NUPACE Academic Policies & Syllabi

Autumn 2010

名古屋大学短期交換留学 プログラム

NUPACE Academic Calendar & Policies – Autumn 2010

(Vernal Equinox Day)

1. Calendar

Mar 21

Oct 1 ~ January 27	NUPACE (Japan area studies; majors) & regular university courses
Oct 12 ~ Feb 7	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 24 ~ Jan 10	Winter vacation for UWJLP programme
Apr 13	Spring 2011 semester commences

National Holidays (No classes will be held on the following days) (Health-Sports Day) Oct 11 体育の日 Nov 3 文化の日 (Culture Day) Nov 23 (Labour Thanksgiving Day) 労働感謝の日 (Emperor's Birthday) Dec 23 天皇誕生日 Jan 10 成人の日 (Coming-of-Age Day) Feb 11 建国記念日 (National Foundation Day)

2. List of Courses Open to NUPACE Students

春分の日

Japanese & Other Language Programmes		р7
Standard Course in Japanese (7 Levels: SJ101~SJ301)	1~5 crdts	p 9
Intensive Course in Japanese (6 Levels: IJ111~IJ212)	2~10crdts	p 9
漢字 <kanji>1000, 2000</kanji>	1 credit	p 10
オンライン日本語 <online japanese="">(中上級読解・作文)</online>	0 credits	p 10
ビジネス日本語 I, II, III	1 credit	p 10
入門講義 <j>* (ECIS Introductory Courses Taught in Japanese)</j>		
国際関係論 I (Global Society I)	2 credits	
日本文化論 I (Introduction to Japanese Society & Culture I)	2 credits	p 11
日本語学・日本語教育学 I (Introduction to Japanese Linguistics I)	2 credits	
言語学入門 I (Introduction to Linguistics I)	2 credits	p 12
* <j> Courses which require at least level 2 of the Japanese Language Proficiency Test (JLPT) or equivalent.</j>		
Other Foreign Language Courses (Graduate School of Languages & Cultures)	2 credits	p 13
Japan Area Studies		
A Multicultural Approach to Contemporary Issues	2 credits	1
Science & Technology in Japan	2 credits	p 14
Courses in the Student's Major		
Education Center for International Students		
<u>Education Center for International Students</u> Sociology of Education: Equity, Citizenship, and Inclusion	2 credits	1
Education Center for International Students	2 credits 2 credits	1
<u>Education Center for International Students</u> Sociology of Education: Equity, Citizenship, and Inclusion Teaching in the Japanese Community (GIS) <u>School of Agricultural Sciences:</u>	2 credits	p 16
<u>Education Center for International Students</u> Sociology of Education: Equity, Citizenship, and Inclusion Teaching in the Japanese Community (GIS)		p 16
<u>Education Center for International Students</u> Sociology of Education: Equity, Citizenship, and Inclusion Teaching in the Japanese Community (GIS) <u>School of Agricultural Sciences:</u> Introduction to Bioagricultural Sciences <u>School of Economics</u>	2 credits	p 16
<u>Education Center for International Students</u> Sociology of Education: Equity, Citizenship, and Inclusion Teaching in the Japanese Community (GIS) <u>School of Agricultural Sciences:</u> Introduction to Bioagricultural Sciences	2 credits	р 16 р 17 р 17

<u>Ecotopia Science Institute</u> Neuromechanics & Control of Human Movement (Graduate)	2 credits	p 19
<u>School of Engineering:</u> Academic, Scientific, and Technical English Civil Engineering & Policies for Developing Countries II Introduction to Civil Engineering & Architecture Overview of Advanced Electrical, Electronic & Information Engineering	1 credit 2 credits 2 credits 2 credits	p 20 p 21
<u>Graduate School of Environmental Studies</u> Biological Resource Management Policies Biological Resource Management Projects Climate Change Policies Environmental Industry Systems Planning and Design Studio for Historical Environment (2 nd quarter; Graduate) Politics and Diplomacy in the International Environment (Graduate) Practice in Biological Resources Management Seminar on Precipitation Climatology A Studio Workshop of Architectural Design (1 st quarter; Graduate) Sustainability and Environmental Studies Water and Waste Engineering	2 credits 2 credits 2 credits 2 credits 2 credits 2 credits 1 credit 2 credits 2 credits 2 credits 2 credits 2 credits 2 credits	p 26 p 28 p 28 p 29 p 30 p 30 p 30 p 30 p 31 p 31
<u>Graduate School of Information Science</u> Selected Topics in Computer Science and Mathematical Informatics 2	2 credits	р 33
<u>Graduate School of International Development (GSID):</u> Human Security and Law Japan's Development Experience Special Lecture on Peace-building I: Peace-building and the Rule of Law	2 credits 2 credits 2 credits	p 35
<u>Graduate School of Languages & Cultures (GSLC):</u> Introduction to Sociolinguistics b Introductory Studies in International Culture b: Map Appreciation	2 credits 2 credits	-
<u>Graduate School of Law:</u> Comparative Studies in Administrative Law: Modern Administrative Law Comparative Studies in Political Thought: Political Theory in Modern Europe Comparative Studies in Politics II: Japanese Diplomacy & International Politics Politics & Law in Japan Professional Studies in International Human Rights Law II:	2 credits 2 credits 2 credits 2 credits	p 39 p 39
Seminar on Human Rights and Refugee Law Special Lecture and Seminar: Workshop on International Negotiation Special Lecture and Seminar: Legal & Business Ethics in Developing Countries Special Lecture and Seminar: <i>Yomiuri Shimbun</i> Special Lecture –		p 35 p 41
Comparative Asian Corporate Theory Studies in Jurisprudence: Law as Political Theory (1-year course)	2 credits 2 credits	
<u>School of Letters:</u> Iconicity in Language and Literature 日本言語文化入門 II (Introduction to Japanese Language & Culture II) <j></j>	2 credits 2 credits	
<u>Graduate School of Mathematics:</u> Perspectives in Mathematical Sciences II (Graduate)/IV (Undergraduate)	2 credits	p 46
<u>School of Science:</u> Advanced Quantum Chemistry	2 credits	p 47

3. Class Timetable: Japan Area & Intercultural Studies, Courses in the Student's Major, and 入門講義 <J> (Introductory Courses)

Unless indicated otherwise, the following courses commence on <u>Friday</u>, <u>October 1, 2010</u>. 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.

>	Mon	Tue	Wed	Thu	Fri
l 08:45-10:15		Income Theory & Applications (Economics, Sem. Rm. 5)	Special Lect. & Sem: Workshop on International Negotiation (IRB Humanities & Soc. Sc., Rms. 409~410) Biological Resource Management Projects (Env. Studies, Lect. Rm. 3)	Water and Waste Engineering (Env. Studies, Lect. Rm. 1) Studio Workshop of Architectural Design <1 st quarter> (Eng. Bldg. 3 <n>, 3F, 338) Planning & Design Studio for Historical Env. <2nd quarter> (Eng. Bldg. 3 <n>, 3F, 338)</n></n>	
			•	Special Lecture on Peace-building I (GSID, Seminar Rm. 9)	
ll 10:30-12:00	Comp. Studies in Administrative Law: Modern Admin. Law (IRB Humanities & Soc. Sc., Rm. 407)		Science & Technology in Japan (Eng. Bldg. 1 <new>, Rm. N121)</new>	Int'l Culture b: Map Appreciation (IRB Humanities & Soc. Sc., Rm. 623)	Sustainability & Environmental Studies (Env. Studies, Lect. Rm. 3)
	Introduction to Sociolinguistics b (IRB Humanities & Soc. Sc., Rm. 609)		Advanced Quantum Chemistry (Science Bldg. B, Lecture Rm. 3 <b-116>)</b-116>	Environmental Industry Systems (Env. Studies, Lect. Rm. 1)	
	Iconicity in Lang. & Literature (IRB Hurmanifies & Soc. Sc., Rms. 308–309)		Comp. Studies in Politics II: Japanese Diplomacy & Int'l Politics (Law, Sem. Rm. 905)	Studio Workshop of Architectural Design <1 st quarter> (Eng. Bidg. 3 <n>, 3F, 338) Planning & Design Studio for Historical Env. <2nd quarter> (Eng. Bidg. 3 <n>, 3F, 338)</n></n>	
III 13:00-14:30	国際関係論 I <j> (ECIS, Rm. 207E) <u>From Oct. 18</u></j>	Politics & Law in Japan (IRB Humanities & Soc. Sc., Rms. 409~410)	Japan's Development Experience (GSID, 8F, Auditorium)	Prof. Studies in International Human Rights Law II: Seminar on Human Rights and Refugee Law (Law, Sem. Rm. 905)	Intro to Civil Eng. & Architecture (Eng. Bldg.8, Rm. 210)
	Climate Change Policies (Env. Studies, Lect. Rm. 1)	Overview of Adv. Electrical, Electronic & Information Eng. (Eng. Bldg. 1, Rm. 132)	Civil Engineering & Policies for Developing Countries II (Eng Bldg. 8, Rm. 108)	Sociology of Education: Equity, Citizenship, & Inclusion (Inter-departmental Education Bldg <school &<br="" informatics="" of="">Sciences>, Rm. C14)</school>	Special Lect. & Sem: Legal & Business Ethics in Developing Countries (Law, Sem. Rm. 905)
	Seminar on Precipitation Climatology (Hydrospheric- Atmospheric Research Ctr., Lect. Rm. 301)	Practice in Biological Resource Management (<i>Env. Studies, Sem. Rm.</i> 2) Perspectives in Mathematical Sciences II/IV (<i>Sc., Bidg. 1 <maths>,</maths></i> <i>Rm.</i> 109)	Computer Science & Mathematical Informatics 2 (Grad. School of Info Sc., Rm. 3)	日本文化論 I <j> (ECIS, Rm. 207E) <u>From Oct. 14</u></j>	言語学 I <j> (ECIS, Rm. 207E) <u>From Oct. 15</u></j>
IV 14:45-16:15	Politics & Diplomacy in the Int'l Environment (Grad. School of Info. Sc., 1F, Lect. Rm. 4)	Overview of Adv. Electrical, Electronic & Information Eng. (Eng. Bldg. 1, Rm. 132)	Special Lect. & Sem: Yomiuri Shimbun Special Lect Comp. Asian CorporateTheory (Law, Sem. Rm. 905) From Oct. 13	ビジネス日本語III <i>(Rm.TBA)</i> <u>From Oct. 14</u>	Comp. Studies in Political Thought: Political Theory of Modern Europe (Law, Sem. Rm. 905)
	Neuromechanics & Control of Human Movement (Eng. Bldg 2, Rm. 231) 日本語学・		漢字 1000 (ECIS, Rm.201) From Oct. 13		Intro to Civil Eng. & Architecture (Eng. Bldg. 8, Rm. 210) ビジネス日本語I (ECIS, Rm.207W)
	日本語教育学 I <j> (ECIS, Rm. 207E) <u>From Oct. 18</u></j>		Cracial Last & Carry		From Oct. 15 A Multicultural Approach to
V 16:30-18:00	Biological Resource Management Policies (Env. Studies, Lect. Rm. 1)	Human Security and Law (GSID, Sem. Rm. 8)	Special Lect. & Sem: Yomiuri Shimbun Special Lect Comp. Asian CorporateTheory (Law, Sem. Rm. 905) From Oct. 13	ビジネス日本語II <i>(Rm.TBA)</i> <u>From Oct. 14</u>	Contemporary Issues (ECIS, Rm. 207W)
	Studies in Jurisprudence:	日本言語文化入門 II <j></j>	Law and Economics Workshop (Economics, Sem. Rm. 5)		Academic, Scientific, & Technical English <i>(IB, Rm. 011)</i> 漢字 2000
	Law as Political Theory (IRB Humanities & Soc. Sc., Rm. 411)	(Letters, Lect. Rm. 237)	Intro to Bioagricultural Sciences (Agric. Sc., Rm. B319)		(ECIS, Rm.201) From Oct. 15

4. Other Courses/その他の授業

Students participating in NUPACE may be 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. $49 \sim 50$) and confirm with the instructor(s) of the course(s) in question that 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.

<u>Pre-requisites and Restrictions Regarding Registration for</u> <u>Other Courses:</u>

- 1. Unless specified otherwise, students must have obtained level one of the Japanese Language Proficiency Test. (Foreign language courses are exempted from this requirement.)
- 2. Students may not register for any sport/physical exercise courses.
- 3. Students may not take more than one foreign language course per semester. (Japanese is not included in this requirement.)

Guided Independent Study

In their <u>second semester</u> 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 \rightarrow 2 credits	30 pages \rightarrow 6 credits
20 pages \rightarrow 4 credits	40 pages \rightarrow 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: 『指導教賞・ 留学生 稙当著 のための 短期 留学生 受入れ 幸ニュテル』. 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(49-50 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

- 特に明記されていない限り、日本語能力検 定試験の1級に合格していなければいけま せん。(外国語の授業については、この条 件は免除されます。)
- 2. 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。
- 3. 日本語の授業を除き、一学期に履修できる 外国語の授業は一つまでです。

GIS(個人勉学指導)

名古屋大学での勉学が二学期目に入ると、 GIS(個人勉学指導)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。

10 ページ→2 単位	30 ページ→6 単位
20 ページ→4 単位	40 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け 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。

5. Grading System

Credit-seeking Students:

With the exception of 'Special Research Students', NUPACE students are required to register for a minimum of <u>15 credit hours</u> per semester, or a total of <u>30 credit hours per academic year</u>. 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 UCTS (UMAP Credit Transfer Scheme). 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 UCTS 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せなか 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、そのうちー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 UCTS(アジ ア太平洋大学交流機構単位評価方式)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 UCTS 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/UCTS 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				

(Nagoya University will not adopt the grades E and Fx, as employed by the UCTS grading system)

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, 29 October 2010**. Requests for amendments to course registration details after this date will not be accepted.

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、2010年10月29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。

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 their period of exchange. 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 2010 semester: Thursday, February 10, 2011.

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・ 物学生 担当者 の た め の 短期 留学生 受入れ *マニュアル』.

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、交換留学が修了する前に研究成果の報 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(2010 年度後期):2011 年 2 月 10 日(木)

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 学生受け入れマニュアル』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 TakaoPlace:Education Centre for International Students. (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* 1000' 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.

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.

Textbooks:

- A Course in Modern Japanese Vol. 3「現代日本語コース中級I」 compiled and edited by the Japanese Language Education Research Group, Nagoya University (1993)
- 「現代日本語コース中級I 聴解ワークシート 予習・授業シート」compiled and edited by the Japanese Language Education Research Group, Nagoya University (1993)

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.

Textbooks:

- A Course in Modern Japanese Vol. 4「現代日本語コース中級 II」compiled and edited by the Japanese Language Education Research Group, Nagoya University (1993)
- 「現代日本語コース中級 II 聴解ワークシート 予習・授業シート」compiled and edited by the Japanese Language Education Research Group, Nagoya University (1993)

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 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.

Japanese Level			Textbook			
Elementary I			SJ101			A Course in Modern Japanese Vol. 1
Elementary II			SJ102			A Course in Modern Japanese Vol. 2
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)	『現代日本語コース中級I』
Intermediate II	SJ202 (C1 & C2)		SJ202(R)	SJ202(L)	SJ202(G)	『現代日本語コース中級 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

Standard Japanese Course Structure

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 Ia	apanese Course	Structure ((Elementary	I to	Pre-intermed	iate)
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Japanese Level	Clas	ss Name	Textbook
Elementary I	IJ111		A Course in Modern Japanese Vol. 1
Elementary II	IJ112		A Course in Modern Japanese Vol. 2
Pre-intermediate			To Be Announced

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

Courses in Japanese & Other Languages

					Class	Name/SI	cill				
Japanese Level	Conversation 1		ConversationConversationReading12		Listening		Grammar/ Discourse		Textbook		
Pre-intermediate		IJ21			IJ211		IJ211		IJ211		To Be Announced
Intermediate I	IJ212 (C1)	(C1 &	C2)	IJ212 (C2)	(R)	IJ212 (R)	(L)	IJ212 (L)	(G)	IJ212 (G)	『現代日本語コース 中級I』
Intermediate II											『現代日本語コース 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.

3. 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』

4. 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』

5. オンライン日本語<Online Japanese>(中上級読解・作文)

日本語の授業に出席することが時間の関係などで難しい留学生のために、Web 上で教材を配布し、学習者からの解答に対しフィードバックを返すというものです。受講者は学内LANで、日本語入力可能なものに限ります。登録 者にはパスワードを発行するので、詳しくは留学生センターホームページをご参照ください。プレイスメントテストは 不要です。

登録する人は g44420a@cc.nagoya-u.ac.jp にメールしてください。パスワードを発行します。

6. ビジネス日本語 I, II, III

This course is aimed at students seeking employment at Japanese companies. It also caters to students who want to deepen their understanding of Japanese business communication. Participants in this course will acquaint themselves with Japanese business manners and learn expressions used in the Japanese business world.

将来、日本の企業に就職を希望する人はもちろん、日本人のビジネスコミュニケーションに対する理解を深めたい 留学生を対象とし、日本のビジネス・マナー及びビジネスで用いられる日本語表現を身につける。

Textbook:

『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

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

NB. The following courses are taught in Japanese and require at least level 2 of the Japanese Language Proficiency Test (JLPT) or equivalent.

1. 国際関係論 I (Global Society I)

Co-ordinator:	AKIYAMA Yutaka
Class:	Mondays, 13:00~14:30
Place:	Education Centre for International Students (ECIS), Rm. 207E

遠く離れた場所で起きたできごとや自分がまったく知らないできごとが距離・時間の隔たりなく人々の生活、健康な どに影響をあたえるようになった。さらに貿易、資本、情報の流れにおける国境だけでなく、考え方や規範、価値観 といった面でも国境の存在が薄らいできた。このような空間の縮小、時間の短縮、国境の消滅ははたして一つの地 球村の形成につながるのであろうか。その可能性はあなたが何者であるかによるのかもしれない。国家、経済、人々 が盛んに行き交う時代、いわゆるグローバリゼーションは世界を一つにするのか、あるいはバラバラにしてしまうのか。 グローバリゼーションがもたらす正負の側面を概観する。

Topics to be covered (tentative):

世界の統合
 1-1グローバル・キャピタル
 1-2グローバル文化
 世界の分断
 2-1拡大する不平等
 2-2雇用と収入の不安
 不安定な世界
 3-1金融市場
 3-2グローバル犯罪
 3-3 沈黙の緊急課題:環境悪化
 地球社会?
 4-1グローバル・ガバナンス
 4-2グローバルNGOネットワーク

Reference Materials:

資料配布

Evaluation:

出席率・積極性・レポート

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. 207E

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<u>やり</u> <u>ません</u>。「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 [(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。

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・籾山洋介『よくわかる言語学入門』バベル・プレス 町田健・籾山洋介他『言語学大問題集 163』大修館書店 籾山洋介『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

Graduate School of Languages & Cultures (GSLC)

The Graduate School of Languages and Cultures offers a variety of language courses (Ainu, Chinese, Dutch, English, French, German, Classical Greek, Italian, Korean, Latin, 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

Registration Period:Tue, Sep 21, Wed, Sep 22 at 09:00~12:00 and 13:00~17:00Class Placement:Notice-board <university-wide courses>, 1F, Inter-departmental
Education Bldg (School of Informatics & Sciences), 9:00 on Tue, Sep 28.

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) between Fri, Oct 1 and Mon, Oct 18. 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 by 17:00 on Tue, Oct 19.

NB. English language classes commence on Fri, Oct 1, 2010. Classes in languages other than English commence in the second week of the semester (i.e., in the week starting on Fri, Oct 8).

Japan Area Studies

1. A Multicultural Approach to Contemporary Issues

Co-ordinator:Michelle HENAULT-MORRONEClass:Fridays, 16:30~18:00Place:Education Center for International Students, Room 207W

This course begins with an overview of Japanese education with particular emphasis on social development influencing education from the post-war period to the present time. It is hoped that an examination of certain patterns that occur in Japanese society (early education, etc.) will shed light on an environment where the dynamics of "tradition" and "change" coexist, upsetting yet renewing, the current social milieu.

Topics to be covered:

Assigned readings relating to the discussion topics are to be read prior to class. Movies/documentaries provide supplemental materials in order to enrich the student's understanding of the subject of analysis. Topics to be discussed include:

- 1. Introduction
- 2. Culture and Society
- 3. Amae
- 4. The Japanese Self
- 5. Preschool Preparation for Life
- 6. Preschool in Three Cultures
- 7. Elementary education Initiation Due
- 8. Returnees, Dropouts and Bullies
- 9. Safety Concerns
- 10. Gender Issues
- 11. Presentation Preparation
- 12. Presentation Preparation
- 13. Presentation Preparation (outside class)
- 14. Presentations
- 15. Presentations and Final Individual Reports

Reference Materials:

Copies prepared by instructor. Check for reserved readings.

Evaluation:

Participation, in-class assignments, and attendance:30%Final Assignment:35%Final Group Presentation:35%

2. Science & Technology in Japan

Co-ordinator:	Mehrdad PANAPOUR TEHRANI (panahpour@nuee.nagoya-u.ac.jp)
Class:	Wednesdays, 10:30~12:00
Place:	School of Engineering, Bldg. 1 (New), Room N121

This course introduces the history, the current state and future prospects of R&D (research and development) in Japan's Industries. This class will be held in "omnibus-style", and lectured in English.

Topics to be covered:

- 1. Image Processing
- 2. Embedded Computing Systems
- 3. Famous Electron Microscopists in Japan

Course Schedule:

Oct 6	Guidance	(K. TATSUMI)
Oct 13	Guidance	(K. TATSUMI)
Oct 20	Image processing Technologies – Applications	(M. P. TEHRÁNI)
Oct 27	No Class	
Nov 10	Advanced Image Processing Technologies - Computer Vision	(M. P. TEHRANI)
Nov 17	Future Image Processing Technologies – 3D Vision	(M. P. TEHRANI)
Nov 24	Embedded Computing Systems – Fundamentals and Trends	(G. ZENG)
Dec 1	Advanced Embedded Computing Systems - Low Energy Design	(G. ZENG)
Dec 8	Advanced Embedded Computing Systems – Automotive Applications	(G. ZENG)
Dec 15	Sumio Iijima: High Resolution Image of Carbon Nano-tube	(K. TATSUMI)
Dec 22	Akira Tomomura: Electron Holography	(K. TATSUMI)
Jan 5	No Class	
Jan 12	Present and Future Possibilities of Electron Microscopy	(K. TATSUMI)
Jan 19	Presentation	(All Lecturers)
Jan 26	Presentation and Questionnaire	(All Lecturers)

References:

Digital Image Processing, Rafael C. Gonzalez & Richard E. Woods, Addison-Wesley, 2002.

Machine Vision: Automated Visual Inspection and Robot Vision, David Vernon, Prentice Hall, 1991. (Available online at: homepages.inf.ed.ac.uk/rbf/BOOKS/VERNON/)

Programming Embedded Systems, Second Edition, Michael Barr and Anthony Massa, O'Reilly Media 2006

Designing Embedded Processors: A Low Power Perspective, Henkel, Jeorg and Parameswaran, Sri, Springer Published 2007.

Transmission Electron Microscopy A Textbook for Materials Science, Williams, David B., Carter, C. Barry, Springer

Transmission Electron Microscopy Physics of Image Formation, L. Reimer, H. Kohl, Springer

Evaluation:

Attendance 40%

One report per lecture: 30%

(Summarize the content of each lecture in a single A4 page and submit it as a DOC file by email to the corresponding lecturer by the next lecture. Be innovative and perhaps include your idea and related topics in the report.)

Final presentation:

(Choose a topic of interest from the lectures content or your topic of interest. Presentation time is 10min, following with 5min Q&A.)

Contacts:

Kazuyoshi Tatsumi Tel: 5135/Fax: 5137

Email: k-tatsumi@nucl.nagoya-u.ac.jp

Gang Zeng Tel: 5147/Fax: 5889 Email: sogo@ertl.jp

Mehrdad Panahpour Tehrani Tel/Fax: 3628 Email: panahpour@nuee.nagoya-u.ac.jp

30%

Education Center for International Students

1. Sociology of Education: Equity, Citizenship, and Inclusion

Co-ordinator:KITAYAMA YukaClass:Thursdays, 13:00~14:30Place:Inter-departmental Education Bldg (School of Informatics & Sciences), Rm. C14

This course aims to introduce sociological approaches to issues in education, especially those related to equity, citizenship, and nationality. The course pays particular attention to different backgrounds of social inclusion and exclusion in the context of education. Also, focusing on equity in education, students are expected to examine these issues by analysing qualitative and quantitative data. Assigned reading materials relating to topics are to be read prior to class.

Topics to be covered:

- 1. Ideology and education in pre-War/post-War Japan
- 2. Education and Power
- 3. Liberal nationalism and Cosmopolitan Citizenship
- 4. Citizenship and Identity in Japanese Education.
- 5. Equity in School: Class, ethnicity, gender
- 6. Academic Achievement and Social Capital
- 7. Meritocracy and the Japanese School
- 8. Data Analysis: PISA test (Programme for International Student Assessment)

Reference Materials:

To be distributed in class.

Evaluation

Participation and attendance:	30%
Presentation:	30%
Report:	40%

2. Teaching in the Japanese Community (GIS)

Co-ordinator:	Claudia ISHIKAWA (k46189a@cc.nagoya-u.ac.jp)
Class:	Teaching Practice Sessions: 16:30~18:00 once per week (Wednesdays) from
	November 10, 2010 to January 12, 2011 (8 times). Each class will consist of 45
	minutes of teaching time, and 45 minutes of interaction with the children.
Place:	Teaching Practice Sessions: Nagoya University Poppins After-School
No. of Credits:	2
Maximum Capacity	4 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 6, 2010.

This guided independent study involves teaching English to, and developing a rapport/playing with approximately ten elementary school-aged children (ages 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.

Evaluation:

- 1. English-Language Lesson Plan: 20% (2 sides A4-sized paper + Poppins prescribed lesson plan form; submission deadline: Wednesday, Wednesday October 27, 2010.)
- 2. Final Report: 80% (4~6 sides of A4-sized paper; submission deadline: Wednesday, January 19, 2011.)

School of Agricultural Sciences

Introduction to Bioagricultural Sciences

Co-ordinator:	MURASE Jun
Class:	Wednesdays, 16:30~18:00
Place:	School of Agricultural Sciences, Room B319

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. All lectures are given in English.

Topics to be covered:

1. Introduction	(MURASE Jun)
2. Ecology of Irrigated Rice Fields I	(MURASE Jun)
3. Ecology of Irrigated Rice Fields II	(MURASE Jun)
4. International Co-operation for Agricultural Development	(ITO Kasumi)
5. Basic Reproductive Endocrinology I	(MAEDA Kei-ichiro)
6. Basic Reproductive Endocrinology II	(MAEDA Kei-ichiro)
7. Molecular Insect Sciences	(NIIMI Teruyuki)
8. Genetically Modified Crops I	(TANIGUCHI Mitsutaka)
9. Genetically Modified Crops II	(TANIGUCHI Mitsutaka)
10. Enzyme Engineering I	(IWASAKI Yugo)
11. Enzyme Engineering II	(IWASAKI Yugo)
12. Current Trends in Crop Production in Japan	(YAMAUCHI Akira)
13. Remarks	(MURASE Jun)

Evaluation:

Evaluation is based on attendance and written reports.

School of Economics

1. Income Theory and Applications

Co-ordinator:	ARAYAMA Yuko (Office Hours: Tue, Fri, 8:30~9:00)
Class:	Tuesdays, 8:45~10:15
Place:	School of Economics, Seminar Room 5

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

Topics to be covered:

- 1. Introduction (1): Microeconomic Foundations of Macroeconomics
- 2. Introduction (2): Major Economic Indicators and National-Income Accounting
- 3. Economic Growth (1): Barro's Interpretation of the Solow Model
- 4. Economic Growth (2): Long-Run Economic Growth
- 5. Markets in Macroeconomics (1): Household Budget Constraints
- 6. Markets in Macroeconomics (2): Consumption, Saving and Investment
- 7. Economic Fluctuations: Business Cycle Model
- 8. Money and Prices (1): The Demand for Money
- 9. Money and Prices (2): Inflation, Money Growth and Interest Rates
- 10. The Government Sector (1): Government Budget Constraint and Expenditure
- 11. The Government Sector (2): Tax and Public Debt
- 12. Money and Business Cycles (1): The Price-Misperception Model
- 13. Money and Business Cycles (2): Sticky Prices and Nominal Wage Rates
- 14. International Macroeconomics (1): World Markets in Goods and Credit
- 15. International Macroeconomics (2): Purchasing-Power Parity (PPP) and Exchange Rates

Textbook/Reference Materials:

Robert J. Barro, Macroeconomics: A Modern Approach < Textbook>

N. Gregory Mankiw, *MacroEconomics, 4th Ed.* Jack Hirshleifer et al, *Price Theory and Applications, 7th Ed.*

Evaluation:

Mid-term examination and term paper.

2. Law and Economics Workshop

Co-ordinators:	ARAYAMA Yuko & MATSUURA Yoshiharu
Class:	Wednesdays, 17:00~18:30 (every two weeks; check the workshop calendar)
Place:	School of Economics, Seminar Room 5

NB. This is a one-year course commencing in April. Those students attending for one semester only, or commencing the course in October, 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		
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.

Ecotopia Science Institute

Neuromechanics and Control of Human Movement

Co-ordinator:	OBINATA Goro
Class:	Mondays, 14:45~16:15
Place:	School of Engineering, Building 2, Room 231

NB. This course is only open 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 4 Structure of the nervous system
- Oct 18 Synaptic transmission
- Nov 1 Coding of sensory information 1
- Nov 8 Coding of sensory information 2
- Nov 15 Processing of sensory information
- Nov 22 Visual system
- Nov 29 Muscles and their control 1
- Dec 6 Muscles and their control 2
- Dec 13 Brain and motor output
- Dec 20 Integration systems: neural basis of behaviour 1
- Jan 17 Integration systems: neural basis of behaviour 1
- Jan 24 Summary

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

School of Engineering

1. Academic, Scientific, and Technical English

Co-ordinator:Laurence DRYDENClass:Fridays, 16:30~18:00 (seven meetings: Oct. 8, 22; Nov. 12, 26; Dec. 17; Jan. 14, 21)Place:IB, Room 011

This series of special lectures, conducted entirely in English, provides guided practice in written and spoken English in academic, scientific, and technical contexts. Lectures usually begin with a 45-minute illustrated presentation, followed by 45 minutes of 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. Academic style I: Sentences and paragraphs
- 4. Academic style II: Fine tuning
- 5. Academic style 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.

Evaluation:

Attendance and participation: Students who attend five or more lectures and participate earnestly in activities receive 1 credit. More detailed information will be given at the first lecture.

2. Civil Engineering and Policies for Developing Countries II

Co-ordinator:	YAMADA Shotaro (Rm. 9-312; Tel. 789-4621)
Class:	Wednesdays, 13:00~14:30 (~16:15)
Place:	School of Engineering, Building 8, Room 108

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 <u>Wednesday</u>, <u>October 3^{rd} , 2010</u>.

The objectives of this course are 1) to acquire a fundamental knowledge of planning, design, construction, and maintenance of infrastructure in Japan, as well as developing countries and, 2) to survey various issues in civil engineering, including environmental problems and the recent development of disaster mitigation activities.

Topics to be covered:

- 1. Evaluation of ODA Projects
- 2. Damage of Concrete Structures due to Earthquakes and Improvement of Seismic Performance
- 3. Ground Improvement Technology in Japan and Application Overseas
- 4. Significance of Genetic and Natural Resources and FDI for Economic Development

- 5. Strom Surge Disaster in Bangladesh
- 6. Global Material Flow and Limitation of Growth
- 7. Worldwide Challenge on Water-related Disaster and ICHARM's Activities
- 8. Infrastructure and Development
- 9. Transport Infrastructure Development in Developing Countries

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:	ITOH Yoshito (Room 7-306; 789-3905)
Class:	Fridays, 13:00~16:15 (Lessons will be held two to three times a month)
Place:	School of Engineering, Building 8, Room 210

NB. An orientation for this course, at which a detailed course schedule will be distributed, will be held on <u>October 1st, 2010</u>.

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 the modernising process of Japanese architecture and recent development of regional disaster mitigation activities.

Topics to be covered:

Oct 1	Orientation	(Prof. Y. Itoh/Prof. Y. Kitane)
Oct 22	Site-visit 1: Nagakute Cultural Center	(Prof. H. Shimizu/Assoc. Prof. K. Ikuta)
Oct 29	Site-visit 2: Nagoya City Museum	(Prof. H. Shimizu/Assoc. Prof. K. Ikuta)
Nov 5	Lecture 1: Social infrastructure and civil engineering	g (1)
	(Mr. Y. Matsui <	<central co.,="" expressway="" ltd.="" nippon="">)</central>
Nov 12	Site-visit 3: Highway Traffic Control Center and To	kai-Hokuriku Highway
		(Central Nippon Expressway Co., Ltd.)
Nov 19	Site-visit 4: Construction sites of Nagoya 2 nd Circle	Line
		(Central Nippon Expressway Co., Ltd.)
Dec 3	Lecture 2: Social infrastructure and civil engineering	g (2)
	(Mr. Y. Matsui <	<central co.,="" expressway="" ltd.="" nippon="">)</central>
Jan 14	Site-visit 5: Nagoya University Disaster Mitigation &	& Management Office
	(http://www.seis.nagoy	a-u.ac.jp/taisaku/) (Assoc. Prof. J. Tobita)

Evaluation:

Students will be evaluated on attendance and written reports.

4. Overview of Advanced Electrical, Electronic & Information Engineering

Co-ordinator:	OKUMA Shigeru
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:

- 1. High Temperature Superconductors
- 2. Supercomputers and Space Plasma Simulations
- 3. Better Life with Plasma Electronics
- 4. Silicon integrated Circuits History, Present Status, and Future Prospects
- 5. FTV (Free-viewpoint Television) The Ultimate 3D Visual Media
- 6. Introduction to Algorithms
- 7. The Data-centric Approach to Understanding Human Behaviour
- 8. Visit to TOYOTA MOTOR CORPORATION
- 9. Visit to DENSO CORPORATION
- 10. Visit to CHUBU ELECTRIC POWER CO. INC.
- 11. Visit to NIPPON TELEGRAPH & TELEPHONE CORPORATION

Evaluation:

Written reports after each lecture and plant visit.

Graduate School of Environmental Studies

1. Biological Resource Management Policies

Co-ordinator:WATANABE Mikihiko (miwata@urban.env.nagoya-u.ac.jp)Class:Mondays, 16:30~18:00Place:Graduate School of Environmental Studies, Lecture Room 1

The objective of the course is to provide students with: 1) an explanation of the contents of biological and genetic resources; 2) a definition of access and benefit-sharing of the resources (ABS); 3) a description of the political situation of ABS; and 4) an introduction of cases of resource utilisation. Students are required to understand the meaning of biological and genetic resources and understand the significance of the resources in the context of biologicry conservation. Political situations regarding resources are especially necessary to understand.

Topics to be covered:

- 1. Plan of the Course/What are biological and genetic resources?
- 2. CBD and Access to Biological Resources and Benefit-sharing (ABS)
- 3. CBD, ABS, and the International Regime Political situation
- 4. CBD and Traditional Knowledge (TK)
- 5. Intellectual Property Rights (IPRs) and Biological and Genetic Resources Discussion on 'bio-piracy', TK, and intellectual property rights (IPRs)
- 6. Economic Values of Biological Resources in the Context of ABS
- 7. The Commons A unique community resources management scheme
- 8. Case 1 (Strategy): Bio-prospecting Classic case of Merk-INBO
- 9. Case 2 (Policy): Investing in biodiversity Case of Indonesia
- 10. Case 3 ()nternational Policy): Those who have both abundant resources an technology Australia
- 11. Presentation by Students and Discussion 1
- 12. Presentation by Students and Discussion 2
- 13. Presentation by Students and Discussion 3
- 14. Summary of Lectures

Lecture Plans:

1. Plan of the Course/What are biological and genetic resources?

The first lecture provides students with a detailed plan of the structure of the course and its aims. This

will be followed by an explanation of definitions of biological and genetic resources. Biological and genetic resources (biological resources, in short) are the main components of biodiversity and they are crucial sources for biotechnology and bio-industry. A knowledge of the utilisation of the resources comprises a critical step to understanding biodiversity conservation, its sustainable use, and fair and equitable sharing of the benefits.

Contents

- 1 Definition of biological and genetic resources
 - 1) Definition
- 2 Differences in definitions
 - 1) Some factors that change definitions
 - 2) Difference in recognition Old-biotechnology and new-biotechnology
- 3 Categories of resources
 - 1) Utilisation in various markets and fields

References

[1] Convention on Biological Diversity, Convention Text,

http://www.cbd.int/convention/convention.shtml

[2] Kate, K. T. and Laird, S. A. (1999) The commercial use of biodiversity – access to genetic resources and benefit-sharing, Earthscan

2. CBD and Access to Biological Resources and Benefit-sharing (ABS)

The Convention on Biological Diversity stipulates how the contracting parties should treat biological and genetic resources. Amongst the three objectives of CBD, the third objective is the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources and is called 'ABS'. ABS has critical role in biological resources management. In order that the students can understand its meaning, the lecture will be given using components below.

Contents

- 1 ABS its original meaning, intention and Article 15
 - 1) Article 15
 - 2) Meanings of PIC and MAT
 - Other related Articles 8(j), 16, and 19
- 3 ABS in problematic the reasons why it is stagnating
 - 1) Technical limitation
 - 2) Historical background and emotional and emotional factors e.g. plant hunters
 - 3) Prominent characteristics of biological and genetic resources

References

[1] Convention on Biological Diversity, Official Website, http://www.cbd.int/

[2] Secretariat of the Convention on Biological Diversity (2008) Access and benefit-sharing in practice: trends in partnerships across sectors, Technical Series No. 38

[3] Japan Bio-industry Association (2007) *High-level expert meeting in Tokyo 2007 – Addressing the access and benefit-sharing (ABS) challenges in the context of the Convention on Biological Diversity,* Symposium proceedings held on 8th and 9th February 2007 in Tokyo, organised by Japan Bio-industry Association

3. CBD, ABS, and the International Regime - Political situation

As explained in the previous lecture, ABS is stagnating, partly because of its technical difficulties and partly because of its political situation. The better description might be that ABS is often treated as a political rather than technical matter because of some difficulties. In order to resolve this problem and improve the situation, CBD required the contracting parties to negotiate the international regime (IR) that is expected to become a 'regime' to facilitate the access and benefit-sharing. The lecture explains nature and situation of IR.

Contents

1 Concept of misappropriation - 'Bio-piracy'

2 Emergence of Like-Minded Mega-Diverse Countries (LMMCs)

3 Mandate of International Regime (IR)

4 International certificate of origin/source/legal provenance

References

[1] Mgbeoji, I. (2006) Global biopiracy - patens, plants, and indigenous knowledge, UBC Press

[2] Reports of the meetings of the Ad Hoc Open-ended Working Group on Access and Benefit-sharing, http://www.cbd.int/abs/

[3] Report of the meeting of the Group of Technical Experts on an international recognized certificate of origin/source/legal provenance, http://www.cbd.int/doc/?mtg=absgte-01 (sited on 5th August 2009)

4. CBD and Traditional Knowledge (TK)

Traditional knowledge (TK) plays an important role in management of biological and genetic resources. Organic substances with no economic values may become resources with high economic values by TK. Handling TK simultaneously has to bear technical difficulties, partly because it is intangible and partly because it is difficult to judge for whom it belongs. In order that the students understand what TK is, the lecture consists of the components below.

- 1 Meaning of traditional knowledge
- 2 Retention of TK by indigenous people and local communities
- 3 Protection or utilisation of TK
- 4 Akwe: Kon Guidelines

References

[1]Laird, S. A. (2002) Biodiversity and traditional knowledge – equitable partnerships in practice, Earthscan [2]Muller, M. R. (2006) The protection of traditional knowledge: Policy and legal advances in Latin America, IUCN

5. Intellectual property rights (IPRs) and Biological and Genetic Resources – Discussion on 'bio-piracy', TK, and intellectual property rights (IPRs)

Biological and genetic resources can be protected by intellectual property rights (IPRs), *i.e.* patents. Rights of inventors have to be protected by the law. This protection, however, may cause conflicts between providers of resources and users of them. In order to describe this situation, the lecture consists of the components below.

1 IPR and biodiversity

2 Related regime – TRIPs Agreement of WTO, discussion at WIPO

3 Conflict on TK – To whom does TK belong? Is it for every one? – A case of conflict between India and the US on turmeric

4 Discussion - Should TK be patented?

References

[1] Dutfield, G. (2000) Intellectual property rights, trade and biodiversity, Earthscan

[2] Dutfield, G (2004) Intellectual property, biogenetic resources and traditional knowledge, Earthscan

[3] Swanson, T. M. (1995) Intellectual property rights and biodiversity conservation – an interdisciplinary analysis of the values of medical plants, Cambridge University Press

6. Economic Values of Biological Resources in the Context of ABS

Biodiversity has a various economic values. In addition, biological and genetic resources are thought to have economic values. They are resources, because they have values. This lecture quickly reviews a basic classification of all the economic values. This is followed by introduction of valuation methods and classification at intermediary or advanced levels.

1 Classification of economic values - A quick review

2 Values and format of benefits

3 Unique value by bio-prospecting such as drug discovery and negative values – pathogen 4 Evaluation of biological resources – two advanced methods

References

[1] Dixon, J. A., Scura, L. F., Carpenter, R. A., and Sherman, P. B. (1986) *Economic analysis of environmental impacts*, Earthscan

[2] Kalof, L. and Satterfield, T. eds. (2005) The Earthscan reader in environmental values, Earthscan

[3] Rietbergen-McCracken, J. and Abaza, H. eds. (2000) Environmental valuation – A world wide compendium of case studies, Earthscan

[4] Hanley, N. and Mourato, S., and Wright, R. E. (2002) *Choice modelling approaches: A superior alternative for environmental valuation?*, in Hanley, N. and Roberts, C. J. eds. *Issues in environmental economics*, Blackwell

[5] Winpenny, J. T. (1991) Values for the environment – A guide to economic appraisal, HMSO

[6] Hensher, D. A., Rose, J. M., and Greene, W. H. (2005) *Applied choice analysis – A primer*, Cambridge University Press

[7] Polansky, S. ed. (2002) The economics of biodiversity conservation, Ashgate

7. The Commons – A unique community resources management scheme

The commons or common property resources are regarded to be 'a unique style' of natural resources management. In this context, the resources include biodiversity. In addition to this, the commons consists of traditional technology, community organising and institutions that may be thought to be similar to TK. Hence, the commons plays an important role in the context of biological resources management.

1 Meaning of the commons - Is the commons tragedy?

2 Aspects of the commons - Significance of community-based natural resource management

3 Cases of the commons

[1] Ostrom, E. (1990) Governing the commons -The evolution of institutions for collective action, Cambridge University Press

[2] Ostrom, E., Gardner, R., and Walker, J. (1994) Rules, games, and common-pool resources, Michigan University Press

[3] Bromley, D. W. ed. (1992) Making the commons work - Theory, practice, and policy, ICS Press

8. Case 1 (Strategy): Bio-prospecting - Classical case of Merk-INBIO

One of the prominent characteristics of biological and genetic resources is bio-prospecting. This classic case of Merk-INBIO can describe a very basic scheme for bio-prospecting under ABS of CBD. Through this case, students are expected to understand the strategy of the firm regarding biological and genetic resources.

1 Agreement between Merk and INBio for bio-prospecting in Costa Rica 2 Lessons from this case

References

[1] Reid, W. V., Laird, S. A., Meyer, C. A., Gámez, R., Sttenfield, A., Janzen, D. H., Gollin, M. A., and Juma, C. (1993) *Biodiversity prospecting : using genetic resources for sustainable development,* World Resources Institute

[2] Sampath, P. G. (2005) Regulating bioprospecting – institutions for drug research, access and benefit-sharing, United Nations University Press

9. Case 2 (Policy): Investing in Biodiversity - Case of Indonesia

The World Bank uses the term, investing in biodiversity, when the Bank explains its policy of projects on biodiversity conservation. The Bank recognises biodiversity as resources and it intends to conserve it for future use. The Bank attempts to realise both development and conservation through integrated approach. The lecture tries to explain its contents, significance and effectiveness. 1Basic aspects of Integrated Conservation and Development Projects (ICDP)

2 Case of Indonesia

3 Lessons learned

References

[1] Wells, M., Guggenheim, S., Khan, A., Wardojo, W., and Jepson, P. (1999) Investing in biodiversity – A review of Indonesia's integrated and conservation projects, the World Bank

[2] Guatan, M., Lele, U., Kartodihardjo, H., Khan, A., Erwinsyah, I., and Rana, S. (2000) Indonesia – The challenges of World Bank involvement in forests, World Bank

10. Case 3 (International Policy) : Those who have both abundant resources and technology – Australia

There used to exist a dichotomy that developing countries have rich biological resources and developed countries don't, and that the former do not have technologies and the latter do. Recently, however, some countries are regarded to have both resources and technology. A typical example of this is Australia. China and India may be added to this example as emerging economies. The Australian case implies ABS regulation as international policy.

1 Biodiscovery Act 2004 in Queensland

2 Case of ABS

3 Matter of indigenous people

 Laird, S., Monagle, C., and Johnston, S. (2008) *Queensland biodiversity collaboration – The Griffith University AstraZeneca partnership for natural product discovery*, UNU-IAS Report, United Nations University
 Australia, Biodiscovery act 2004,

http://www.legislation.qld.gov.au/LEGISLTN/ACTS/2004/04AC019.pdf, sited on 21st August 2009

11. Presentation by students and discussion 1) - 3)

Students are required to make a presentation on a World Bank/GEF project that is related to biodiversity. A list of projects is introduced. Each student can choose a project in which he/she is interested. Through preparation for the presentation, students are expected to understand how the projects are designed.

Evaluation:

Presentation:100%**NB.** Credits will not be awarded where the student's attendance rate is less than 80%

2. Biological Resource Management Projects

Co-ordinator:	ТВА
Class:	Wednesdays, 08:45~10:15
Place:	Graduate School of Environmental Studies, Lecture Room 3

There are various difficulties in the implementation of biological resource management projects. This course provides case studies of biological resource management projects and project management method of JICA (Japan International Cooperation Agency). In the course of lectures, students will discuss good practices and appropriate solutions for projects.

Goals:

- 1. To understand the importance and problems of biological resource management.
- 2. To explain the problems on and lessons learned from the case study projects by applying the project evaluation method.

Topics to be covered:

1. Biological resource management

This session will focus on what biodiversity is, why its conservation is important, and how the loss of biodiversity influences human communities. Fundamental questions to start learning about biological resource management will be presented and shared.

2. Approaches to biological resource management

In this session, JICA's development strategies for biological resource management will be introduced. The students will learn and discuss appropriate approaches toward biological resource management in the framework of the development strategies.

3. Viewpoints on biological resource management projects (1) and (2)

Various issues must be taken into consideration at the same time in order to carry out any project. Projects for biological resource management particularly require this attitude as they involve many aspects such as rural and community development, education, technology, and economic benefits from the resources. In this session, various viewpoints that are especially important for biological resource management projects will be introduced and discussed among the students.

4. Country reports (1), (2), and (3)

The students will present biological resource management projects in their home countries. Approaches of the projects will be examined in the context of the viewpoints, as discussed above..

5. International cooperation framework of JICA

In this session, JICA's international cooperation activities and its principles will be introduced. The role of international cooperation on the conservation of biological resources will be discussed, with a particular focus on JICA's policy.

6. Framework of biological resource management projects in JICA

JICA's approaches and procedures of the project appraisal, project implementation, and schedule management will be explained. Students will learn the mechanism of international cooperation projects from the practical aspect.

7. JICA's project management method I (Project Planning) The JICA Project Cycle Management (JPCM) will be introduced as a basic project management tool of the Agency. Project Planning, the first element of JPCM, will be explained in this session.

8. JICA's project management method II (JPCM: Project Monitoring) Project Monitoring will be explained as the second element of JPCM.

9. JICA's project management method III (JPCM: Project Evaluation) Project Evaluation will be explained as the third element of JPCM.

10. Case studies (1), (2), and discussion

Guest lecturers, as practitioners of international cooperation, will provide case studies. Participants realise the viewpoints of project implementation and evaluation.

11. Review

We will discuss the importance and difficulties pertaining to biological resource management as a review of the entire sessions of the course.

Evaluation:

Students are required to prepare presentations of country reports and case studies.

3. Climate Change Policies

Co-ordinator:	WATANABE Mikihiko (miwata@urban.env.nagoya-u.ac.jp)
Class:	Mondays, 13:00~14:30

Courses in the Student's Major

Place: Graduate School of Environmental Studies, Lecture Room 1

The objective of the course is to provide students with basic facts and knowledge on policy measures pertaining to climate change. Topics of Asian and African countries are focused on. The course has a unique style. 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, including emission trading and CDM. Furthermore, other related matters such as transportation and deforestation should be understood.

Topics to be covered (order subject to change):

- 1. Orientation: Plan of the course
- 2. History of Global Environmental Issues: Basic frameworks and approaches
- 3. Environmental Principles and Theories in Relation to Climate Change in Developing Countries
- 4. Question of Technology to Cope with Climate Change in Developing Countries
- 5. Possible Policy Measures to Achieve GHGs Reduction Targets
- 6. Developing Countries and Climate Change
- 7. Kyoto Mechanisms and Developing Countries
- 8. Waste Management and Recycling to GHG Emission Reduction
- 9. Deforestation and Climate Change
- 10. Energy Efficiency in Developing Countries
- 11. Transportation and Climate Change
- 12. Climate Change and Governance

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 Reisinger, A. eds.]. IPCC http://www.ipcc.ch/ipccreports/ar4-syr.htm (Other references will be specified in each lecture.)

Evaluation:

Report: 100%

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

4. Environmental Industry Systems

Co-ordinators:	WATANABE Mikihiko (miwata@urban.env.nagoya-u.ac.jp);
	TAWA Masahiro (tawa01@urban.env.nagoya-u.ac.jp)
Class:	Thursdays, 10:30~12:00
Place:	Graduate School of Environmental Studies, Lecture Room 1

This course tries to realise a unique style of learning. The course consists of: 1) lectures by representatives of environmental industries located in the Chubu areas; 2) presentations and/or discussions amongst the students, and 3) discussions between the students and experts from the industries. These industries comprise prominent companies mainly in the field of manufacturing. To complement this class, students are strongly recommended to take the course "Theory of Environmental Resources Management'.

Topics to be covered:

- 1. Lecture by Industry 1
- 2. Lecture by Industry 2
- 3. Lecture by Industry 3
- 4. Brief Presentations by Students based on Assignment 1
- 5. Lecture by Industry 4
- 6. Lecture Industry 5

Courses in the Student's Major

- 7. Lecture by Industry 6
- 8. Brief Presentations by Students based on Assignment 2
- 9. Lecture by Industry 7
- 10. Lecture by Industry 8
- 11. Lecture by Industry 9
- 12. Brief Presentations by Students based on Assignment 3
- 13. Group Presentations and Discussions 1
- 14. Group Presentations and Discussions 2
- 15. Group Presentations and Discussions 3

(Note that the number of discussions is subject to change by the number of participants.)

Reference Materials:

References will be specified in each lecture.

Evaluation:

Presentation:50%Report:50%Students who are absent for three lectures, or more, will not be awarded credits.

5. Planning and Design Studio for Historical Environment

Co-ordinator:	NISHIZAWA Yasuhiko
Class:	Thursdays, 9:00~12:00 (2 nd Quarter: 18 November 2010~27 January 2011)
Place:	School of Engineering, Building 3 <n>, 3F, Room 338, Graduate Student Studio</n>
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 house "Toyoda Sasuke Tei" built around 1920 along the "Cultural Path" in the downtown of 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 18 Explanation of works and introductory lecture

- Nov 19 (p.m.) Research on the site and historical heritage of the work
- Nov 25 First esquisse checking concept and outline of planning
- Dec 2 Second esquisse checking concept and outline of planning
- Dec 9 Third esquisse checking plan, section and façade of buildings or townscape
- Dec 16 First review of works
- Jan 13 Fourth esquisse checking changing works, complying with first review
- Jan 20 Fifth esquisse checking final work
- Jan 27 Final review of works

Evaluation:

Presentation of work in final review: 100%

6. 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:	Graduate School of Information Science, 1F, Lecture Room 4.

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:

Joseph S. Nye, Jr. Understanding International Conflicts: An Introduction to Theory and Practice. Seventh Edition. Longman, 2009.

Chapter 1: Is there an Enduring Logic of Conflict in World Politics? Chapter 2: Origins of the Great Twentieth-Century Conflicts Chapter 3: Balance of Power and World War I Chapter 4: The Failure of Collective Security and World War II Chapter 5: The Cold War Chapter 5: The Cold War Chapter 6: Conflicts after the Cold War – Interventions and Institutions Chapter 7: Globalization and Interdependence Chapter 8: Information Revolution and Transnational Actors Chapter 9: A New World Order?

Evaluation:

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

7. Practice in Biological Resources Management

Coordinators:	WATANABE Mikihiko (miwata@urban.env.nagoya-u.ac.jp)
	TAWA Masahiro (tawa01@urban.env.nagoya-u.ac.jp)
Class:	Tuesdays, 13:00~14:30
Place:	Graduate School of Environmental Studies, Seminar Room 2

This course will introduce students to concrete measures necessary for carrying out a bio-resources management project. Exercises consist of: 1) necessary analysis and methods for formulation and management of the projects on bioresources, hypothetical but useful cases being used; 2) economic valuation methods for bioresources, including cost-benefit analysis; and 3) role-playing to reach an agreement on the component(s) of the project.

8. Seminar on Precipitation Climatology A

Co-ordinator:	NAKAMURA Kenji
Class:	Mondays, 13:00~14:30
Place:	Lecture Room 301, Hydrospheric-Atmospheric Research Centre
Class capacity:	10 Students

This semester, papers on precipitation climatology, including the IPCC report, will be read by participants. Participants will review the papers discuss their content, in turn. The discussion will include not only scientific but also societal issues. The knowledge of international students on the climate, culture, society, etc. of their home countries will facilitate the discussion, particularly regarding societal issues.

9. Studio Workshop	of Architectural Design
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Co-ordinators:	KATAGI Atsushi & HOTTA Yoshihiro
Class:	Thursdays, 8:45~12:00 (1st Quarter: 7 October 2010 ~ 18 November 2010)
Place:	School of Engineering, Building 3 <n>, 3F, Room 338, Graduate Student Studio</n>

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. The project this year is 'Carchitecture'. Students are requested to propose a new program which indicates a future relationship between car and architecture & city as well as its architectural and urban design.

Evaluation:

Presentation of work evaluated by jury: 100%

10. Sustainability and Environmental Studies

Co-ordinator:	Victor MUHANDIKI (victor@urban.env.nagoya-u.ac.jp)
Class:	Fridays, 10:30~12:00
Place:	Graduate School of Environmental Studies, Lecture Room 3

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:

- 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
- 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 specified in each lecture.

Evaluation:

Reports: 100%

11. 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
- 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:

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.
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Evaluation:

Report:	40%
Examination:	60% (Students with an attendance rate exceeding 80% are eligible for the exam)

Graduate School of Information Science (GSIS)

Selected Topics in Computer Science & Mathematical Informatics 2

Co-ordinator:	Fransesco BUSCEMI
Class:	Wednesdays, 13:00~14:30
Place:	Graduate School of Information Science (GSIS), Room 3

The course will provide an introduction to quantum information theory, 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) – noisy communication channels – quantum entropies – classical and quantum information transmission – basic ideas in classical and quantum coding techniques – introduction to quantum cryptography.

Topics to be covered:

First Set: Basic Ideas

1. Basic mathematical tools

- 2. Mathematical description of quantum systems: composite systems and purification theorem
- 3. Basics of quantum entanglement

Second Set: Quantum Processes

- 4. Evolution of open quantum systems: the notion of complete positivity
- 5. Quantum channels and quantum measurement processes
- 6. Representation theorems for quantum channels and quantum measurements (I)
- 7. Representation theorems for quantum channels and quantum measurements (II)

Third Set: Quantum Information Theory

- 8. Simple quantum communication channels I: super-dense coding
- 9. Simple quantum communication channels II: teleportation
- 10. Noisy communication channels: notions of reliable information transmission, coding rates, and capacities
- 11. Entropic functions and information measures
- 12. Sending classical information through a channel: the setup
- 13. Sending classical information through a channel: overview of the HSW theorem
- 14. Sending quantum information through a channel: the setup
- 15. Sending quantum information through a channel: overview of the LSD theorem and basic notions of quantum cryptography

Textbook:

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

Evaluation:

By examination on topics covered in the course.

Graduate School of International Development (GSID)

1. Human Security and Law (人間の安全保障と法)

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

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

Human Security is a concept which has gained popularity among members of the United Nations. It appeared in Human Development Report 1984 issued by UNDP and became one of the key concepts in modern international relations. "Freedom from fear" and "freedom from want" are basic ideas forming that new concept. Especially after the end of the cold war, the international community has more internal wars than interstate armed conflicts. The traditional concept of security centred on the national security, but now security of individuals is more important in peacetime as well as wartime. Gross violation of human rights is a typical example threatening human security of people. Failed states which are not willing to and able to protect civilians are increasing in number. In some cases, they give asylum to terrorists, who are indiscriminately engaging attacks against ordinary people even in developed countries. September 11 demonstrated that even the only one giant state was not immune from terrorist attacks. This course has an aim to understand the 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. Secondly the changing system of the UN collective security after 1990 will be addressed. Lastly lectures will be given on newly emerged concept of human security. Standpoint from which this course is offered is international law. This is one of the courses of law.

Topics to be covered:

- 1. Introduction
- 2. Overview of the UN Collective Security System
- 3. The Paralyzed Security Council in the Cold War era
- 4. Korean War
- 5. Uniting for Peace Resolution
- 6. Peace-keeping Operations
- 7. Legal basis of PKO
- 8. The Concept of "International Peace and Security"
- 9. Economic Sanction
- 10. Economic Sanction involving Use of Force
- 11. Authorization to Use Force in the Gulf War
- 12. Changing Nature of Peace-Keeping Operations
- 13. Human Security in Human Development Report 1984
- 14. Human Security and Humanitarian Intervention
- 15. Written Examination

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 (30%) and the final written examination (70%).

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

Co-ordinator:SHINKAI Naoko & NISHIKAWA YukikoClass:Wednesdays, 13:00~14:30Place: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*:

- Introduction
 Governance and Law
 Education
 Education
 Japan's Experience of Economic Development (1) & (2)
 Agricultural/Rural Development
 Social Development
 Peace-building
 Wranger Standard
- 14. Wrap-up Session

*More details will be provided during the first session on October 6.

Reference Materials:

Relevant materials will be introduced in each class.

Evaluation:

Class participation and weekly comment papers.
Special Lecture on Peace-building I: Peace-building and the Rule of Law (平和構築特論 I)

Co-ordinator:	SHIMADA Yuzuru
Class:	Thursdays, 8:45~10:15
Place:	Graduate School of International Development (GSID), Seminar Room 9

This course will focus on the legal reform in the post-conflict countries. Since sustainable peace is the ultimate purpose of peace-building effort, the legal reform that makes the framework for good governance and amicable society is mandatory. Even in the early phase of peace-building, the rule of law is essentially important to secure the social order and fundamental human rights that have been seriously damaged in course of violent action. This course will discuss multidimensional stage of legal reform in the peace-building effort with special emphasis on mid- to long-term challenges.

This course is designed to (1) introduce participants to a law reform in the post-conflict society that have very different situation from normal society, (2) introduce to the development of law and peace-building arguments since 1990s (3) demonstrate the multi-dimensional (from immediately order to sustainable peace effort, and from international issues to local issues) challenges of post-conflict law reform, (4) provide participants with successful case studies of post-conflict law reform, (5) provide participants with theoretical framework integrating law reform to the development program, (6) extend participants' skill for theoretical analysis of post-conflict peace-building in relation to law reform. (7) let participants know key materials on the course theme as many as possible.

By the end of this course each participants should:

- be familiar with key texts in English that explain themes in law and peace-building, rule of law in unstable societies;

- know how to find primary and secondary sources on both theories and applications of law and peace-building and rule of law worldwide;

- understand contemporary debates within law, political and the social sciences about the linkage between legal reform, peace-building and development;

- understand various challenges and experiences of success and failure for sustainable peace with constitutional democracy;

- be ready to formulate and discuss your own view about the law reform in post-conflict country.

Topics to be covered:

1. Introduction

2. Contemporary conflicts and law reform

Reading: Jonathan Goodhand and David Hulme, "From Wars to Complex Political Emergencies:

Understanding Conflict and Peace-Building in the New World Disorder", Third *World Quarterly*, Vol. 20, No. 1, (1999), pp.13-26.

--> Why has the legal reform in post-conflict society become an issue recently?

3. Breakdown of legal system under conflict

Reading: United Nations Development Program, STRENGTHENING RULE OF LAW WITHIN AN EARLY RECOVERY FRAMEWORK: THE UNDP RULE OF LAW PROGRAMME IN DARFUR, 2007.

--> How the legal system became dysfunctional and what the result of the legal dysfunction was.

4. Identification of legal reform issues for post-conflict societies

Reading: UNHCHR, RULE-OF-LAW TOOLS FOR POST-CONFLICT STATES: Mapping the justice sector, United Nations, 2006.

--> What measures should be taken to restore the post-conflict legal system, and the interrelation of those measures.

5. Case study (1) : East Timor

Readings (temporarily):

Strohmeyer, Hansjoerg, "Building a new judiciary for East Timor: Challenges of a Fledging Nation", Criminal Law Forum v.11, pp.259-285, 2000.

UNDP, Revised Program Document: Strengthening the Justice System in Timor-Leste, 2005.

--> Experiment of full UN support for legal system building in a new country.

6. Case study (2): Aceh

Reading: UNDP, Access to Justice in Aceh (2006)

--> Regional legal reform (post secessionist internal conflict) utilising existing customary and state law, and relation with the national legal system.

7. (Re)establishing the constitutional system: comparison of post-conflict constitutions

--> Each participant will be asked to make presentation

Post-conflict countries that have elected government or new constitutions after peace-agreement: Cambodia, Afghanistan, Sierra Leone, Croatia, Burundi, Haiti, Angola, Bosnia and Herzegovina, Rwanda, Iraq, Macedonia, Democratic Republic of Congo.

Evaluation:

Assessment is based on short essay, presentation and contribution to lecture (reading material and giving valuable comment).

Graduate School of Languages and Cultures (GSLC)

1. Introduction to Sociolinguistics b

Instructor:	MORITA Chua Liang
Class:	Mondays, 10:30~12:00
Place:	IRB Humanities & Social Sciences, Room 609

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. Introductory Studies in International Culture b: Map Appreciation

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

"Map Appreciation" will investigate contemporary cartography as a craft that synthesises the arts and sciences. It aims to cover terrestrial and celestial maps, projections and scales, artistic elements, and various ways that maps are used by going through the following sequence of six topics: "Disciplines associated with cartography," "cartographic vocabulary," "uses of cartographic documents and artifacts," "the science in cartography," "the art in cartography," and "types of maps."

Maps and other cartographic materials are produced to show the location of selected places, and distance and direction are important components. Behind maps, though, are stories concerning selection, composition, and such like, and many maps provide cultural insights. It is hoped that after taking this course, students will be able to look at maps not only in a more critical light but also with a deep understanding of how complex they can be.

Textbooks/Reference Materials:

Daniel Dorling and David Fairbairn, *Mapping: Ways of Representing the World* (Harlow, Essex: Longman, 1997) [ISBN: 0-582-28972-6]

Mark Monmonier, How to Lie with Maps (Chicago: University of Chicago Press, 1996) [ISBN: 0-226-53421-9].

Other materials for reading or consultation will be made available according to the circumstances.

Evaluation:

Approved cartographic project:50%Final examination on readings and class meetings:50%

School of Law

4. Comparative Studies in Administrative Law: Modern Administrative Law

Co-ordinator:	ICHIHASHI Katsuya
Class:	Mondays, 10:30~12:00
Place:	IRB Humanities & Social Sciences, Room 407

In 1947 the Judicial Constitution Act and the Administrative Court Act were repealed. This marked a new beginning for the court system. It has been more than 50 years since then, in which time the system of judicial review of administrative action has developed. However, the contemporary raises many problems, which require urgent reform. I would like to reflect upon the merits and demerits of the court's role in administrative cases by means of reference to major Supreme Court's cases.

- 1. The Interpretation of Administrative Law;
- 2. Administrative Law and the Principle of Good Faith;
- 3. Legal Relations in Administrative Activity;
- 4. Administrative Legislation Administrative Circulars;
- 5. Delegated Legislation;
- 6. Administrative Actions Void Dispositions;
- 7. Administrative Discretion Political Discretion;

- 8. Administrative Discretion Special Expertise Discretion;
- 9. Retraction of Administrative Dispositions
- 10. Hearing Procedures:

Proceedings of Consultative Organs; Constitution and Hearing; Attachment of Reasons; Administrative Guidance; and Freedom of Information.

5. Comparative Studies in Political Thought: Political Theory in Modern Europe

Co-ordinator:	ISOBE Takashi
Class:	Fridays, 14:45~16:15
Place:	School of Law, Seminar Room 905

With the aim of understanding European political culture as deeply as possible, we will read Voegelin's book and discuss the principal types of order of human existence in society and history as well as the corresponding symbolic forms.

Textbook:

Eric Voegelin (1987). In Search of Order.

6. Comparative Studies in Politics II: Japanese Diplomacy & International Politics

Co-ordinator:	MIURA Satoshi
Class:	Wednesdays, 10:30~12:00
Place:	School of Law, Seminar Room 905

This course is designed to help students understand the basics of both Japanese foreign policy and international relations theory. Each student is expected to make a presentation by applying theories to a topic of his/her interest.

- 1. Realism
- 2. Liberalism
- 3. Constructivism
- 4. Applying the three theories to the case of Japan's security policy
- 5. Applying the three theories to the case of international relations in East Asia

Reference Materials:

To be distributed in class.

Evaluation:

Attendance and participation	50%
Presentation:	50%

7. Politics and Law in Japan

Co-ordinator:	Frank BENNETT
Class:	Tuesdays, 13:00~14:30
Place:	IRB Humanities & Social Sciences, Room 409~410

This course is divided into two six-session parts, separated by a mid-term exam on Part I, and ending in a final examination covering both Part I and Part II of the course. The first half of the course introduces the institutions of the modern Japanese political system, and provides a survey of the forces and events that have shaped the modern political system. The second half of the course concerns the legal system, with attention to "private law" (the law of property and obligations), family law, and the criminal justice

system. We will both examine the underpinnings of the common image of Japan as a society with a low level of disputing and litigation, and explore recent changes to the legal system that will be the source of change in the next generation.

Prerequisites: Class attendance is required.

Reference Materials:

J.A.A. Stockwin, Governing Japan, 3rd ed. (1999)
G. Curtis, The Logic of Japanese Politics (1999)
F. Upham, Law and Social Change in Postwar Japan (1987)

Other readings to be distributed.

Evaluation:

Class attendance, participation	20%
Mid-term examination	30%
Final Examination	50%

ξ	8. Professional Studies in International Human Rights Law II:		
		Seminar on Human Rights and Refugee Law	

Co-ordinator: OBATA Kaoru Class: Thursdays, 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'.

Evaluation:

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

9. Special Lecture & Seminar: Workshop on International Negotiation

Co-ordinator:	Frank BENNETT
Class:	Wednesdays, 8:45~10:15
Place:	IRB Humanities & Social Sciences, Rooms 409~410

This course is an intensive experience in the essential business skills of negotiation and arbitration, taught in a "problem based" format. The basis of the course will be preparation for a 2-day intercollegiate competition that takes place in Tokyo in early December. The class will be divided into teams, and each class member will work closely with team mates during preparation, and at the competition itself. Preparation work will be broken into weekly tasks, for which individual teams will be responsible, reporting weekly progress to an executive meeting for critique and consultation. The competition itself is a very competitive event, conducted in two languages (we will send both a Japanese and an English team this year), involving 12 of the top universities in Japan.

Please note that participants will need to cover the costs of attending the Tokyo competition themselves,

although some expenses will be defrayed.

Prerequisites: A willingness to work hard, learn quickly, work in a team, and handle criticism

Reference Materials:

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

Evaluation:

Class attendance, participation	20%
Mid-term examination	30%
Final examination	50%

10. Special Lect. & Seminar: Legal & Business Ethics in Developing Countries (235)

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

This seminar will combine the theory of legal and business ethics with the practicalities of developing nations. Students will wrestle with questions such as how one can be ethical when working in a system that has corruption. The course will draw upon theory and will ask students to address scenarios based on what they have learnt in addition to their prior practical knowledge. We hope to have outside participation from practitioners and experts. The course will be taught in English and Japanese as appropriate. Students will give oral presentations of assigned topics during the course and refine the presentation of their draft into a short research paper which will be the final exercise for the course. International and Japanese students are invited to attend.

Topics to be covered:

- 1. What is Ethics? Three kinds of ethics. What is Corruption? The concept, causes, remedies and mitigants (rules and treaties on the ethics of the legal profession and on corruption)
- 2. Country Reports: State of professional ethics, fabric of society and ant-corruption policies in the countries of participating students
- 3. Business Ethics: What is business ethics? Is it professional ethics? How are the norms of business ethics to be administered? Function of business ethics in society. Enron, Nikko Cordial, to name just two. What is *dango*? What is being done about it? Anti-trust regulation and free enterprise.
- 4. Role-play: The lawyer in the developing country. Moral dilemmas faced and dealt with.
- In-depth Analysis of Corruption. If rent-seeking in the form of corrupt practice is rational behaviour in the developing country, what are the rational steps to its remedy? The structure and functions of that which is corrupted, the public sector: Providing 1) public goods, 2) political power, 3) public deliberation and decision. The conditions that the personnel who man the system must satisfy to function.
- 6. Confirming what we have learnt. What was the basic problem? What was the basic remedy? Why is it difficult to implement the remedy? What can we do to implement the remedy? What have we learnt about the law from this inquiry? What have we learnt about business enterprise from this enquiry?

Reference Materials:

Material will be made available in the form of hard copies or on the class website (to be announced).

Evaluation:

Participation:	50% (attendance, assignments and active performance in class)
Research Paper:	50%

NB. Active participation expected in a role-play client counselling session with 'real' clients, as well as in

Internet telecast discussion with students across the Pacific.

11. Special Lecture & Seminar: Yomiuri Shimbun Special Lecture –	
	Comparative Asian Corporate Theory
Instructors: Class:	Journalists from the <i>Yomiuri Shimbun</i> 's Tokyo Office Wednesdays, 14:45~16:15 (~18:00)

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:

Place:

第1回 10月13日 読売新聞の海外報道/大塚隆一(編集委員)

1. October 13, Foreign news coverage of the Yomiuri Shimbun

School of Law, Room 905

Instructor: Ryuichi Otsuka, Senior Writer

The Yomiuri Shimbun has 60 correspondents in 35 overseas bureaus. We will look at how Japanese newspapers see and cover our rapidly changing world. Global issues such as climate change and nuclear weapons will be taken up to discuss the future of our planet and the role of journalism.

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

第2回 10月20日 日米外交関係/五十嵐 文(政治部記者)

2. October 20, U.S.-Japan relations under the DPJ Administration

Instructor: Aya Igarashi, political correspondent

The Democratic Party of Japan has put emphasis strengthening ties with Asian countries since the party took over power about a year ago. Does this mean that the DPJ administration intends to shift the centre of gravity of Japanese foreign policy from the U.S. to Asia? We will discuss this with firsthand information from a correspondent who covers Prime Minister's Office.

第3回 10月27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)

3. October 27, English as a common language among newspapers in Asia

Instructor: Shigefumi Takasuka, assistant editor of The Daily Yomiuri

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.

第4回 11月10日 日本とファッション/宮智 泉(編集委員)

4. November 10, Japan and Fashion

Instructor: Izumi Miyachi, Senior Writer, Yomiuri Shimbun

Japanese fashion attracts designers and the young generation from all over the world through its creative style. How did it develop? Can it be a soft power for Japan? What kind of influence does it have on Asian countries? Ms. Miyachi will provide an introduction to Japanese fashion and the power of consumers that made it unique.

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

第5回、6回 11月17日(<u>14:45~18:00</u>) 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) 5. & 6. November 17 (<u>14:45~18:00</u>), 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7回 11月24日 日本の留学生政策/南 砂(編集委員)

7. November 24, The Japanese and Foreign Students

Instructor: Masago Minami, deputy editor of the Commentary & News Analysis Department

It was in 1983, with only 8,000 foreign students studying in Japan at the time, when the Japanese government set a goal to accept 100,000 overseas students by the early 21st century. The goal was finally attained in the year 2002, but a number of problems had appeared in the meantime. We will look back on and discuss what the Japanese have achieved and failed the foreign students for from the long-term plan.

Ms Minami is a medical doctor specializing in psychiatry.

第8回 12月1日 アジアの宇宙時代/ 滝田恭子(科学部主任)

8. December 1, Space Race in Asia

Instructor: Kyoko Takita, Science News Reporter

China and India are emerging as space superpowers with new 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 moon.

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

第9回 12月8日 米国オバマ政権とアジア/坂元 隆(国際部次長)

9. December 8, President Obama's Approach towards Asia

Instructor: Takashi Sakamoto, Deputy International Editor, The Yomiuri Shimbun.

President Obama's trip to Singapore and East Asian countries in November marked the real beginning of his Asia diplomacy. We have to watch carefully how different his approach towards countries such as Japan, China and the Koreas is, when compared to his predecessor's. North Korea has been the biggest problem in the region. However there is no doubt that the new Democratic administration in Tokyo could be the most controversial partner to deal with. We will look into Obama's strategy in East Asia including Japan.

Mr. Sakamoto was New Delhi Bureau Chief from 1990 to 1993 and Washington correspondent from 1995 to 2001 and from 2005 to 2008.

第10回、11回 12月15日(<u>14:45~18:00</u>) 世界のスポーツとアジア/結城和香子(運動部次長) 10. & 11. December 9 (<u>14:45~18:00</u>), The Olympic Games and Asia

Instructor: Wakako Yuki, vice sports editor

Former Sydney and Athens bureau chief in charge of the Yomiuri Shimbun's Olympic Games coverage. In 2008, Asia hosted the first Summer Olympic Games in 20 years. The Beijing Olympic Games was 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 spur doping problem
- --became 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12回、13回 12月22日(14:45~18:00) 歴史問題とアジア/ 鬼頭 誠(調査研究本部主任研究員)

12. & 13. December 22 (<u>14:45~18:00</u>), Historical Issues and Asia-War Responsibility of the Japanese

Instructor: Makoto Kito, Senior Research Fellow Yomiuri Research Institute

In 2006, the Yomiuri Shimbun occasionally published features in morning editions on the war responsibility of the Japanese leadership in World War II. Why did Japan expand the Sino-Japanese War? Why did she wage war with the U.S. in spite of extremely slim resources? What caused the Japanese to employ "banzai attacks", or "kamikaze" suicide attacks? Wasn't it possible to prevent the atomic bombings of Hiroshima and Nagasaki? Let's re-examine and try to identify the responsibility of the war leaders' failures, while finding lessons to be learned.

Mr. Kito worked as a member of the Yomiuri Shimbun War Responsibility Re-examination Committee. The translated compilation of the features was published both in English in 2006 and in Chinese in 2007.

第14回 1月12日 中国とメディア/末続哲也(国際部主任)

14. January 12, China and the Media

Instructor: Tetsuya Suetsugu, Staff Writer of the International News Department

In China, the local media is under strict control of the Communist Party which is eager to maintain its authoritarian political system. At the same time, the correspondents of the foreign media face a miscellany of difficulties when they try to cover China.

Mr. Suetsugu, former correspondent to Beijing and Shenyang, will lecture on how the media works in China.

第15回 1月20日 新聞社のメディア戦略/ 松井 正(メディア戦略局IT事業部次長)

15. January 20, Online Media: A Disruptive Technology

Instructor: Tadashi Matsui, Deputy Manager, Department of Research & Development Operation, Digital Media Bureau

Internet and mobile media have had a clearly disruptive effect on the newspaper industry. Keeping in mind the unique characteristics of the Japanese newspaper business, we will examine how newspapers can reach the younger generation and find the means to survive.

Mr. Matsui is a former visiting researcher at the Newspaper Association of America. He is a video journalist, web director, and a former staff writer with The Yomiuri Shimbun's Science Department.

Evaluation:

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

12. Studies in Jurisprudence: Law as Political Theory

Co-ordinator:	MORIGIWA Yasutomo
Class:	Mondays, 16:30~18:00 (one-year course, class held every two weeks)
Place:	Integrated Research Building (IRB), Humanities & Soc. Sciences, Room 411

NB. This is a one-year course; one-year attendance being necessary for the earning of credits. NUPACE students may commence the course either from April or October. However, those students attending the course for one semester only cannot receive credits. (They may, however, sit in on the classes.)

This bi-weekly two semester course introduces the student to the world of legal and political theory. Burning questions students have on political power and public order will be examined and explained. To facilitate the inquiry, theories of law and state by Hobbes, Locke, Rousseau, Kant, Hegel and Marx, as well as their contemporary counterparts developed by Hart, Dworkin, Raz and Rawls may be discussed. The course will be taught in English, with summaries in Japanese as necessary. International and Japanese students are welcome. The day and time of class is subject to change upon discussion with the participants.

School of Letters

1. Iconicity in Language & Literature

Co-ordinator:	William J. HERLOFSKY
Class:	Mondays, 10:30~12:00
Place:	IRB Humanities & Social Sciences, Rooms 308~309

In this class, which is open to students from both linguistics and literature backgrounds, we will read research papers written from both of these perspectives, and these papers will all have in common their focus on iconicity. In addition, since this class is a skill/content class, it has two main educational objectives. One objective is to offer a content class in which students will be able to study about iconicity, linguistics, literature and other related issues. The second objective is to offer a content class that will also provide students with the opportunity to develop their English-language skills. Students will have the opportunity to read and discuss language/literature-related materials, to listen to others reading and discussing, as well as the opportunity to write about the material read and discussed in class.

2. 日本言語文化入門 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 2 of the Japanese Language Proficiency Test (JLPT) or equivalent.

この講義は、日本言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、星がギラギ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:	HISHIDA Toshiaki, Thomas GEISSER, NAKANISHI Tomoki
Class:	Tuesdays, 13:00~14:30
Place:	School of Science Building 1 < Mathematics>, Room 409

This course is designed as one of the English courses which the Graduate School of Mathematics provides for the 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: Basic undergraduate mathematics (calculus and linear algebra).

Tentative Course Schedule:

Oct 5 Hishida (1); Oct 12 Geisser (1); Oct 19 Hishida (2); Oct 26 Hishida (3) Nov 2 Geisser (2); Nov 9 Geisser (3); Nov 16 Geisser (4); Nov 23 *Holiday*; Nov 30 Geisser (5) Dec 7 Hishida (4); Dec 14 Hishida (5); Dec 21 Nakanishi (1) Jan 11 Nakanishi (2); Jan 18 Nakanishi (3); Jan 25 Nakanishi (4)

Topics to be covered:

A. HISHIDA Toshiaki: Functional Analysis and PDEs

My course provides rather systematic studies of evolutionary partial differential equations (PDEs) by the method of functional analysis. It is particularly emphasised that the theory of semigroups of linear operators developed by K. Yosida et al. can be effectively applied to initial-boundary value problems for various PDEs. The course consists of five lectures and a tentative outline is:

1. Introduction to PDEs arising from physics;

2. The Yosida-Hille theory and analytic semigroups of operators;

3. Lp-Sobolev spaces;

- 4. Applications to linear PDEs such as heat, wave, ... equations;
- 5. Applications to nonlinear PDEs such as the Navier-Stokes equations.

Reference Materials:

I will not use any textbook during the lecture, however, the related classical theory can be found in some literature, for instance,

[1] A. Friedman, Partial Differential Equations, Holt, Rinehart and Winston, New York, 1969.

[2] A. Pazy, Semigroups of Linear Operators and Applications to Partial Differential Equations, 2nd Edition, Springer-Verlag, New York, 1992.

[3] H. Tanabe, Equations of Evolution, Pitman, London, 1979.

B. Thomas GEISSER: Solving Congruence Equations

Recently, solving congruences has found many applications in cryptography and coding theory. The aim of the lectures is to explain how solving congruences is related to class field theory, and how information on the number of solutions can be encoded into functions called zeta-functions. In the short time it will not be possible to prove the theorems of class field theory, but my aim is to explain how these theorems can be used to determine if congruences have solutions or not.

1. Introduction to conguences and examples, the RSA algorithm (10/12);

2. Quadratic equations and quadratic reciprocity (11/2);

- 3. The meaning of class field theory I (11/9);
- 4. The meaning of class field theory II (11/16);
- 5. Hasse-Weil zeta-functions and special values of L-series (11/30).

Reference Materials:

I do not follow a specific textbook, but books on elementary number theory, Galois theory and class field theory will be useful.

C. NAKANISHI Tomoki: Playing with Root Systems

Root systems appeared in the early 20th century in the work of E. Cartan for the theory of finite-dimensional simple Lie algebras over C. They are also related to the corresponding Weyl groups, which are the 'symmetry' of these Lie algebras. There are certain special elements of Weyl groups called the Coxeter elements.

In the first part of my lecture, I review the basic facts on root systems, Weyl groups, and Coxeter elements. They are very standard facts in representation theory; therefore, to get familiar with these concepts will be useful to any student of any major. Then, in the second part of my lecture, I present a role of Coxeter elements in cluster algebras, which are new mathematics rapidly developing in the 21st century. The tentative plan of my talk will be as follows.

- 1. Root systems and Weyl groups
- 2. Coxeter elements
- 3. Cluster algebras
- 4. Tropicalisation

Reference Materials:

References will be provided during the lectures.

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

Advanced Quantum Chemistry

Co-ordinator:Stephan IRLEClass:Wednesdays, 10:30~12:00Place: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 problem: Static and dynamic electron correlation (CASSCF, and CI and MP2 methods)
- 7. Density-based methods: Kohn-Sham theory, density functional theory (DFT)
- 8. Density-Functional Tight-Binding
- 9. QM/MD simulations: BOMD, CPMD, LvNMD

10. Steered MD, umbrella-sampling, and transition path sampling methods

11. Strengths and weaknesses of MD simulations for the understanding of complex problems

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)
A self-prepared script

Evaluation:

Final Examination: Six Assignments: 40% 10% each

Nagoya University Program for Academic Exchange (NUPACE)

Education Centre for International Students, Nagoya University C5-1 (760), Furo-cho, Chikusa-ku, Nagoya, 464-8601 Japan nupace@ecis.nagoya-u.ac.jp http://www.ecis.nagoya-u.ac.jp/en/nupace/