# NUPACE Academic Policies & Syllabi

Spring 2010

Nagoya University Program for Academic Exchange

## NUPACE Academic Calendar & Policies - Spring 2010

## 1. Calendar

Apr 13 ~ Jul 23	NUPACE (Japan area studies; majors) & regular university courses
Apr 12 ~ Jul 26	University-wide Japanese Language Programme (UWJLP)
Jul 26 ~ Aug 6	Examination period for regular university courses
Aug 8 ~ Sep 30	Summer vacation

## National Holidays

(No classes will be held on the following days)

Apr 29	昭和の日	(Showa Day)
May 3	憲法記念日	(Constitution Day)
May 4	みどりの日	(Greenery Day)
May 5	こどもの日	(Children's Day)
Jul 19	海の日	(Marine Day)

In addition, many classes will be cancelled on Thursday, June 3 (afternoon~) to Friday, June 4 for the Nagoya University Festival. Please check with your class instructors.

## 2. Courses

<u></u>		
Japanese and Other Foreign Language Programmes:		p 7
Standard Course in Japanese (7 Levels: SJ101~SJ301)	1∼5 crdts	p 9
Intensive Course in Japanese (6 Levels: IJ111~IJ212)	2~10crdts	
漢字 <kanji>1000</kanji>	0 credits	p 10
オンライン日本語 <online japanese="">(中上級以上作文クラス)</online>	0 credits	
ビジネス日本語I&II	0 credits	
入門講義 <j> (ECIS Introductory Courses Taught in Japanese):</j>		
国際関係論 II (Global Society II)	2 credits	n 11
日本文化論 II (Introduction to Japanese Society & Culture II)	2 credits	1
日本語学·日本語教育学 II (Introduction to Japanese Linguistics II)	2 credits	1
言語学入門 II (Introduction to Linguistics II)	2 credits	1
<j> Courses taught in Japanese and which require at least level 2 of the Japanese Language Proficiency Test</j>		
	0 / 1	
Other Foreign Languages (Graduate School of Languages & Cultures)	2 credits	p 13
Japan Area Studies		
Contemporary Japanese Society	2 credits	p 14
Introduction to Japanese Politics	2 credits	
J 1		1
Courses in the Student's Major		
Education Center for International Students		
Immigration in Japan: A Socio-legal Perspective	2 credits	
Teaching in the Japanese Community (GIS)	2 credits	p 17
School of Economics:		
Development Economics	2 credits	p 18
Financial Accounting B	2 credits	p 19
Introduction to Financial Reporting	2 credits	
Law and Economics Workshop	2 credits	p 20
•		-

Price Theory and Applications	2 credits	p 21
School of Education:		
Education in Japan	2 credits	p 22
Intercultural Education: Disney as a Cultural Teacher	2 credits	
School of Engineering:		
Introduction to Applied Physics, Materials & Energy Engineering	2 credits	p 23
Introduction to Chemical & Biological Industries	2 credits	
Introduction to Production Engineering	2 credits	
Graduate School of Environmental Studies:		
English Communication on Environmental Issues	2 credits	p 25
Environmental Systems Analysis and Planning	2 credits	
Field Seminar on Environmental Studies	2 credits	
Introduction to Biodiversity Conservation Policies	2 credits	-
Low Carbon Cities Studies	2 credits	
Theory of Environmental Resources Management	2 credits	
•	2 credits	
Water and Waste Management Policies	2 credits	p 29
Graduate School of International Development (GSID):	2 17	2.4
International Co-operation Law	2 credits	-
Introduction to International Development	2 credits	p 35
Graduate School of Languages & Cultures (GSLC):		
Introduction to Sociolinguistics a	2 credits	p 35
Special Topic in the Geography of Religion: Rāja Yoga	2 credits	p 36
School of Law		
Consult the course instructors prior to registering for the following classes.		
Comparative Studies in Constitutional Law: Outline of the Modern Constitution	2 credits	p 37
Comparative Studies in Criminal Law: Development of National Criminal Law	) 2 anodita	n 27
under the Influence of Foreign and International Law (Intensive Course		
Comparative Studies in Jurisprudence: The Law & Its Personnel	2 credits	
Law as Political Theory (1-year course)	2 credits	
Professional Studies in International Law: Introduction to International Law	2 credits	
Special Lecture and Seminar: The Japanese Legal System	2 credits	p 40
School of Letters:		
Iconicity in Language & Literature	2 credits	-
日本言語文化入門 I (Introduction to Japanese Language & Culture) <j></j>	2 credits	
<j> Course taught in Japanese and which requires at least level 2 of the Japanese Language Proficiency Test</j>	(JLPT) or equ	iivalent.
Graduate School of Mathematics:		
Perspectives in Mathematical Sciences III <u>/I <g></g></u>	2 credits	p 41

## 3. Class Schedule: Japan Area Studies, Courses in the Student's Major, and 入門 講義 (Introductory Courses) <J>\*

Unless indicated otherwise, the following courses commence on <u>Tuesday, 13 April 2010. (Courses marked <J> commence on Monday, 12 April.)</u> Students should refer to the course descriptions in this pamphlet for details of course content and eligibility, and the enclosed floor maps for the locations of classrooms.

$>\!\!<$	Mon	Tue	Wed	Thu	Fri
I 08:45-10:15	Introduction to Financial Reporting (Economics, Sem. Rm. 13)	Theory of Environmental Resources Management (Environmental Studies Hall, Lect. Rm. 2)		Water & Waste Management Policies (Environmental Studies Hall, Lect. Rm. 3)	Price Theory and Applications (Economics, Sem. Rm. 5)
II 10:30-12:00	Iconicity in Lang. & Literature (IRB Humanities & Soc. Sc., Rm. 308-309) Introduction to Sociolinguistics a (IRB Humanities & Soc. Sc., Rm. 609)	Environmental Systems Analysis & Planning (Environmental Studies Hall, Lect. Rm. 1) Special Lect. & Sem: The Japanese Legal System (Law, Sem. Rm. 905)	Low Carbon Cities Studies (Environmental Studies Hall, Lect. Rm. 3)		
III 13:00-14:30	Education in Japan (IRB Humanities & Soc. Sc., Rm. 306)  Perspectives in Mathematical Sciences III/I (Science Bidg. 1, Rm. 109) Intro to Biodiversity Conservation Policies (Environmental Studies Hall, Lect. Rm. 3)		Introduction to Int'l Development (GSID, 8F., Auditorium)  Introduction to Chemical & Biological Industries (Eng. Bldg. 1, Rm. 143)	Special Topic in the Geography of Religion: Raja Yoga (IRB Humanities & Soc. Sc., Rm. 623)	Comparative Studies in Jurisprudence: The Law & its Personnel (Law, Sem. Rm. 905)
IV 14:45-16:15	国際関係論 II 〈J〉 (ECIS, Rm. 207E)  Introduction to Japanese Politics (ECIS, Rm. 201)  Comparative Studies in Constitutional Law: Outline of the Modern Constitution (IRB Humanities & Soc. Sc., Rms. 412-413)	Immigration in Japan: A Socio-legal Perspective (ECIS, Rm. 207W) Intercultural Education: Disney as Cultural Teacher (Education, Lect. Rm. 2) Introduction to Applied Physics, Materials & Energy Engineering (Eng. Bldg. 7, B1-703)	Introduction to Production Engineering (Eng. Bldg. 2, Rm. 222)	Financial Accounting B (Economics, Sem. Rm. 13) 日本文化論 II〈J〉 (ECIS, Rm. 207W)	Contemporary Japanese Society (ECIS, Rm. 207) 言語学入門 II〈J〉 (ECIS, Rm. 301)
V 16:30-18:00	Comparative Studies in Constitutional Law: Outline of the Modern Constitution (IRB Humanities & Soc. Sc., Rms. 412-413) Law as Political Theory (IRB Humanities & Soc. Sc., Rm. 411) 日本語学・日本語教育学 II〈J〉 (ECIS, Rm. 207E)	Int'l Co-operation Law/ Prof. Studies in Int'l Law: Intro to Int'l Law (GSID, 6F, Lect. Rm. 3)  Development Economics (Economics, Lect. Rm. 2)  English Communication on Environmental Issues (Environmental Studies Hall, Sem. Rm. 2)  日本言語文化入門 [ ]	Field Seminar on Environmental Studies (Environmental Studies Hall, Lect. Rm. 1) Law and Economics Workshop <17:00-18:30> (Economics, Sem Rm. 5)		

<sup>\*</sup> The intensive course, Comparative Studies in Criminal Law: Development of National Criminal Law under the Influence of Foreign and Int'l Law is expected to be held in August or September 2010. Please enquire at the School of Law section, IRB Office for details.

## 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 (p. 42) 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> Other Courses:

- 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.
- Students may not take more than two foreign language courses per semester. (Japanese is not included in this requirement.)

#### **Guided Independent Study**

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

10 pages  $\rightarrow$  2 credits 20 pages  $\rightarrow$  4 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 担当者 のための短期 留学生 受入れ マニュアル』.

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(42 ページ)と相談し、同意を得る必要があります。また、その授業に必要な言語やバックグラウンド等の条件を満たしているかについて、その授業の担当教員に判断してもらい、受講の許可を得る必要があります。許可を得たうえで履修することを決定した場合、「履修登録・成績評価に関するお願い」を NUPACE オフィスで受け取り、授業担当教員へ提出してください。

NUPACE で提供される授業以外のコースを登録 するための条件と制限

- 1. 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。)
- 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 外国語の授業は二つまでです。

#### 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 20 ページ→4 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 15 credit hours per semester, or a total of 30 credit hours per academic year. Those students who fail to obtain the required number of credits shall not be presented with a 'Certificate of Completion' once they have concluded their term of exchange.

All NUPACE students will receive two academic transcripts, one of which will be sent directly to their home institutions. The transcript will contain the names of courses studied, class contact hours, number of credits awarded, letter grades and scores out of one hundred. Grades for achievement will be given using a modified form of the 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.

## 单位取得希望学生:

「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、そのうち一通は所属大学へ直接郵送されます。成績証明書には履修した授業の科目名、履修時間数、単位数、成績(ABC)、スコア(%)が表示されます。達成度を示す成績は 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 ECTS/UCTS grading system)

Students who select 'grade' status for any subject 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'.

NUPACE students may elect to take courses on an audit basis. These courses are not included when calculating the required credit load, but they are recorded on the student's registration form and academic transcript. An auditing student is expected to attend classes regularly and to prepare for the lectures/activities. However, he/she is not required to take examinations nor submit assigned papers. Students who attend less than 80% of any course that they are auditing will not have that course recorded on their academic transcripts.

授業科目を「grade」として履修登録をした場合は、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。

また NUPACE 生は授業を聴講科目として受講することが可能です。聴講は単位取得に求められる条件を満たす必要はありませんが、履修登録用紙や成績表に聴講した記録が記載されます。しかし授業に出席し、講義や授業のための準備を充分に行うことが要求されます。試験やレポートの提出などは求められませんが、出席率が80%以下の場合は、その科目を聴講したという記録が成績証明書に記載されません。

Students who wish to change the grading status of a course from 'grade' to 'audit', or who wish to 'drop' a class, should notify the NUPACE Office by **Friday, 28 May 2010**. Requests for amendments to course registration details after this date will not be accepted.

## Students engaging in Research or Guided Independent Study:

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

## Report submission deadline for spring 2010 semester: Friday, 6 August 2010.

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・問題学生 担当者 の た め の 短期 留学生 受入れ 電学生 担当者 の た め の 短期 留学生 受入れ マニュアル』.

授業の履修状況を「grade」から「audit」へ変更する場合、あるいはその授業の履修を止める際には、2010年5月28日(金)までに必ず NUPACE オフィスに報告しなければなりません。

## 研究あるいは GIS(個人勉学指導)を行う学 生:

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

## 報告書の提出締切り(2010 年度前期):2010 年8 月 6 日(金)

調査研究や GIS に関して指導教員と相談する際は、『指導教員・留学生担当者のための短期留学生受け入れマニュアル』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 Takao

Place: Education Center 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, Nagova 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 (SJ101) and Elementary Japanese II (SJ102), 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.

#### Standard Japanese Course Structure

Japanese Level			Class Name			Textbook
Elementary I			SJ101			A Course in Modern Japanese Vol. 1
Elementary II			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

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 (IJ111) (covering elementary levels I and II) and Elementary Japanese II (IJ112) (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. 10 classes covering three levels are offered, which are divided amongst the skill areas of conversation (C), reading (R), listening (L), and grammar and discourse (G). Students may opt to take between one and five of these classes at a level determined by the result of their placement test.

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

Japanese Level	Class	Name	Textbook
Elementary I	IJ111		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)

					Class	Name/Sk	till				
Japanese Level	Convers	sation	Conv	rersation 2	Rea	ding	Liste	ning	Gram Disco		Textbook
Pre-intermediate		IJ2			IJ211		IJ211		IJ211		To Be Announced
Intermediate I	IJ212 (C1)	(C1 &	z 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  $\sim$  intermediate I level (IJ211) must register for both C1 and C2.

## 3. 漢字<*Kanji*>1000

This class concentrates on the 1000 kanji covered at level 2 of the Japanese Language Proficiency Test.

#### Textbook:

『漢字マスター Vol. 3 2級漢字 1000』

## 4. オンライン日本語 < Online Japanese > (中上級以上作文クラス)

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。

## 5. ビジネス日本語 I、II<Business Japanese I, II>

#### 1 概更

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。また、日本人のビジネス・スタイルや価値観、日本のビジネス習慣、日本企業の特徴などの理解も深める。

#### 2. 目標

- (1) 日常のビジネス会話が理解できる。
- (2) 会議、商談、電話など、場面や状況に応じた多様な表現を習得し、文脈・目的に応じた適切な表現の選択ができる。
- (3) 日本のビジネス慣習に対する理解を深める。

## 3. 受講資格及び開講期間

講義はすべて日本語で行っているため、日本語能力試験2級程度の日本語力を備えていることが条件となる。 開講期間は標準コースと同様である。

## 4. 開講クラス

中上級レベルを用意し、様々な教材を活用してビジネス日本語の学習を支援する。クラスの主な内容は以下の通りである。(シラバス)

- (1) 心構え:表情、姿勢、動作
- (2) 会話のマナー:言葉遣い、敬語の使い方
- (3) 電話のマナー:電話のかけ方、電話の受け方
- (4) 就職活動ガイド: 面接の練習

## 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Ⅱ(Global Society II)

Co-ordinator: AKIYAMA Yutaka Class: Mondays, 14:45~16:15

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

グローバリゼーションは開かれた社会・経済を推進し、商品、思想、知識は縦横無尽に世界を駆け抜ける。さらに、ネットワーク社会の出現は人権やアイデンティティー意識の高揚をもたらしている。しかしながら、グローバリゼーションの行く末を案ずる声も大きくなってきている。その恩恵を手にする者は極端に少なく、その半面、リスクは等しく高い。内在する脆弱性は貧困層のみならず、富裕層をも脅かす。途方もない金持ちが現れる一方、貧困、排除、不平等といった問題は依然と未解決のままである。腐敗は蔓延し、開放経済の将来も懸念される。今、私たちは重大な危機状況にあると言えよう。

グローバリゼーションをめぐる賛否両論を紹介するなかで、「地球社会」の在るべき姿を受講生とともに考えていきたい。

#### Reference Materials:

資料配布

#### Evaluation:

出席率・積極性・レポート

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

Co-ordinator: UKIBA Masachika Class: Thursdays, 14:45~16:15

Place: Education Center for International Students (ECIS), Rm. 207W

日本人にとって、韓国は「似ている」ようでどこかが「違う」、ちょっと気になる国である。この講義では、日本人が韓国の社会や文化のどこに違和感や共感を抱くのかを吟味し、韓国という<鏡>に映った日本人の自画像を議論していく。韓国を比較の対象とすることで、日本を東アジア文化圏のなかに位置付ける、広い視野を獲得するのがこの授業のねらいである。

#### Topics to be covered:

- 1. 日本人の韓国体験記を読む
- 2. 激しい受験戦争と母の祈り
- 3. 子どもと向き合う韓国の父親
- 4. 現代に生きる儒教精神
- 5. 占いと巫俗信仰
- 6. 在日コリアンと日本社会

#### 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Ⅱ(Introduction to Japanese Linguistics II)

Co-ordinator: LEE Tack Ung

Class: Mondays, 16:30~18:30

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

本講義では、日本語教育で主に問題となる文法項目を取りあげ、整理・検討することによって、文法の基本的知識を身に付けることを目標とする。毎回、簡単な課題を取りあげ、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。

また、本講義では日本語教育の基礎的知識を身に付けることももう一つの目標としている。日本語教育の現状を概観し、コース・デザイン、教材、4技能の指導法、誤用分析などを紹介する予定である。

#### Topics to be covered:

- I 日本語学(前半)
- 1. テンス・アスペクト
- 2. モダリティ
- 3. 待遇表現

#### II 日本語教育学(後半)

- 1. 4技能(話す、聞く、読む、書く)の指導法について
- 2. 誤用分析

#### Reference Materials:

授業の際に紹介する。

#### Evaluation:

出席・授業態度 40% テスト 60%

## 4. 言語学入門Ⅱ(Introduction to Linguistics II)

Co-ordinator: MOMIYAMA Yosuke Class: Fridays, 14:45~16:15

Place: Education Center for International Students (ECIS), Rm. 301

言語学の一分野である意味論について学ぶ。意味研究の重要性、言語の意味に対する考え方、意味分析の資料などの基本的な事柄について理解したうえで、特に現代日本語を素材として、類義表現・多義表現などの分析方法を学び、自ら分析できるようになることを目指す。認知意味論の基本的な考え方についても解説する。

#### Reference Materials:

ハンドアウトを配布する

## 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

The Graduate School of Languages and Cultures offers a variety of language courses (Chinese, English, French, German, Greek (Classical), Italian, Korean, Latin, Portuguese, Russian, Spanish), which are, for the most part, open to NUPACE students. Students who are interested in taking any of these courses should 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

Pick up a yellow course registration form at the Graduate School of Languages & Cultures (GSLC) counter (Office, 1F, IRB Humanities & Social Sciences). After filling the form out, and writing NUPACE in capital letters at the top of it, submit the relevant section of the form to the same counter during the period below. When submitting the form, you will also be required to submit proof, taking the form of an original score sheet, that you have already attained the following English level or above: TOEFL 527 (iBT 71)/TOEIC 663.

Be sure to keep the remaining portion of the registration form to take to your first class.

**Registration Period:** Tue, Apr 13~Wed, Apr 14 at 09:00~12:00 and 13:00~17:00

Class Placement: Fri, Apr 16 at 9:00 on notice-board <university-wide courses>, 1F,

Inter-departmental Education Bldg (School of Informatics & Sciences).

#### Course Registration – Other Languages

Pick up a blue course registration form at the Graduate School of Languages & Cultures (GSLC) counter (Office, 1F, IRB Humanities & Social Sciences) between Tue, Apr 13 and Mon, Apr 26. After filling the form in, and writing NUPACE in capital letters at the top of 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, submit another section of the registration form, labelled 'For Office Use', into the "course application box" at the GSLC counter between Tue, April 20 and Tue, April 27 (9:00~17:00).

**NB.** English language classes offered by the Graduate School of Languages & Cultures commence on Mon, April 19, 2010. Other language classes commence on Tue, April 20, 2010.

## Japan Area Studies

## 1. Contemporary Japanese Society

Co-ordinator: NOMIZU Tsutomu Class: Fridays, 14:45~16:15

Place: Education Center for International Students, Room 207

This course, taking the form of lectures and discussion classes, aims to introduce students to the main features of contemporary Japanese society. Areas of focus include aspects of Japanese law, economy, education, modernisation and the environment.

## Topics to be covered (tentative):

Apr 16	Course Introduction	(NOMIZU Tsutomu, ECIS)
Apr 23	The Japanese Education System	(FURUYA Reiko, Engineering)
Apr 30	No Class	
May 7	Introduction to the Japanese Economy	(SHINKAI Naoko, GSID)
May 14	The 21st Century Legal System of Japan	(Frank BENNETT, Law)
May 21	Styles of Reasoning and Socialisation in Japan:	
	Comparisons with the United States and France	(WATANABE Masako, Edu.)
May 28	Japanese Animation	(WAKUI Takashi, GSLC)
Jun 4	Modernisation in Meiji Japan: Field trip to Meiji-mura	(NUPACE Office, ECIS)
Jun 11	English Education and Internationalisation of Japan	(IWAKI Nami, ECIS)
Jun 18	Earthquakes and Seismic Risk in Japan	(Simon WALLIS, GSES))
Jun 25	Japanese Business:	
	How to read financial statements of Japanese Companies	(NOGUCHI Akihiro, Econ.)
Jul 2	Cross-cultural Exchange in Japan	(TAKAI Jiro, Education)
Jul 9	Introduction to Japanese Social Security Law:	
	Examples of health insurance and elderly care	(NAKANO Taeko, Law)
Jul 16	Ethnic Minority Pupils in Japanese Schools	(KITAYAMA Yuka, ECIS)
Jul 23	Atomic Energy Development & Environmental Problems	(NOMIZU Tsutomu, ECIS)

#### Reference Materials:

Reference and reading materials for each class will be made available to students one week in advance (to be collected at the NUPACE Office). Students should ensure that they read the assigned materials prior to attending class.

#### Evaluation:

Attendance & Participation: 25%

Written Reports: 75% (25% x 3)

Students are required to write three reports, ensuring that they attach bibliographies of reference materials referred to. Each report's length should be at least 1,500 words (approximately four sides of A4-size paper), exclusive of foot/endnotes and bibliography. The first of the reports should deal with one of the topics covered in weeks 2~5 of the course (submission deadline: May 28, 2010); the second with a topic covered in weeks 6~10 (submission deadline: July 2, 2010), and the third report with a topic covered in weeks 11~13 (submission deadline: July 30, 2010). Students should submit their reports to the NUPACE Office, indicating the name of the instructor to whom they are addressed.

## 2. Introduction to Japanese Politics

Co-ordinator: Robert ASPINALL
Class: Mondays, 14:45~16:15
Place: ECIS, Room 201

#### **Japan Area Studies**

This course introduces students to some of the main issues in contemporary Japanese politics. At the same time, as they are given the background to each selected topic, students will be encouraged to think critically about the issues raised and also the methodology used by political scientists, journalists and others in their efforts to analyse and explain events.

After the first, introductory class students will be allocated topics to research. They will make presentations related to these topics in subsequent classes. Students will also submit a written report at the end of the course. This is not a rigid programme of study, but one that is flexible enough to accommodate both the particular interests of individual students as well as the unpredictability of ongoing political events.

## Topics to be covered:

- 1. Politics in Japan after the Second World War
- 2. The changing world of Japanese political parties
- 3. Elections and election campaigns
- 4. Local issues and environmental politics
- 5. Japan's security and foreign policies
- 6. The role of the prime minister
- 7. Political ideologies and culture
- 8. Japanese politics in comparative perspective
- 9. The debate about reforming the constitution
- 10. The debate about education reform
- 11. The role of the bureaucracy

#### Reference Materials:

Some basic references will be distributed in class. When preparing for papers and presentations students will be expected to use a variety of sources, including newspapers, periodicals, etc.

#### Evaluation:

Presentation: 40% Written Reports: 60%

## Education Center for International Students (ECIS)

## 1. Immigration in Japan: A Socio-legal Perspective

Co-ordinator: Claudia ISHIKAWA (k46189a@cc.nagova-u.ac.jp)

Class: Tuesdays, 14:45~16:15

Place: Education Center for International Students, Room 207W

This course aims to analyse the legal and social status of foreigners in Japan, focusing in particular on the immigration law framework, immigration policy, the rights and protections afforded to aliens under domestic laws, and prospective legal developments vis-à-vis their admission. The principal setting will be Japan, although students are encouraged to draw comparisons with the situation in their home countries, and to examine the protection afforded to foreigners under international law.

#### Topics to be covered:

- Apr 13 Introduction
- Apr 20 Citizenship in Japan
- Apr 27 Japan's Immigration Framework I: A Short History
- May 4 National Holiday: No class
- May 11 Japan's Immigration Framework II: Relevant Laws and Ordinances
- May 18 Japan's Refugee Policy
- May 25 Composition of Foreigners in Japan
- Jun 1 Legal Workers Skilled and increasingly 'Unskilled'
- Jun 8 Undocumented (Illegal) Workers: Video Overstay
- Jun 15 An Assessment of Current Immigration Policy Developments
- Jun 22 DVD Sour Strawberries
- Jun 29 Foreigners' Civil and Political Rights under Domestic Law
- Jul 6 Foreigners' Social and Economic Rights under Domestic Law
- Jul 13 Foreigners and Crime in Japan
- Jul 20 The Japanese Perception of Foreigners

#### Notes:

- 1. **Participation:** Students are expected to prepare for each class, and to participate actively. This applies equally to auditing students.
- 2. <u>Class Proceedings</u>: The course will take the form of a seminar, whereby students are expected to take it in turn to both give presentations and chair the class. This applies equally to auditing students
- 3. <u>Presentation</u>: All students, irrespective of grade status, will be asked to give presentations (approximately 30 minutes) on a subject relevant to the topic covered in the week in which the presentation is scheduled. Students should prepare visual aids or handouts when giving their talks.
- 4. **Essay**: Credit-seeking students are required to write one essay, the length of which should be 2,000~3,000 words, exclusive of bibliography and footnotes. Essay titles should be discussed with the class co-ordinator in advance. The submission deadline is 17:00 on Tuesday, July 27, 2010. Students are advised that essays submitted after the deadline will not be accepted.

#### Reference Materials:

The following materials, listed alphabetically by author, and more, are available in my Office (ECIS, 205). The class co-ordinator also has numerous Japanese language texts:

Brody, Betsy (2002). Opening the Door: Immigration, Ethnicity and Globalisation in Japan. Routledge. Carvalho, Daniela de (2003) Migrants and Identity in Japan and Brazil: The Nikkeijin. RoutledgeCurzon. Cornelius, Wayne A. et al (eds.) (1994). Controlling Immigration: A Global Perspective. Stanford University

Douglass, Mike and Glenda S. Roberts (eds.) (2000). Japan and Global Migration: Foreign workers and the advent of a multicultural society. Routledge.

Goodman, Roger et al (eds.) (2003). Global Japan: The experience of Japan's new immigrant and overseas communities. RoutledgeCurzon

Herbert, Wolfgang (1996) Foreign Workers and Law Enforcement in Japan. Kegan Paul International.

Hirowatari, Seigo. <u>Foreign Workers and Immigration Policy</u> in Banno, Junji (Ed.) (1998). *The Political Economy of Japanese Society, Volume 2.* Oxford University Press.

Iwasawa, Yuji (1998). International Law, Human Rights and Japanese Law: The impact of International Law on Japanese Law. Oxford University Press.

Japan Business Federation (Nippon Keidanren) (2003). Interim Recommendations on Accepting Non- Japanese Workers.

Lee Soo Im et al (eds.) (2006). Japan's Diversity Dilemmas: Ethnicity, Citizenship, and Education. iUniverse, Inc.

Ministry of Justice (2007. Immigration Control 2006: http://www.moj.go.jp/NYUKAN/nyukan54.html Ministry of Justice (2007). Basic Plan for Immigration Control, Third Edition):

http://www.moj.go.jp/ENGLISH/information/bpic3rd.html

Mori, Hiromi (1997). Immigration Policy and Foreign Workers in Japan. Macmillan Press Ltd.

Sellek, Yoko (2001). Migrant Labour in Japan. Palgrave.

Shimada, Haruo (1994). Japan's Guest Workers: Issues and Public Policies. University of Tokyo Press.

Tsuda Takeyuki (2006). Local Citizenship in Recent Countries of Immigration: Japan in Comparative Perspective. Lexington.

#### **Statistical Information**:

Japan Immigration Association (annual publication). *Statistics on Immigration Control.* OECD (annual publication). *Trends in International Migration*. SOPEMI

#### **Useful Websites:**

Immigration Bureau of Japan: http://www.immi-moj.go.jp/english/index.html
Ministry of Justice, Japan: http://www.moj.go.jp/ENGLISH/index.html
Yamawaki Keizo, Global Migration and Japan: http://www.kisc.meiji.ac.jp/~yamawaki/gmj/
Debito.org: http://www.debito.org/index.php

#### Evaluation:

Participation: 20%
Presentation: 30%
Essay: 50%

## Teaching in the Japanese Community (GIS)

Co-ordinator: Claudia ISHIKAWA (k46189a@cc.nagova-u.ac.jp)

Class: Teaching Practice Sessions: 16:30~18:00 once per week (Wednesdays) from May

26 to July 14 (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, April 14.

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, May 12, 2010.)
- 2. Final Report: 80% (4~6 sides of A4-sized paper; submission deadline: Wednesday, July 21, 2010.)

## School of Economics

## 1. Development Economics

Co-ordinator: XUE Jinjun (setsu@soec.nagoya-u.ac.jp)

Class: Tuesdays, 16:30~18:00

Place: School of Economics, Lecture Room 2

This course introduces students to the principles and main theories of development economics. Topics covered include theories of population, labour migration, economic growth, development strategy and policy, international trade, etc, with case studies introduced in each lecture. The course pays particular attention to the issues of income disparity and environmental pollution. Students may have the opportunity to participate in international conferences and publish papers in English.

#### Topics to be covered:

- 1. Guidance: Introduction and overview of the main contents, methods and final examination
- 2. Basic conceptions and methodology Case study: English education in China
- 3. Population

Case study: Population issues in India and Japan's ageing problem

- 4. Labour Migration:
  - Case study: Labour migration in China
- 5. Growth Theory
  - Case study: High growth in Japan & Korea
- 6. International Trade
  - Case study: China's special demand
- 7. International Capital Flow
  - Case study: The World Financial Crisis
- 8. Income Distribution (1)
  - Case study: Income disparity in Japan
- 9. Income Distribution (2)
  - Case study: Income disparity in China
- 10. Sustainable Development (1)
  - Case study: The four major pollution-related diseases in Japan
- 11. Sustainable Development (2)
  - Case study: Environment issues in China
- 12. Sustainable Development (3)
  - Case study: Global climate change and the low carbon economy
- 13. Question and answer session
- 14. Free discussion
- 15. Final examination (short thesis)

#### Textbook:

Michael P. Todaro (2006). Economic Development, 9th edition. Pearson Professional.

(日本語版) 岡田靖夫監訳、OCDI 開発経済学研究会訳、『M.トダロの開発経済学』第 8 版、国際協力出版社、2004年。

**NB.** Participants are required to purchase the textbook.

#### Reference Materials:

D.Perkins et al (2001). *Economics of Development*, 5<sup>th</sup> edition, Norton & Co Inc. 薛進軍・荒山裕行・園田正編著『中国の不平等』日本評論社、2008年. Nicholas Stern (2007). *The Economics of Climate Change*, Cambridge University Press.

#### Evaluation:

Examination and research report

## 2. Financial Accounting B

Co-ordinator: NOGUCHI Akihiro Class: Thursdays, 14:45~16:15

Place: School of Economics, Seminar Room 13

**Prerequisites:** This course is only open to NUPACE students majoring in accounting, who are in the third year of their undergraduate studies, or above. Participation is contingent upon there being available places in the class.

This course introduces students to the theory and application of accounting principles generally accepted in the United States.

#### Topics to be covered:

- 1. Key components of stockholders' equity
- 2. Accounting for treasury stock
- 3. Accounting for the issuance, conversion, and retirement of convertible securities
- 4. Accounting for stock warrants and for stock warrants issued with other securities
- 5. Accounting for stock compensation plans
- 6. Three categories of debt securities and accounting treatment for each category
- 7. The equity method of accounting and the fair value method for equity securities
- 8. The revenue recognition principle
- 9. Accounting for long-term contracts
- 10. Pre-tax financial income and taxable income
- 11. The basic principles of the asset-liability method
- 12. Accounting for the employer's pension plan
- 13. Requirements for reporting pension plans in financial statements
- 14. Accounting criteria and procedures for capitalising leases by the lessee
- 15. Special features of lease arrangements that cause unique accounting problems

#### Textbook:

Donald E. Kieso, Jerry J. Weygandt, Terry D. Warfield, Intermediate Accounting, 13th ed., Wiley.

#### Evaluation:

Attendance and oral presentation in English.

## 3. Introduction to Financial Reporting

Co-ordinator: NOGUCHI Akihiro Class: Mondays, 08:45~10:15

Place: School of Economics, Seminar Room 13

**NB.** Participation by NUPACE students is contingent upon there being available places in the class.

This course provides students with a fundamental understanding of the theory and application of

accounting principles generally accepted in the United States.

#### Topics to be covered:

- 1. Introduction
- 2. Chapter 1 Objectives of financial reporting
- 3. Chapter 1 Ethics and financial accounting
- 4. Chapter 2 Conceptual Framework
- 5. Chapter 2 Basic elements of financial statements
- 6. Chapter 3 Double-entry rules
- 7. Chapter 3 Record transactions and preparation of a trial balance
- 8. Chapter 3 Adjusting Entries
- 9. Chapter 4 Income Statements
- 10. Chapter 4 Other Comprehensive Income
- 11. Chapter 5 Balance Sheet
- 12. Chapter 5 Statement of Cash Flows
- 13. Chapter 6 Time Value of Money
- 14. Japanese Financial Reporting
- 15. Summary

#### Textbook:

Donald E. Kieso, Jerry J. Weygandt, Terry D. Warfield, Intermediate Accounting, 13th ed., Wiley.

#### Evaluation:

Attendance and oral presentation in English.

## 4. 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.

## 5. Price Theory and Applications

Co-ordinator: ARAYAMA Yuko (Office Hours: Tue/Fri, 8:30~9:00)

Class: Fridays, 8:45~10:15

Place: School of Economics, Seminar Room 5

A simple economy consists of households, firms and the government sector. The market is a manmade device to connect them to each other. Price theory serves as a tool to analyse the functions of household and firm behaviour. This course intends not only to promote an understanding of basic economic theory, but also to enhance a sense of the practical applications of price theory in the real world.

## Topics to be covered:

- 1. Introduction: What do economists mean by markets? What is price? What is price theory?
- 2. Household Behaviour (1): Utility, budget constraint and consumption
- 3. Household Behaviour (2): Substitution effect, income effect, and ordinary demand curve
- 4. Household Behaviour (3): Applications and extensions of demand theory
- 5. Duality: Compensated demand curve and measurement for welfare change
- 6. Firm Behaviour (1): Production functions
- 7. Firm Behaviour (2): Cost functions and profit maximisation
- 8. Firm Behaviour (3): Short-run and long-run supply
- 9. Market Equilibrium in the Product market
- 10. The Firm and Industry: Monopolies, cartels and economy of scale
- 11. Perfect Competition and Market Failure: Externality, public goods, and asymmetric information
- 12. Market for Factors (1): marginal Productivity and the theory of derived demand
- 13. Market for Factors (2): Labour supply and household production
- 14. General Equilibrium (1): Pure exchange and Pareto Optimality
- 15. General Equilibrium (2): Production, consumption, and welfare

#### Textbook:

Jack Hirshleifer et al. Price Theory and Applications, 7th edition.

**NB.** Participants are required to purchase the textbook.

#### Reference Materials:

Donald N. McCloskey. The Applied Theory of Price (available through the Internet)

#### Evaluation:

Mid-term examination and term paper

## School of Education

## 1. Education in Japan

Co-ordinator: Robert ASPINALL
Class: Mondays, 13:00~14:30

Place: Integrated Research Building (IRB), Humanities & Social Sciences, Room 306

This course aims to introduce international students to the contemporary education system in Japan. Students will be encouraged to compare education in Japan with education in their home country.

#### Topics to be covered:

- 1. The historical development of the modern Japanese education system
- 2. Education reform in contemporary Japan
- 3. Different types of school from kindergarten to university
- 4. School problems like bullying and truancy
- 5. How different subjects are taught
- 6. The debate over children's rights and education
- 7. The debate over internationalization and education
- 8. Education and social stratification
- 9. Education as a political issue
- 10. Education in Japan compared to other countries

#### Reference Materials:

Materials will be distributed during each class. A reading list and advice on other references will also be given out during the class.

#### Evaluation:

One paper and one presentation per student.

## 2. Intercultural Education: Disney as Cultural Teacher

Co-ordinator: David POMATTI
Class: Tuesdays, 14:45~16:15

Place: School of Education, Lecture Room 2

This is a media-literacy course on "reading Disney": How to understand the social and cultural messages in Disney features, from the earliest animations to full-length "live action" movies, and also the various Disneyland theme parks. From the beginning, Walt Disney sought to present "American" values and viewpoints through his productions. The nature of this Americanism has changed over the years as American society has changed, and this is reflected in the images, but core patterns have remained. We will look at 1) the social and psychological meaning of Mickey Mouse and other characters, 2) how "Disneyfication" works (changing sources to fit the Disney formula), 3) whether Disney is good for children, 4) evolving stereotypes in Disney, 5) the Disney Worldview, 6) Disney's idea of nature and of history, 7) Disney and feminism, 8) how Disney has adapted to different countries

#### Topics to be covered:

- 1. Disney Project Questionnaire (and material on the extent of the Disney Corporation and its reception by foreign audiences)
- 2. What We Can Learn from Mickey Mouse (earliest Disney animation and the meanings of characters)
- 3. The Silly Symphonies (sentimentalism and populist messages)
- 4. "Is Disney good for children?" (critical examination of messages in Disney animation: Snow White, Aladdin, The Little Mermaid)

- 5. Disney's Pocahontas (Disneyfied history, moral messages for the present)
- 6. The Disney Princesses (commodification of childhood, sexist or feminist messages?)
- 7. The Disney View of Nature (Bambi and the "True Life Adventures")
- 8. Disney Live Action Westerns (Americanism, "Davy Crockett")
- 9. Disneyland Parks (customer experience, foreign adaptations, 'reading' an amusement park, waiting in lines)
- 10. Disney and Feminism (adaptations and messages in Cinderella and Pretty Woman

#### Reference Materials:

There will be ample video illustrations, including the viewing and analysis of several full Disney features. All printed materials will be provided by the teacher, but the short text must be bought.

#### Evaluation:

Evaluation will be based on attendance, participation in discussions, short worksheets related to the viewing, and a final report demonstrating the student's own media literacy.

## School of Engineering

## 1. Introduction to Applied Physics, Materials & Energy Engineering

Co-ordinator: WATANABE Kenichi (k-watanabe@nucl.nagoya-u.ac.jp; tel: 789-4513)

Class: Tuesdays, 14:45~16:15

Place: School of Engineering, Building 7, B1-703

This course discusses the fundamentals of applied physics, materials science & processing engineering, and quantum energy engineering. Topics to be analysed include: Magnetism, superconductivity, semiconductors, fundamentals and applications of ceramics and metals (steel structures, car bodies, etc.), and an introduction to nuclear fusion and quantum energy utilisation.

#### Topics to be covered:

1. Introduction to superconductivity	(SHIBATA Hajime)
2. Introduction to magnetism	(KUSAKABE Koichi)
3. Introduction to quantum computers	(TANAKA Hirotaka)
4. Introduction to laser materials processing I	(KANAOKA Masaru)
5. Introduction to laser materials processing II	(KANAOKA Masaru)
6. Introduction to nuclear fusion I	(Byron PETERSON)
7. Introduction to nuclear fusion II	(Byron PETERSON)
8. Introduction to nuclear fusion III	(Byron PETERSON)
9. Introduction to nuclear fusion IV: Visit to Nuclear Fusion Research (	Centre
	(Byron PETERSON)
10. Fundamentals of ceramics and applications I	(UKYO Yoshio)
11. Fundamentals of ceramics and applications II	(UKYO Yoshio)
12. Fundamentals of ceramics and applications III: Visit to Toyota Cent	ral R & D Labs
	(UKYO Yoshio)
13. Fundamentals of metals and applications I	(Mehari ABRAHAM)
14. Fundamentals of metals and applications II	(Mehari ABRAHAM)
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#### Reference Materials:

Shackelford, James F., Introduction to Materials Science for Engineers, Prentice Hall, Upper Saddle River, New Jersey, USA

#### Evaluation:

Evaluation will be based on written reports to be submitted at each lecture.

## 2. Introduction to Chemical & Biological Industries

Co-ordinator: LIANG Xingguo

Class: Wednesdays, 13:00~14:30

Place: School of Engineering, Building 1, Room 143

This course introduces the current state and future prospects of R&D and production activities in Japan's chemical and biological industries. The industries' relationship with human society, involvement in environmental and energy issues, and role in the global society will also be discussed.

#### Topics to be covered:

Apr 14 Guidance (LIANG Xingguo)

#### A. Project Creation in Chemical Industries

Apr 21, May 12, 19, & 26

(Umesh KADABA, SCEJ & PMAJ Member)

These lectures will demonstrate how to plan projects as a means of assistance to chemical industries in developing countries. Economic evaluation and examples of practice are included.

#### B. The R & D Process in Biotechnology Companies

Jun 2, 9, 16, & 23

(KYO Motoki, Toyobo Co. Ltd.)

These lectures introduce the stages of development from planning to production/sales of biotechnology products. Overviews of contracts/agreements and patent strategies towards profitable business will be discussed through case studies.

#### C. Process Engineering of Advanced Ceramics

Jun 30, Jul 7, 14, & 21 (ZHOU You, National Institute of Advanced Industrial Science & Tech.) Sintering, microstructure control, and characterisation of advanced structural ceramics

#### Evaluation:

Active participation and report.

## 3. Introduction to Production Engineering

Co-ordinator: SASOH Akihiro

Class: Wednesdays, 14:45~16:15

Place: School of Engineering, Building 2, Room 222

Lecturers invited from leading Japanese industries will provide an insight to the current status of production engineering in Japan. The maximum number of students is limited to thirty, with foreign students having first priority. Regular attendance, as well as the submission of several assignments, is required.

#### Topics to be covered:

## A. Production Engineering of Aerospace Products

(I. MAENO, T. FURUYA & Y. KAWAHARA, Sumitomo Precision Products Co., Ltd.)

- 1. Outline of Aircraft Landing Gear
- 2. Development of Landing Gear: Design, analysis, testing, manufacturing, and quality assurance
- 3. Experience of International Collaboration

## B. Production Engineering in the Automobile Industry

(Toyota Motor Co., Ltd.)

- 4. Introduction to the Toyota Production System
- 5. Toyota Production Planning

## C. Site Visit to Automobile Manufacturing Plant

(Toyota Motor Co., Ltd.)

#### D. Production Engineering in the Aerospace Industry

- (A. KITANO, Mitsubishi Heavy Industries, Ltd.)
- 6. Introduction to Aerospace Manufacturing
- 7. Manufacturing Processes of Typical Aerospace Products

#### E. Site Visit to Aerospace Manufacturing Plant

(Mitsubishi Heavy Industries, Ltd.)

#### F. DENSO Manufacturing for Automotive Parts

(K. KITA, H. MORI & M. KITANO, Denso Corporation)

- 8. Production Systems for Automotive Parts
- 9. Concurrent Activities and IT Utilisation for Product Development
- 10. Activities and Management Systems for Quality Enhancement

#### Reference Materials:

Handouts will be distributed.

#### Evaluation:

Attendance and assignments.

## Graduate School of Environmental Studies (GSES)

NB. These courses are open to all NUPACE students, irrespective of student status.

#### 1. English Communication in Environmental Issues

Co-ordinator: Victor MUHANDIKI
Class: Tuesdays, 16:30~18:00

Place: Environmental Studies Hall, Seminar Room 2

English communication ability is a fundamental requirement for engineers and scientists working in the field of environmental problems, since environmental problems are not unique to any one country. In this course students will be assigned specific subjects concerning environmental problems and will be required to study the assigned subjects deeply, and then present and discuss the studied subjects in class in English. In the first few classes, global environmental issues will be introduced through lectures, video presentations and discussions in class. Students will be expected to acquire a broad overview of important global environmental problems and the measures to address the problems. Students will be encouraged to share with others experiences in their home countries. After the introductory lectures, students will be expected to choose a topic of their interest and collect relevant data and information on the topic. Students will be expected to work both individually and in groups. In forming groups, it will be ensured that each group is well represented in terms of the majors and home countries of students.

#### Topics to be covered:

- 1.1 Global environmental problems
- 1.2 Water and waste management problems
- 1.3 Energy problems
- 1.4 Urban transport problems
- 1.5 Urbanization problems
- 1.6 Biodiversity conservation
- 1.7 Environmental education

#### 1.8 Citizen participation in environmental conservation

#### References:

Relevant references will be introduced in class.

#### Evaluation:

#### 1. Preparation of Presentation Material

Students will be expected to research on their chosen/assigned topics and then prepare presentation materials. PowerPoint will be used for all presentations. In addition, students will be expected to prepare a brief summary of the key issues in their presentation (about 1 page A4 size paper, typed).

#### 2. Presentation and Discussion

Students will present their assigned topics both individually and in groups. To ensure active discussion among students, each group will have a responsibility to chair and lead presentations by other groups.

#### 3. Preparation of Final Report

Each student will be expected to submit a final report on the assigned subject. The length of the report shall be about 4 pages A4 size paper (typed). Students are encouraged to use illustrations (e.g. figures and tables) in their report.

#### Message to Students:

This class is open to students from a wide range of majors and countries. It provides a rare and interesting opportunity for students to interact with others on the important and common subject of environment. It is very important that students attend all classes and actively participate in discussions and group work.

#### 2. Environmental Systems Analysis and Planning

Co-ordinators: TANIKAWA Hiroki (tanikawa@nagoya-u.ac.jp)

Class: Tuesdays, 10:30~12:00

Place: Environmental Studies Hall, 3F, Lecture Room 1

#### Goal & Contents:

- · To understand "environmental systems", i.e., the interaction of human activities and nature
- To learn the scientific mechanisms of global environmental problems, such as climatic change
- To learn the basic principles and methods of analysing environmental systems, e.g., environmental economics, mathematical models, life-cycle assessment, etc.
- To learn the principles and methods of environmental management on local, national and global scales

#### Reference Materials:

TBA

#### Evaluation:

Attendance to each class is a prerequisite Reports on 5~6 subjects 100%

#### 3. Field Seminar on Environmental Studies

Co-ordinator: YAMAGUCHI Yasushi (yasushi@nagoya-u.jp)

Class: Wednesdays, 16:30~18:00 (x 3); Full-day Outdoor Field Seminars (x 3)

Capacity: A maximum of three NUPACE students
Place: Environmental Studies Hall, Lecture Room 1

**NB.** Guidance/discussion sessions are held three times on Wednesday afternoon, and will be followed by full-day, outdoor field seminars, as indicated below. The first guidance will be conducted at 16:30~18:00 on **April 14th**, **2010**.

Prerequisites: Participants are required to have a good Japanese comprehension level.

The goal of this seminar is to understand environmental problems and natural disasters by visiting outdoor areas where these problems actually occur. The course also aims to teach of field survey methodologies.

#### Topics to be covered:

Observations and discussions will be conducted during field seminars on a variety of topics pertaining to environmental studies, such as the interaction between human activities and environments. Areas of interest to be visited are as follows:

- (1) Public institutions and private enterprises in and around Nagoya to learn about environmental measures (Friday, June 4<sup>th</sup>);
- (2) Western part of the Nōbi Plain including the Fujimae mud flat, Nagaragawa River mouth dam and delta areas (Saturday, June 12<sup>th</sup>);
- (3) Central part of Nagoya to discuss the relationship between natural environments and infrastructures, and to actually measure aerosol particles to understand the atmospheric environment (Saturday, June 19th and/or Sunday, June 20th).

#### Textbook:

Environmental Studies Research Source Book, Fujiwara Shoten (Japanese)

#### Evaluation:

Active participation in each seminar 45% Report prior to field seminars 25% Report on field seminars 30%

## 4. Introduction to Biodiversity Conservation Policies

Co-ordinator: WATANABE Mikihiko (miwata@urban.env.nagoya-u.ac.jp)

Class: Mondays, 13:00~14:30

Place: Environmental Studies Hall, Lecture Room 3

The objective of the course is to provide students with the necessary academic background on biological diversity/biodiversity. The background consists of 1) definition and situation of biodiversity; 2) causes of biodiversity loss; 3) theories for analyses and practical tools; and 4) present institutions, policies and international laws related to biodiversity. Through the course, students are expected to, a) understand the problems; b) become acquainted with requisite techniques; and c) acquire capacity-building know-how on institutional and policy development. Students should gain both comprehensive and concrete knowledge to achieve the goal of becoming global environmental leaders.

#### Topics to be covered:

- 1. Orientation Course Overview
- 2. What is biological diversity? Definition and classification
- 3. Status of biodiversity Situation, trends, and causes of the loss 1
- 4. Status of biodiversity Situation, trends, and causes of the loss 2
- 5. Convention on Biological Diversity (CBD)
- 6. The Cartagena Protocol on Biosafety and related international treaties (ITPGR)
  - Discussion on GMO in developing countries
- 7. Conservation measures at the population and species levels
- 8. Conservation measures at the community and policy levels (case study)
- 9. Biodiversity and the private sector

- 10. Values for the environment Economic Valuation and Valuation Methods
- 11. Decision making criterion Cost-benefit analysis (CBA) 1
- 12. Decision making criterion Cost-benefit analysis (CBA) 2
- 13. CBA with values for the environment
- 14. Summary of lectures for examination
- 15. Examination

#### Textbook:

No textbooks are required. The two books below are, however, strongly recommended. Primack, R. B. (2004). *A Primer of conservation biology*. Sinauer Associate Sodhi, N. S. and Ehrich, S. P. eds. (2010). *Conservation biology for all*. Oxford University Press

#### Reference Materials:

Millennium Ecosystem Assessment (2005). Ecosystem and human well-being: biodiversity synthesis, World Resource Institute

Secretariat of the Convention on Biological Diversity (2000). Sustaining life on earth http://www.cbd.int/doc/publications/cbd-sustain-en.pdf

The Convention on Biological Diversity Official Website: http://www.cbd.int/

#### Evaluation:

Examination 100%

## 5. Low Carbon Cities Studies

Co-ordinator: TANIKAWA Hiroki (tanikawa@nagoya-u.ac.jp)

Class: Wednesdays, 10:30~12:00

Place: Environmental Studies Hall, Lecture Room 3

To learn policies, plans and technological and institutional measures to realise low carbon cities with a view to integrating climatic change mitigation in urban development. Students are recommended to have taken (be taking) the lecture *Environmental Systems Analysis and Planning*.

#### Topics to be covered:

- 1. Global Climatic System
- 2. Mechanisms of Global Warming
- 3. Climatic Change and Human History
- 4. Economy, Energy and Environment
- 5. Urban Environmental Management and Planning
- 6. Human Activities and Energy in Cities
- 7. Urban Forms, Land Use and Energy
- 8. Transportation and Energy
- 9. Urban Squares, Buildings and Energy
- 10. Urban Heat Island Phenomena
- 11. Lifestyles and Energy
- 12. Urban Environmental Simulators

## Textbook:

TBA

#### Reference Materials:

TBA

#### Evaluation:

Set problems in class 50% Reports 50%

## 6. Theory of Environmental Resources Management

Co-ordinators: WATANABE Mikihiko, (miwata@urban.env.nagoya-u.ac.jp)

TAWA Masahiro (tawa01@urban.env.nagoya-u.ac.jp)

Class: Tuesdays, 8:45~10:15

Place: Environmental Studies Hall, 3F, Lecture Room 2

This course intends to provide students with a platform to understand what environmental resources are. The lectures consist of two parts: 1) basic theoretical frameworks on environmental resources; and 2) management policies of international cooperation. In addition, note that the lectures are firmly related to the course titled, 'Environmental Industry Systems'. This course comprises the theoretical part, even where it contains practical cases, while 'Environmental Industry Systems' focuses more on practice.

#### Topics to be covered:

- 1. Course Overview
- 2. Classification of the 'resources'
- 3. Theory of optimal depletable resource allocation
- 4. Theory of optimal renewable resource utilisation a basic model
- 5. Theory of optimal renewable resource utilisation genetic resource and bio-prospecting
- 6. Efficient allocation of recyclable resources
- 7. Discussions based on assignment
- 8. International cooperation for environmental resources management (general)
- 9. International cooperation for environmental resources management (forestry sector)
- 10. International cooperation for environmental resources management (agricultural sector)
- 11. International cooperation for environmental resources management (others)
- 12. Group presentations
- 13. Group presentations
- 14. Group Presentations

NB. The number of presentations will be determined by the number of class participants.

#### Textbook:

Tietenberg, T. and Lewis, L. (2009). Environmental Economics & Policy (6th Edition). Pearson, ISBN 9780321666215

#### Reference Materials:

Tietenberg, T. (2006) *Environmental Natural Resource Economics*, Pearson Other references will be specified in each lecture.

#### Evaluation:

Group presentation 50% Report 50%

#### 7. Water and Waste Management Policies

Co-ordinator: Victor MUHANDIKI Class: Victor MUHANDIKI Thursdays, 8:45~10:15

Place: Environmental Studies Hall, Lecture Room 3

Water pollution and solid waste are some of the major environmental problems facing our society today. For effective management of water and waste, it is essential to have relevant rules, laws and policies, and the institutions to administer them. This course will introduce the challenges of managing the water environment and waste focusing on legal, policy and institutional frameworks.

#### Topics to be covered:

#### A. THE GLOBAL WATER PROBLEM

#### 1 Water for Humans and Water for Nature

Water is essential for all forms of life on earth. Water supports not only human life and activities on which human life is dependent, but also supports vital ecosystems such as forests, rivers, lakes, wetlands, and oceans. It is now recognised that we face a global water problem in terms of water quantity and water quality. Some regions in the world experience a water scarcity problem while water pollution is a common problem worldwide. Thus, the challenge we face is how to manage our water resources to meet the needs of the various uses of water. Addressing this challenge involves making the right balance between allocating water for human uses on the one hand and water for nature (ecosystem support) on the other hand. This introductory lecture will highlight key issues regarding the global water situation under the following themes:

- 1.1 Water as a Basic Human Need (BHN)
- 1.2 Global water supply and sanitation situation
- 1.3 Global state of the water environment
- 1.4 Water for nature: Ecosystem support function of water

#### 2 Global Initiatives to Address the Water Problem

There have been concerted global initiatives to address the water problem. Most of these initiatives have been directed at assisting poor countries, which, by their own efforts, cannot fully deal with the water problem. In the past, more emphasis was placed on water supply provision. However, in recent years, it has become apparent that water supply provision has to go hand in hand with other pertinent issues like sanitation provision and protection of water sources. In this lecture we will review important global initiatives in the water field and their impact. The initiatives that will be reviewed include the following:

- 2.1 Dublin Principles on water management
- 2.2 Rio Earth Summit and Agenda 21
- 2.3 World Water Vision (WWV)
- 2.4 Millennium Development Goals (MDGs)
- 2.5 World Lake Vision (WLV)

## **B. WATER QUALITY MANAGEMENT**

#### 3 Types and Sources of Water Pollution

Pollution of the water environment is one of the serious problems we face in water management. The starting point to understand this problem is to know the various types of pollution and their sources. Traditionally, wastes such as sewage are disposed of into water bodies, relying on the self purification capacity of water bodies for the treatment of the wastes. It is therefore also important to understand the self purification function of water bodies. In this lecture, different types of pollution in the water environment will be discussed, including the following: pathogens, organic wasters (oxygen demanding wasters), toxic chemicals (heavy metals and organic chemicals), nutrients and thermal pollution. Sources of pollution will be introduced under two categories, namely point and non-point (also called diffuse) source pollution. Point source pollution has a clearly defined point of origin (such as effluents discharged into the sewerage system from households and factories). On the other hand, non-point source pollution originates from multiple sources over a wide area (such as runoff from agricultural fields, paved surfaces or forests). The self purification function of water bodies will also be introduced. The following topics will be covered in this lecture:

- 3.1 Types of pollution
- 3.2 Point and non-point sources of pollution
- 3.3 Self purification of water bodies

#### 4 Water Quality Standards

To measure the level of pollution of water, quantitative parameters such as dissolved oxygen (DO),

biochemical oxygen demand (BOD) and transparency are employed. These quantitative parameters are used to set water quality criteria, objectives, and standards that are applied in water quality management. Water quality criteria, objectives, and standards provide scientific information about the effects of pollutants on specific water uses and specify water quality requirements for different water uses. The standards provide the basis for water pollution control regulations and also for planning measures for pollution prevention. This class will introduce the above issues under the following topics:

- 4.1 Water quality parameters
- 4.2 Drinking water quality standards
- 4.3 Environmental water quality standards
- 4.4 Discharge standards
- 4.5 Water quality monitoring

#### 5 Point and Non-point Source Pollution Control Measures

Different strategies are required to manage point and non-point source pollution. Because point sources have identifiable and well defined points of origin, their control is relatively easy and often implemented by applying relevant technical or regulatory measures. On the other hand, control of non-point source pollution is relatively complicated and often requires measures beyond technical and regulatory control. For example, getting farmers to use organic manure instead of chemical fertilizers may require measures such public education and awareness raising, involving the farmers in developing the management plan for their watershed, etc. In this lecture, we will discuss the various pollution control measures under the following topics:

- 5.1 Policies, laws, regulations and enforcement
- 5.2 Best Management Practices (BMPs) for non-point source pollution control

#### C. WATER QUANTITY MANAGEMENT

## 6 Water Use and Water Rights

Water has many users and uses and often there are conflicts over allocation of right quantities of water among the different users and uses. For example, the use of river or lake water for drinking water supply may conflict with the use of the same river or lake for discharge of treated effluent from a municipal wastewater treatment plant or factory. The conflicts occur both in space (e.g. upstream – downstream) and time. To manage these conflicts that are inherent in water resources management, the responsible authorities (local or central governments) often issue water rights for the various users and uses of water. Managing conflicts is particularly a challenging task for international water bodies (water bodies shared by more than one country). Virtual water is a concept that has attracted much interest in water resources management in recent years. Virtual water is the amount of water that is embedded in food or other products needed for its production. For example, when Japan imports flowers produced in Kenya, Japan in essence imports virtual water from Kenya equivalent to the amount of water used to grow the flowers in Kenya. In this lecture, we will discuss water quantity management under the following themes:

- 6.1 Allocation of water among competing users and uses
- 6.2 Upstream-downstream issues
- 6.3 Virtual water

#### 7 Dams and other Flow Regulation Structures

Dams are one of the major water resources infrastructures constructed for purposes such as to impound water in order to ensure a stable water supply, to control floods, or to generate hydro-electric power. While dams serve useful purposes as listed above, in recent years there has been intense debate over the necessity of dams. Some have argued strongly against dam construction from an environmental point of view. The World Commission on Dams (WCD) released a report on the controversial issues related with dam construction in 2000. This lecture will introduce dams and other flow regulation structures under the following topics:

- 7.1 Why dams and other flow regulation structures are constructed
- 7.2 Issues surrounding dam construction: World Commission on Dams (WCD) report

#### D. LAKES: A TYPIFICATION OF WATER RESOURCES MANAGEMENT ISSUES

#### 8 Characteristics, Values and Problems Facing Lakes

Of all the water resources, it may be argued that lakes are perhaps the most difficult and delicate to manage. This is because of three unique characteristics of lakes, namely, long retention time, integrating nature, and complex response dynamics. Integrating nature means that everything comes together in lakes. In fact lakes act as mirrors of their basins: by looking at a lake, you can tell what is going on the lake basin. Long retention time of lakes implies that problems in lakes remain for long and finding solution takes long. Complex response dynamics means that all things in water affect each other and the response of ecosystems to changes cannot be predicted or controlled. It may therefore not be an overstatement to say that if we could succeed to manage lakes effectively, then we could succeed to manage all other water bodies. In this and the next series of related lectures, lake management issues will be introduced with a view to helping the students understand the complex issues inherent in water resources management. The following topics will be discussed in this lecture:

- 8.1 Characteristics of lakes
- 8.2 Values of lakes
- 8.3 Problems facing lakes

## 9 Principles of Lake Management

Principles of lake management refer to basic guidelines or way of thinking that should inform lake basin management. Lakes around the world are faced with a host of problems such as water pollution, water level decline, overfishing, and introduction of exotic species. These problems threaten the many uses of lakes. Principles of lake management provide guidelines, which if followed, would lead to effective management of lakes for their sustainable use. In this lecture, the following seven principles of lake management presented by the World Lake Vision (WLV) Committee at the Third World Water Forum (WWF3) held in Japan in 2003 will be discussed:

- 9.1 Need for harmony between humans and nature
- 9.2 Lake drainage basin as the management unit
- 9.3 Need for long-term preventative approach
- 9.4 Role of science and information
- 9.5 Need for conflict resolution
- 9.6 Need for stakeholder participation
- 9.7 Need for good governance

#### 10 Essential Components of Lake Basin Management

Managing a lake entails managing the water body itself and its basin. For some issues such as long rage transport of atmospheric pollutants or global warming, it is inevitable to "think beyond the lake basin". There are many sectors and players in lake basins and it is often the case that the agendas of all the stakeholders are not necessarily in conformity with requirements for lake basin management. For example, it may be the policy of the Ministry of Agriculture to increase food production by subsidizing chemical fertilizers used by farmers. This policy that looks reasonable from the point of view of food security, obviously is in conflict with the objective of water quality management considering that increased fertilizer use may lead to increased pollution of lake water. From this example, it is clear that lake management requires proper coordination and collaboration among different stakeholders in the lake basin. This lecture will discuss six essential components of lake management listed below:

- 10.1 Policies, laws and regulations
- 10.2 Institutions
- 10.3 Technological interventions
- 10.4 Information systems
- 10.5 Involving people

10.6 Finance

#### 11 Lake Biwa Case Study

Lake Biwa is the largest lake in Japan and is located in Shiga Prefecture. It is an important water resource for 14 million people in the Kansai Metropolitan Region. In addition to water supply, the lake has multiple uses such as fishery, flood control, hydro-electric power generation and recreation. The population in the lake basin has grown over the past years because of the growth of industries in the basin and the existence of a convenient transportation network that connects the area to the neighbouring cities of Kyoto, Osaka and Kobe. The lake, believed to be more than 4 million years old, has become tremendously polluted over the past 50 years. The largest ever water resources development project in Japan was implemented in Lake Biwa basin for 25 years from 1972 – 1997 at a cost of 1.9 trillion Japanese Yen. In this lecture, water resources management issues in the Lake Biwa basin will be introduced to illustrate the approaches taken in Japan.

#### E. SOLID WASTE MANAGEMENT

#### 12 Solid Waste Generation, Collection and Disposal

Solid waste is a generic term that describes things that we discard. This lecture will be limited to Municipal Solid Waste (MSW). The definition of MSW varies but usually includes wastes from households and commercial establishments. Solid waste management is particularly a major problem in many urban areas with large populations. Generally, the amount of solid waste generated increases as people become wealthy. This lecture will introduce basic technical concepts of solid waste management, focusing on waste generation, collection and disposal.

#### 13 Waste Minimization, Recycling and Resource Recovery

The challenge we face today is to break the link between waste creation and economic growth. There is need to change the way we use resources to ensure efficient use and minimal environmental impacts. This change requires a wide range of interventions, including technical and socio-economic measures. But, perhaps, the greatest change needed is at the individual level regarding our consumption patterns and our perception of waste. In this lecture, we will discuss waste management focusing on waste minimization, recycling and resource recovery. Relevant policies for solid waste management will be discussed.

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- Novotny, V. and P. Brown, eds. (2007). Cities of the Future: Towards Integrated Sustainable Water and Landscape Management. IWA Publishing, London, UK.
- Novotny, V. (2003). Water Quality: Diffuse Pollution and Watershed Management. John Wiley & Sons, Inc., New York, USA.
- Okada, M. and S.A. Peterson (1999). Water Pollution Control Policy and Management: The Japanese Experience. Gyosei, Tokyo, Japan. (also available in Japanese)
- Tchobanoglous G., H. Theisen and R. Eliassen (1977). *Solid Wastes: Engineering Principles and Management Issues*. McGraw-Hill, Inc., New York, USA.
- World Commission on Dams, WCD (2000). Dams and Development: A New Framework for Decision-Making, The Report of the World Commission on Dams. World Commission on Dams. (available online at http://www.dams.org/)
- World Water Council, WWC (2000). World Water Vision Commission Report: Vision for Water, Life and the Environment. (available online at <a href="http://www.worldwatercouncil.org">http://www.worldwatercouncil.org</a>)

## Graduate School of International Development (GSID)

## 1. International Co-operation Law (国際協力法)

Co-ordinator: YAMAGATA Hideo (yamagata@gsid.nagoya-u.ac.jp)

Class: Tuesdays, 16:30~18:00

Place: Graduate School of International Development (GSID), 6F, Lecture Room 3

NB. This course is open to graduate students in general, as well as undergraduate students of the School of Law. The same course is listed as *Professional Studies in International Law: Introduction to International Law* under the School of Law courses.

This is an introductory course for the study of international law, with the aim of imparting a basic knowledge of what international law is, and how it functions. Due to time constraints, it does not cover the entire field of international law; however, through the analysis of the ICJ judgement in the *Nicaragua case*, it will impart a basic idea. Stress will be put on the structural change of international law between its traditional and contemporary forms.

## Topics to be covered:

- 1. What is international law?
- 2. War under traditional international law.
- 3. Prohibition of the use of force under the Charter of the United Nations.
- 4. Self-defence in international law.
- 5. Collective self-defence in international law.
- 6. Principle of non-intervention.
- 7. Principle of peaceful settlement of international disputes.
- 8. The World Court as a judicial organ.
- 9. Jurisdiction of the Court.
- 10. Procedures before the Court.
- 11. Creation of rules of international law.
- 12. Treaties as a source of international law.
- 13. Formation of customary international law.
- 14. Legal force of customary international law.
- 15. Written Examination.

#### Textbook:

Materials will be supplied.

### Reference Materials:

Brownlie. Principles of Public International Law. Oxford UP

Shaw. International Law. Cambridge UP Evans (ed.). International Law. Oxford UP

Evaluation:

Course Performance: 30% Written Examination: 70%

### 2. Introduction to International Development (国際開発入門)

Co-ordinator: SHIMADA Yuzuru/YAMADA Shoko

Class: Wednesdays, 13:00~14:30

Place: Graduate School of International Development, 8F, Auditorium

### NB. This course is open to credit-seeking NUPACE students only. Auditing is unacceptable.

This course introduces students to the inter-disciplinary nature of international development. It presents aspects of international development from various disciplines such as 1) economic development & management, 2) rural and regional development, 3) governance and law, 4) peace-building, 5) social development and culture, and 6) education and human resource development. Lectures are given by instructors from various academic and professional backgrounds. A detailed schedule is announced on the GSID's homepage: <a href="http://www.gsid.nagoya-u.ac.jp/index-en.html">http://www.gsid.nagoya-u.ac.jp/index-en.html</a>

### Topics to be covered (tentative):

- 1. Review and Overview of Development Thoughts by Economists
- 2. Global Warming and International Co-operation
- 3. Governance and Law
- 4. Rural/Regional Development
- 5. Peace-building
- 6. International Education Development
- 7. Social Development and Culture

#### Reference Materials:

Handouts will be distributed.

#### Evaluation:

Class attendance and weekly comment papers.

## Graduate School of Languages and Cultures (GSLC)

### 1. Introduction to Sociolinguistics a

Co-ordinator: MORITA Chua Liang Class: Mondays, 10:30~12:00

Place: Integrated Research Building (IRB), Humanities & Soc. Sciences, Room 609

This course explores the relationships between language and society. We will attempt to answer questions such as 'How many languages are there in the world?' and 'How does the way one speak reveal his/her social background?' In attempting the former, we will learn that social, political and historical factors play an important role in our definition of language and in the latter, social class influences the way people speak in many societies. We will also be spending time on discussing how linguistic problems can become societal problems and what can be done.

### Topics to be covered:

- 1. Language in society/Society in language
- 2. Language choice
- 3. Sociolinguistic patterns
- 4. Language and gender
- 5. Linguistic problems as societal problems

### Textbooks/References:

Romaine, S. 2000. Language in Society. Oxford, New York: Oxford University Press.

#### Evaluation:

Participation 50% Presentation 50%

### 2. Special Topic in the Geography of Religion: Rāja Yoga

Co-ordinator: Simon POTTER (potter@lang.nagoya-u.ac.jp)

Class: Thursdays, 13:00~14:30

Place: Integrated Research Building (IRB), Humanities & Soc. Sciences, Room 623

### NB. This course is open to all NUPACE students, irrespective of student status.

This course will revolve around spiritual yoga with the idea of getting insights into culture as well as, perhaps, oneself. Some information about the geography of South Asia will be provided to establish an environmental framework, and there will be some explanation of what might be called the Hindu way of life. This will lead into an examination of the four spiritual yogas, during which time students will be encouraged not only to read about them, but also to try them. Special attention will be paid to rāja or Pātañjala yoga and to attaining samādhi. Wear loose, comfortable clothing so that there won't be any embarrassing situations.

### Topics to be covered:

- 1. Introductory geography and history
  - → de Blij & Muller, "South Asia"
  - → Klostermaier, "Introduction"
- 2. Fundamentals behind the philosophy or way of life
  - → Smith, "Hinduism," pp. 12-26
- 3. Stages and stations in life
  - → Smith, "Hinduism," pp. 50-59
- 4. Jñāna yoga, bhakti yoga, karma yoga
  - → Smith, "Hinduism," pp. 26-41
  - → Other readings might be made available
- 5. Rāja yoga: Introduction
  - → Smith, "Hinduism," pp. 41-50
- 6. Rāja yoga: from Patājali's text
  - → Concentration 1 + terminology
  - → Concentration 2: Through yama and niyama

āsana

prānāyāma and pratyāhāra

 $\rightarrow$  Powers: samyama

- 7. Seminar papers (10 pages, academic style) to be submitted
- 8. Course examination

#### Reference Materials:

Copies of reading materials will be made available for consultation.

#### Evaluation:

Written examination on reading materials related information arising in class meetings: 50% Ten-page academic paper: 50%

### School of Law

NB. Unless otherwise specified, the following graduate-level law and politics courses are open to both graduate and undergraduate NUPACE students.

### 1. Comp. Studies in Constitutional Law: Outline of Modern Constitution

Co-ordinator: OHKOCHI Minori Class: Mondays, 14:45~18:00

Place: Integrated Research Building (IRB), Humanities & Soc. Sciences, Rooms 412~413

This course is an introduction to the theory of modern constitution followed by a comparative analysis of issues in Japan and selected Asian countries.

- 1. Historical development of the modern Constitution
- 2. Basic principles of the modern governmental system and human rights
- 3. Constitutional issues and the theory of Constitutional law in Japan
- 4. Constitutional issues and the theory of Constitutional law in selected Asian countries
- 5. Constitutional theory for better-protected human rights and more democratic politics

### Reference Materials:

Detailed summaries will be distributed at every class.

Higuchi, Yoichi (ed.) (2001). Five Decades of Constitutionalism in Japanese Society. University of Tokyo Press. Luney, P.R., Kazuyuki Takahashi (eds.) (1993). Japanese Constitutional Law. University of Tokyo Press.

### Evaluation:

Presentation 50%
Participation in class discussions 50%

# 2. Comparative Studies in Criminal Law: Development of National Criminal Law under the Influence of Foreign and International Law

Co-ordinator: TAKAYAMA Kanako

Class/Place: Intensive course to be taught in either <u>August or September</u>.

Enquire at the School of Law section of the IRB Office for details later.

The purpose of this course is to analyse the development of national criminal law under the influence of foreign and international law. There will be particular focus on comparisons between different judicial groupings such as common law countries, countries with the European continental legal tradition, Islamic countries, etc. Participants are required to report on their country's experience and their views on desirable legislation in the future. Legal systems in general as well as specific topics in criminal law and criminal procedure will be discussed.

### Topics to be covered:

- 1. Introduction. Purpose of the course
- 2. History of Japanese criminal justice system, world legal systems and cultures
- 3. Basic structure of Japanese criminal justice system; Basic structure of Japanese legal system for criminal matters

- 4. Court system and court reports; Introduction of lay-judge system (saiban-in); juvenile courts
- 5. Purposes and principles of criminal law: Theories on punishment; Penalties; Legality principle (*nulla poena sine lege*)
- 6. Structure of the general part of criminal law: Common elements of criminal offences (constituent elements of crime Illegality and justification Culpability and excuse); Extension of punishments (attempts-complicity)
- 7. Topics in the general part of criminal law: Technology and criminal law; Vagueness Doctrine; Democracy and criminal law; Substantive due process
- 8. Structure of the special part of criminal law: Crimes against individuals (crimes against life and body crimes against liberty and fame crimes against property); Crimes against society; Crimes against the State
- 9. Topics in the Special Part of Criminal Law: Public morals and criminal law in Japan; Regulations relating to the family; protection of children; Freedom of speech
- 10. Business activities and crime: Corruption; Criminal responsibility of legal persons; Protection of intellectual property; Cyber-crime; Anti-monopoly law
- 11. Future of Japanese criminal law: Recent reforms; International Criminal law and Japan
- 12. Criminal law in Southeast Asian countries: Presentations
- 13. Criminal law in Central and East Asian countries: Presentations
- 14. Closing discussion

#### Reference Materials:

Handouts will be distributed at the beginning of the course.

Oda, Hiroshi (2009). Japanese Law, 3rd edition. University of Oxford Press. ISBN 9780199232185

Dando, Shigemitsu (1997). The Criminal Law of Japan: The general part. F. B. Rotham.

Foote, Daniel H. (2007) Law in Japan. University of Washington Press.

Milhaupt, Curtis. J., J. Mark Ramsmeyer, and Mark D. West (2006). *The Japanese Legal System: Cases codes and commentary*. Foundation Press.

### Evaluation:

Participation

Presentation on the participant's national criminal legal system

### 3. Comparative Studies in Jurisprudence: The Law & Its Personnel

Co-ordinator: MORIGIWA Yasutomo Class: Fridays, 13:00~14:30

Place: School of Law, Seminar Room 905

What is the most difficult aspect of setting up a legal system? Legislation, funding, or provision of facilities? Each of these stages does have its problems, but the training of personnel probably presents the greatest hurdle. Technical, legal and moral competence is required for those who man and run the legal system. How can legal education provide such qualities to its trainees? Discussion and interviews are conducted on this question following intensive reading of literature on the subject. The course will be taught in English. International and Japanese students are welcome, and will be asked to address scenarios based on their practical knowledge.

### Evaluation:

Attendance and participation 30% Short essays 30% Oral presentation 15% Final essay 25%

### 4. 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.

### 5. Professional Studies in Int'l Law: Introduction to International Law

Co-ordinator: YAMAGATA Hideo Class: Tuesdays, 16:30~18:00

Place: Graduate School of International Development (GSID), 6F, Lecture Room 3

NB. This course is open to graduate students in general, as well as undergraduate students of the School of Law. The same course is listed as *International Cooperation Law* under the Graduate School of International Development courses.

This is an introductory course for the study of international law, with the aim of imparting a basic knowledge of what international law is, and how it functions. Due to time constraints, it does not cover the entire field of international law; however, through the analysis of the ICJ judgement in the *Nicaragua case*, it will impart a basic idea. Stress will be put on the structural change of international law between its traditional and contemporary forms.

### Topics to be covered:

- 1. What is international law?
- 2. War under traditional international law.
- 3. Prohibition of the use of force under the Charter of the United Nations.
- 4. Self-defence in international law.
- 5. Collective self-defence in international law.
- 6. Principle of non-intervention.
- 7. Principle of peaceful settlement of international disputes.
- 8. The World Court as a judicial organ.
- 9. Jurisdiction of the Court.
- 10. Procedures before the Court.
- 11. Creation of rules of international law.
- 12. Treaties as a source of international law.
- 13. Formation of customary international law.
- 14. Legal force of customary international law.
- 15. Written Examination.

### Textbook:

Materials will be supplied.

### Reference Materials:

Brownlie. Principles of Public International Law. Oxford UP

Shaw. International Law. Cambridge UP Evans (ed.). International Law. Oxford UP

Evaluation:

Course Performance: 30% Written Examination: 70%

### 6. Special Lecture and Seminar: The Japanese Legal System

Co-ordinator: OHYA Takehiro Class: Tuesdays, 10:30~12:00

Place: School of Law, Seminar Room 905

In this lecture international students will be provided with a basic understanding and knowledge of the Japanese legal system. I will start by describing the fundamental perspective of comparative law. Such elements of the Japanese system as the basic structure of the government, the differences of this structure in the pre-war and post-war eras, legislation, the unique character of the relationship between law and society, and recent reforms of Japanese law, will be examined.

- 1. Introduction to Comparative Law
- 2. Government Structure in Pre-War Japan
- 3. Government Structure in Post-War Japan
- 4. Legislation and its Inspection
- 5. Law and Japanese Society
- 6. Legal System Reform in Japan
- 7. Changing Japanese Society
- 8. Reading Japanese Law

### School of Letters

### 1. Iconicity in Language & Literature

Co-ordinator: William J. HERLOFSKY Class: Wondays, 10:30~12:00

Place: Integrated Research Building (IRB), Humanities & Soc. 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.

### 

Co-ordinator: SAITO Fumitoshi
Class: Tuesdays, 16:30~18:00
Place: School of Letters, 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、日本語の表記(漢字・ひらがな・カタカ ナ・ROMAJI)に焦点が当てられる。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. 漢字はどのくらいあるのか?
- 2. 漢字はどのくらい覚えればよいのか?
- 3. 漢字の長所と短所は?
- 4. ひらがな・カタカナはどのようにしてできたのか?
- 5. 漢字を廃止することはできるのか?
- 6. 小説・マンガなどでは、漢字・ひらがな・カタカナ・ROMAJI をどのように使用しているのか?

#### 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

### 1. Perspectives in Mathematical Sciences III <U> / I <G>

Co-ordinators: FUJIWARA Kazuhiro(fujiwara@math.nagoya-u.ac.jp);

Lars HESSELHOLT (larsh@math.nagoya-u.ac.jp)
IYAMA Osamu (iyama@math.nagoya-u.ac.jp)

Class: Mondays, 13:00~14:30

Place: School of Science Building 1 (Mathematics), Room 109

**Prerequisites:** A working knowledge of basic undergraduate mathematics, including calculus and linear algebra.

This course comprises one of the English courses which the Graduate School of Mathematics provides for graduate and undergraduate students not only from abroad but also domestic students who strongly desire to study abroad or to communicate with foreign scientists in English. All course activities, including lectures, homework assignments, questions and consultations are given in English. This year, the course is provided by three instructors, who will cover different subjects from various aspects of mathematics and related fields.

### Topics to be covered:

### Part 1 - Kazuhiro Fujiwara: Zeta Functions, Uniform Distribution and Fourier Analysis

For a given sequence of real numbers, it is an interesting problem to know how the fractional part distributes in the interval [0, 1]. This problem leads us to the notion of *uniform distribution* of a sequence. The notion is very useful in many areas of mathematical sciences, such as ergodic theory, theory of numerical integration, and also in number theory. The purpose of the lecture is to explain it with explicit examples arising from number theory, including Sato-Tate conjecture on elliptic curves which is now known to be true. The relation with *zeta functions*, which are very important and fundamental in number theory, will be explained. From the technical and analytic aspects, Fourier analysis plays an important role. This will be also explained in the course.

We start from the following question: How often does  $2^n$ ,  $n \ge 0$ , start from 1 on the decimal system? Then we proceed from there. A detailed plan will be given at the first lecture.

#### Reference Materials:

J. P. Serre, <u>Abelian l-adic Representations and Elliptic Curves</u>, Research Notes in Mathematics (a K Peters), Vol 7.

### Part 2 – Lars Hesselholt: Kummer's Ideal Numbers

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

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

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

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

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

### Reference Materials:

Charles A. Weibel, *The K-Book: An introduction to algebraic K-theory*, Chapters I and III, available for free download at www.math.rutgers.edu/~weibel/Kbook.html.

### Part 3 – Osamu Iyama: Quiver Mutation and Related Topics

A quiver means a direct graph. After quivers were introduced by Gabriel around 1970, it has been a popular subject in representation theory, A operation for quivers, called mutation, was introduced by Fomin and Zelevinsky in 2000. Mutation is not only a kind of puzzle, but has a deep mathematical background which comes from cluster algebras and their categorification via cluster tilting theory. The purpose of this lecture is to explain this.

#### Reference Materials:

B. Keller, *Cluster algebras, quiver representations and triangulated categories*, http://arxiv.org/abs/0807.1960 B. Keller, *Quiver Mutation in Java*, http://people.math.jussieu.fr/keller.quivermutation/

### Evaluation:

Attendance and report problems, as assigned by each instructor.

# Memoranda

Nago	ya University Program for Academic Exchange (NUP
	ation Centre for International Students, Nagoya Unive
	(760), Furo-cho, Chikusa-ku, Nagoya, 464-8601 Japan ce@ecis.nagoya-u.ac.jp
	//www.ecis.nagoya-u.ac.jp/en/nupace/