the internationalisation of Japan, viewed in the context of these two policies.

第14回 1月15日 中島健太郎(政治部記者)

14. January 15, The United States Rebalancing Strategy and Security Environment of the Asia-Pacific

The US defense budget has been under sequestration. How will this affect the “rebalancing” policy of the Obama Administration and defense policy of Asia-Pacific countries, including Japan and China? We will discuss this with first-hand information from a correspondent who has covered Japan and the US Government.

第15回 1月22日 栗山倫子(メディア戦略局)

15. January 22, One Japanese Intern's Experience as a Digital Media Consultant in New York

Instructor: Michiko Kuriyama, Department of Research & Development Operations, Digital Media Bureau

New York is becoming the capital of digital media because of its historic role as centre for finance, advertising and traditional media. Meanwhile, numerous foreign companies are trying to enter this emerging market. Keeping in mind how New York established its position, we will examine how foreign people and companies have been active as players in the market.

Michiko Kuriyama is a former fellow at Tow-night Centre for Entrepreneurial Journalism at the City University of New York.

Evaluation:

Participation and the submission of a report at the end of the course.

6. Studies in Jurisprudence: Law as Political Theory II

Co-ordinator: MORIGIWA Yasutomo

Class: Mondays, 16:30~18:00 (class held every two weeks)

Place: IRB for Humanities & Social Sciences, Rooms 409-410

This bi-weekly course, with one credit given for each semester, introduces the student to the world of legal and political theory. Theories to be discussed include that of Hobbes, Locke, Rousseau, Kant, and Hegel, as well as those developed by Hart, Dworkin, Raz and Rawls. Selected theories will be examined and explained, answering the burning questions any conscientious student would have on political power and public order. The course will be taught in English, with summaries in Japanese as necessary.

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International and Japanese students are welcome. The class time and venue will be decided at the first class meeting on Monday, 1 Oct 2012.

School of Letters

1. Asian Film History before 1945

Co-ordinator: MA Ran
Class: Thursdays, 10:30~12:00
Place: School of Letters, Lecture Room 127

By figuratively dividing the film history in Asia into two stages, namely the *pre-* and *post-*World War II periods, we shall start our two-part survey on Asian film history with this particular course, in which the highlight is directed to early cinemas from East Asia. In positioning the survey of films within the socio-historical exigencies and cultural context of Japan, China and Korea before and during World War II, this course offers the students an opportunity to engage with the early cinemas and their evolution from the perspective of social history and discourses of modernities in this region. Students are expected to acquire the basic knowledge on early cinemas in Asia, and learn to analyse films in relation to certain socio-cultural issues that became significant during the time frame under examination. This course comprises a combination of screenings, lectures, and discussions. Students *must* complete the reading assignments prior to each module.

10% Participation
20% contribution to class discussion/presentation
20% Short Analytical Paper
50% Final Paper

2. Aspects of Contemporary Japanese Culture

Co-ordinator: Kristina IWATA-WEICKGENANTT
Class: Mondays, 10:30~12:00
Place: Communal Building for Humanities and Social Sciences, Room 1AB

Proficiency in both English and Japanese is needed for this class which will mostly be conducted in English, but heavily rely on untranslated Japanese source materials. Through a close examination of contemporary literature and popular culture, we will discuss the role entertainment media play in the discursive construction of Japan as an 'unequal society'. We are going to examine how Japan's presumed transformation from an all middle class society to a society of widening gaps is expressed through a variety of popular media including literature. Closely analysing examples of the past two decades, we will talk about how the decline of the salaryman culture, ice-age employment, and social disenfranchisement has triggered a paradigm shift towards a social discourse of precarity. There will be reading assignments in either language for each week. Depending on the course size, the class will combine lecture and student-teacher-interaction. Evaluation is based on regular attendance and a final exam; depending on the course size, there may be student presentations (in either language) instead of a final exam.

3. Cinema and Cultural Theory

Co-ordinator: MA Ran
Class: Thursdays, 14:45~16:15
Place: School of Letters, Lecture Room 129

This course engages critical issues and debates on contemporary cultural theories by facilitating the inquiry with three broadly-divided but intricately interconnected themes, namely visual culture, popular culture as well as globalisation, all three of which offer various critical lens in examining global socio-cultural conditions and the discontents of modernity; such critical perspectives underpin the way

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how we perceive and critique the era we are living in. This course will engage students in sustained analysis and self-analysis of key ideas of cultural and social theories by referring to wide spectrums of cultural objects and practices, with particular interest in visuality and representation in cinematic works, while the survey also extends to painting, photography, video and the cyberspace. Students will assess the social construction and implications of certain cultural forms, phenomena and texts and evaluate the opposing takes and arguments. For case studies and certain reference readings emphasis will be given to popular culture in Asia.

Through this course, students are expected to

*Acquire new knowledge on globalisation, popular culture and visual culture through study and analysis of theoretical and cultural texts;

*Examine and critique issues on contemporary culture and globalization from a range of different theoretical perspectives;

*Demonstrate a critical and ethical awareness of local and global socio-cultural issues through discussions of cultural texts.

10% Participation

20% contribution to class discussion/presentation

20% Reading Explication Essay: Students will discuss and evaluate the arguments and evidences of two essays drawn from either required or reference readings until Nov 28th and write a one to two page explication essay; students could also test the viability of concepts by re-contextualising them in other examples of their own choosing. Late papers will not be accepted. A more detailed explanation will be provided later in the semester.

50% Final Paper (2,000~ words)

4. Japanese Culture: Language and Communication II

Co-ordinator: YASUI Eiko (eyasui@lit.nagoya-u.ac.jp)

Class: Tuesdays, 13:00~14:30

Place: IRB Humanities & Social Sciences, Room 305

Language as a communicative tool has a close relationship with the culture in which it is used. In order to be a competent speaker of a language different from your own, therefore, it is essential that you fully understand the socio-cultural system and values associated with the language. This course on Japanese communication aims to provide students with an interdisciplinary overview of how language structures and culture in Japan form the way people communicate, examining various linguistic phenomena in Japanese everyday conversations. Through this class, students will be provided with resources to understand the behaviour of people in Japan as well as other cultures, necessary to become a better communicator in an intercultural context.

The main purpose of the autumn semester of this course is to look at actual communicative situations in Japanese society. We will first learn about the factors that form Japanese people's communicative behaviour, focusing on Japanese linguistic structures, society, and culture. We will then focus on natural conversations and learn about how people in different situations can use grammar differently as well as what people do with grammar in actual conversations. Students should expect to work in groups and participate in discussions as there will be a lot of in-class group works during the semester.

Reference Materials:

Handouts

Evaluation:

Participation/attendance: 20%

Two exercises: 20%

Final exam 60%

*Details to be given in class.

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5. Modern Japanese Literature from an East Asian Perspective

Co-ordinator: Kristina IWATA-WEICKGENANT
Class: Mondays, 13:00~14:30
Place: School of Letters, Room 128

Proficiency in both English and Japanese is needed for this class which will mostly be conducted in English but heavily rely on untranslated Japanese source materials. The lecture is meant as an introductory course to the literature of ethnic Korean authors in Japan. We will approach this literature from a post-colonial perspective, placing particular attention to issues such as language and place/displacement and trace their development across three literary generations. Besides literary texts, we will discuss a number of film adaptations. There will be reading assignments in English or Japanese for each week. Depending on the course size, the class will combine lecture and student-teacher-interaction. Evaluation is based on regular attendance and a final exam; depending on the course size, there may be student presentations (in either language) instead of a final exam.

6. Seminar: Cinema and Practice – City, Urban Culture and Cinema in

Contemporary Asia

Co-ordinator: MA Ran
Class: Tuesdays, 16:30~18:00
Place: Communal Building for Humanities and Social Sciences, Room 1AB

In this fast-changing, ever globalising world, the life and existence of human beings are to great extent defined by the urban condition they are enmeshed within and struggling with. This seminar attempts to survey major urban issues and cultural topics in modern societies by engaging with a wide spectrum of cultural texts drawn from films, literary works as well as architecture; in case studies, particular attention is paid to the social context and cities in Asia. City will not only be simply explored as the theme or ambience featured in these texts, following our adventure of “entering” the city, with the socio-historical dimensions of urban space theoretically surveyed, we shall direct our attention to the urbanites and their mental life. A critical journey of wandering in the city as flâneur and encountering other strangers would lead us into the “invisible city” as interwoven with fear, desire, memory, and dream. Finally, the seminar will position the study of urban culture within the heated discourses and debates on globalization. Departing from observations upon Asian metropolises, students are expected to debate and discuss cinematic texts in relation to the urban condition of local, regional and global scales. Through the seminar, students will learn to approach and critique the cultural space of cities by utilising key concepts drawn from various theoretical perspectives such as cultural studies, visual culture and sociology.

Course Approach:

Lectures, screenings, and oral/written analyses. Regardless of their previous exposure to cultural theory, students will refine and advance their skills of cultural analysis and critical observation. Students will evaluate argument and evidence in readings and they will practice communicating their ideas effectively via discussions, presentations and in writing assignments.

10% Participation

20% contribution to class discussion/presentation

30% Reading Journal Assignment: For each month between Nov-Jan, students are expected to submit one reading journal assignment reflecting upon their reading progress in the previous month. They are required to review, evaluate and even critique concepts and arguments by referring to both the required and reference readings (from the previous month) and write a one to two page journal. Details will be offered later in class.

40% Final Paper

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7. Seminar: Theory and Practice of Literary Translation

Co-ordinator: Kristina IWATA-WEICKGENANTT
Class: Wednesdays, 10:30~12:00
Place: IRB Humanities & Social Sciences, Room 310

Although concerned with translation, this class is not designed as part of a language learning programme and is therefore not primarily meant to improve your English/Japanese language skills; sufficient proficiency in both languages is a necessary condition for participating in the course. We are going to approach the problem of translation from an interdisciplinary perspective, reading a number of theoretical texts ranging from orthodox translation studies to anthropological concepts such as cultural translation. In order to become aware of the delicacy of translation, we will a) compare different translations from a same original text and b) translate texts back into their original language, discussing the translational choices made. Technical solutions to translation (e.g. online translation programs) will be discussed and tried out. In addition, students will do translations of their own and discuss what makes a translation "literary." All students are encouraged to actively participate in class discussions and translation group work. Course materials will be announced during the first class. Evaluation is based on regular attendance, individual presentations and active participation.

8. 日本語文化入門 II (Introduction to Japanese Language & Culture II)

Co-ordinator: SAITO Fumitoshi
Class: Tuesdays, 16:30~18:00
Place: School of Letters, Lecture Room 237

NB. Course taught in Japanese and which requires at least level N2 (or 2) of the Japanese Language Proficiency Test (JLPT) or equivalent.

この講義は、日本語文化に対する理解を深めることを目的とする。特に、語彙(単語)に焦点があてられる。また、講義、クラス討論、レポート、グループ発表の様々な形式をとる。

Topics to be covered:

1. 「昨日頭を切ってきたよ」「昨日頭をカットしてきたよ」は言えるのに、「昨日頭を切断してきたよ」だとぶきみになってしまうのはなぜ？
2. 「今日は11月3日、祝日でちょうど日曜日にあたります」の中の5個の「日」、なんでみんな読み方が違うの？
3. 「見上げてごらん、星がキラキラまたたいているよ」はなぜロマンチックじゃないの？
4. 「ホーカにケッタマシンで郵便局行ったら、どえりゃあ疲れてまった」ってどんな意味？

Reference Materials:

必要に応じてプリントを配布。

Evaluation:

出席: 30%
授業への貢献度: 30%
レポート: 40%

Graduate School of Mathematics

Perspectives in Mathematical Sciences II (Graduate)/IV (Undergraduate)

Co-ordinators: FUTABA Fujie, Jacques GARRIGUE, Lars HESSELHOLT
Class: Tuesdays, 14:45~16:15
Place: Graduate School of Mathematics Building, Room 109

This course is designed as one of the English courses which the Graduate School of Mathematics

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provides for graduate and undergraduate students not only from foreign countries but also domestic students who have a strong intention to study abroad or to communicate with foreign scientists in English. All course activities including lectures, homework assignments, questions and consultations are conducted in English. The purpose of this course is to introduce and explain various methods in mathematical science.

Prerequisites: Knowledge of basic undergraduate mathematics including calculus and linear algebra.

Topics to be covered:

A. FUTABA Fujie: Graphs and Matrices

One can find many results in the area of graph theory where linear algebra plays an important role. For example, the Matrix-Tree Theorem determines the precise number of spanning trees contained in a given graph using matrices. A similar idea enables us to calculate the number of circuits having some special property in that graph. In this course, we will study some well-known matrices associated with a graph and their properties as well as what they can tell us about the original graph.

We will first introduce ourselves to some well-known concepts and terminology in graph theory, then will focus on three graph-related matrices, namely adjacency matrices, incidence matrices, and Laplacian matrices, and their properties. A more detailed plan will be presented at the first lecture.

Reference Materials:

- [1] R. B. Bapat, *Graphs and Matrices*, Springer (2011).
- [2] D. B. West, *Introduction to Graph Theory*, Prentice Hall (2000).

B. Jaques GARRIQUE: Computability and the lambda calculus

What does it mean to be “computable”? This question first appeared in mathematical logic. Mathematicians, trying to fulfill the Hilbert Project of finding theorems according to rules, discovered problems whose solution could not be automated. To explain this, in 1936, Turing, Kleene and Church gave different definitions of computability, and proved the existence of non-computable functions. Immediately afterwards, they proved that those three completely different definitions were actually equivalent. In this lecture we will learn the basics of computability, and the corresponding computational models. In particular we will emphasize Church's lambda-calculus, as it plays an important role in computer science.

A detailed plan (syllabus) will be given at the first lecture. The following topics should be introduced:

- Turing Machine
- Recursive function
- Lambda calculus
- Halting problem

Reference Materials:

- [1] 高橋正子『計算論計算可能性とラムダ計算』近代科学社, 1991.
- [2] Neil D. Jones, *Computability and complexity from a programming perspective*, MIT Press, 1995.
- [3] Henk Barendregt, *The lambda-calculus: Its syntax and semantics*, North-Holland, 1981.

C. Lars HESSELHOLT: Kummer's ideal numbers

In 1847, Lamé and Cauchy announced proofs of Fermat's last theorem in a meeting of the French Academy of Sciences. Shortly thereafter, however, Kummer pointed out a fatal error in the proofs. In a way, this was a most fortunate turn of events, for some very important parts of modern mathematics grew out of Kummer's work. This portion of the course will present some parts of this mathematics. In the end, I will present a conjecture of Kummer--or as he wrote, “a theorem still to be proved”--that to this day remains an important open problem.

Lecture 1: Rings, modules, and their homomorphisms. Matrices. Simple rings and their classification. Semi-simple rings.

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Lecture 2: Free modules and projective modules. Every projective module over a local ring is free. The Grothendieck group.

Lecture 3: Invertible modules over a commutative ring and the Picard group. Dedekind domains and their Picard groups. The Picard group of a ring of integers in a number field is finite.

Lecture 4: Rings of integers in cyclotomic fields and their Picard group. Kummer's theorem on regular prime numbers. The Kummer-Vandiver conjecture.

Reference Materials:

[1] Charles A. Weibel, *The K-book: An introduction to algebraic K-theory*, Graduate Studies in Math., vol. 145, Amer. Math. Soc., Providence, RI, 2013. Available for free download at www.math.rutgers.edu/~weibel/Kbook.html.

Evaluation:

Attendance and report problems, as assigned by each instructor. The final grade will be decided according to the totality of the scores

School of Science

1. Advanced Quantum Chemistry

Co-ordinator: Stephan IRLE
Class: Wednesdays, 10:30~12:00
Place: School of Science Building B, Lecture Room 3 <B-116>

Prerequisites: Basic knowledge of quantum chemistry and some familiarity with electronic-structure theory and/or molecular dynamics techniques.

In complex reaction systems at high temperatures, following the minimum energy pathways on the potential energy surface is not only impossible, but will entirely neglect important entropic effects during the reactions. Quantum chemical molecular dynamics (QM/MD) simulations have recently elucidated the formation as well as erosion mechanisms of nanomaterials such as fullerenes, carbon nanotubes, and graphenes. In this class, all theoretical concepts important for QM/MD simulations will be covered.

Topics to be covered:

1. Born-Oppenheimer approximation and potential energy surfaces (PESs)
2. Location and characterisation of stationary states on the PES
3. Comparison: Molecular mechanics and quantum chemical methods
4. LCAO-MO theory; Hartree-Fock theory
5. Basis sets in quantum chemical calculations
6. The electron correlation methods)
7. Quantum chemistry and the bond breaking/formation problem
8. Density-based methods: Kohn-Sham theory, density functional theory (DFT)
9. Time-dependent Density Functional Theory
10. Density-Functional Tight-Binding
11. Integrated and Multiscaling Methods, ONIOM
12. QM/MD simulations: BOMD, CPMD, LvNMD

Textbook:

Self-made scriptum

Reference Materials:

Thomas Engel, *Quantum Chemistry & Spectroscopy, 2nd Edition*, Prentice Hall
M. P. Allen, D. J. Tildesley (1989), *Computer Simulation of Liquids*, Oxford University Press (ISBN 0-19-855645-4)

Courses in the Student's Major

A self-prepared script

Evaluation:

Final Examination: 40%
Six Assignments: 10% each

2. Computational Chemistry

Co-ordinator: Stephan IRLE
Class: Thursdays, 8:45~10:15
Place: School of Engineering, ES Building, Room 032 (Satellite Lab>

“How can I use computers in chemistry?” The purpose of this course is to introduce computer science from a chemist's perspective. The course begins with an introduction to the basic use of computers for data search, and introduces FORTRAN 90 as a way to solve simple scientific problems in an efficient way.

NB. As students will use computers during class time, it is imperative that they bring their student ID cards, computer system IDs and passwords.

Topics to be covered:

1. Using the computer: Searching for information
2. Constructing and viewing 3-dimensional models of molecules: GaussView, MOLGEN programs
3. Overview over commercial molecular modeling packages
4. Introduction to FORTRAN 90: Compilers, etc.
5. Data Types, Constants, and Variables
6. If, else if, case expressions
7. Do loops
8. Formatted input
9. Formatted/Unformatted output
10. Subprograms
11. Application: Data processing
12. Bohr atom model

Textbook:

Self-made scriptum

Larry Nyhoff, Sanford Leestma: *Introduction to FORTRAN 90*

Thomas Heine: *Computer Chemistry Workbook*, VCH, Weinheim.

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