## Tohoku University "Course Numbering" Implementation Manual

Approved by the Academic Affairs Council on November 10, 2014 Revised draft by the Educational Records and Programs Committee of the Academic Affairs Council on July 27, 2015

## I. What is Course Numbering?

Course Numbering is a system in which codes indicating various information, including the correlation among courses and levels of difficulty, are assigned to each course in order to simply and clearly represent the education curriculum so as to facilitate understanding of the curriculum structure.

In the Satomi Vision 1 Strategic Focus [1] "Educational reforms, aimed at fostering global leaders, centered on improving the humanities curriculum," Course Numbering is listed as an example of efforts to develop an internationally compatible educational system.

It can also be referred to simply as "Numbering."

## II. The Purpose/Necessity of Implementation

By assigning codes and numbers to each course to clarify its difficulty level/characteristics, significance, and the sequence in which courses should be taken, students can understand which courses they should register for, the role of each course within the undergraduate/graduate curriculum, and each course's objectives.

We will be able to organize the education curriculum systematically and sequentially and familiarize the students with it, and by creating a curriculum map and other methods, it will be possible to check whether each course structure is suitable for the diploma/curriculum policy of the hosting faculty/school, whether the course subject fields are well-balanced, etc..

Also, clarification of course levels is expected to facilitate credit transfers with overseas universities.

#### III. Coding Method

Course Numbering at this university will be organized as follows.

As a general rule, the codes will be fixed for each course, instead of being reassigned every academic year. However, codes may be reassigned in some cases, such as when there are major revisions in the course content.

However, when the Educational Records and Programs Committee of the Academic Affairs Council has approved exceptions based on special circumstances, such cases may be handled differently.

## 1. Course Numbering Code:

<u>A</u>	BC	-	$\overline{\text{DEF}}$	<u>1</u>	$\underline{23}$	G
[1]	[2]		[3]	[4]	[5]	[6]

## 2. Meanings of Codes:

- [1] Hosting Faculty/School
- [2] Department/Major (For General Education, Subject Category/Group)
- [3] Academic Field
- [4] Level/Characteristics
- [5] Classification Number
- [6] Language Used in Course

#### 3. Table of Codes:

## [1] List of Faculty/School Codes [one letter]

These codes shall be the same as the letter that indicates the affiliated faculty/graduate school, shown as the third letter of the student ID number; General Education Subjects and Teacher Training Subjects will be assigned one letter each that is not already in use.

Faculties/Schools	Code
Faculty/Graduate School of Arts and Letters	L
Faculty/Graduate School of Education	Р
School/Graduate School of Law	<b>1</b>
Faculty of Economics/Graduate School of Economics and Management	Е
Faculty/Graduate School of Science	S
School/Graduate School of Medicine	М
School/Graduate School of Dentistry	D
Faculty/Graduate School of Pharmaceutical Sciences	Y
School/Graduate School of Engineering	Т
Faculty of Agriculture/Graduate School of Agricultural Sciences	А

Faculties/Schools	Code
Graduate School of International Cultural Studies	K
Graduate School of Information Sciences	Ι
Graduate School of Life Sciences	В
Graduate School of Environmental Studies	G
Graduate School of Biomedical Engineering	W
Graduate School of Educational Informatics Education Division	F
General Education Subjects	Z
Teacher Training Subjects	Q

# [2] List of Department/Major Codes [two letters]

Faculty/School		Department, etc.	Code
Major-specific courses without designated department, etc. (common courses for all faculties)			AL
Arts and Letters	Humanities	and Social Sciences	HM
Education	Educational	Science	ES
Law	Law		LA
F :	Economics		EC
Economics	Business Ad	Iministration	BA
	Mathematics		MA
	Physics		PH
	Astronomy and Geophysics		AG
Science	Chemistry		CH
	Geoenvironmental Science		GS
	Earth and Planetary Materials Science		EP
	Biology		BI
	Medicine		MD
Medicine		Nursing	NS
medicine	Health Sciences	Radiological Technology	RT
		Medical Technology	МТ
Dentistry	Dentistry		DE
Pharmaceutical	Pharmacy		PH
Sciences	Pharmaceut	ical Sciences	$\mathbf{PS}$

	Mechanical and Aerospace Engineering		MA	
		Electrical, Information and Physics Engineering (From Academic Year 2015)		
Engineering	Information Year 2014)	and Intelligent Systems (Closed by Academic	II	
Engineering	Applied Che Engineering	emistry, Chemical Engineering and Biomolecular	CH	
	Materials Se	cience and Engineering	ME	
	Civil Engine	eering and Architecture	CA	
۸	Applied Bio	Sciences	BS	
Agriculture	Applied Bio	Applied Biological Chemistry		
		Human Studies	BH	
	Core Subjects	Social Studies	BS	
		Science Studies	BN	
		Human Sciences	DH	
	Expansion	Social Sciences	DS	
General	Subjects	Natural Sciences	DN	
Education		Integrated Sciences	DG	
Subjects		Small-Group Freshmen Seminars	$\mathbf{CS}$	
		Foreign Languages	$\mathbf{CF}$	
	Common Subjects	Information Sciences	CI	
		Health Sciences	CP	
		Subjects for International Students	CJ	
	Teacher Tra	Teacher Training Subjects		

Graduate School	Major	Code
Courses without designated major, etc. (common courses for all graduate schools)		
	Humane Studies	HS
Arts and Letters	Linguistic Studies	LI
Arts and Letters	Historical Studies	HI
	Human Sciences	HU
Education	Educational Science	ES
Education	Educational Design and Measurement	EM
	Law and Society	LS
Law	Public Law and Policy	PP
	Legal and Political Studies	LP
Economics and	Economics and Management	$\mathbf{E}\mathbf{M}$
Management	Accountancy	AC
	Mathematics	MA
	Physics	PH
Gaianaa	Astronomy	AS
Science	Geophysics	GP
	Chemistry	СН
	Earth Science	ES

	Medical Sciences	MD
	Disability Science	DS
Medicine	Health Sciences	HS
	Public Health(From Academic Year 2015)	PH
Dentistry	Dental Sciences	DE
	Molecular Pharmaceutical Science	MP
Pharmaceutical	Life and Pharmaceutical Science	LP
Sciences	Pharmacy	PH
	Mechanical Systems Engineering (From Academic Year	MF
	2016) Mechanical Systems and Design (Closed by Academic Year	MD
	2015) Finemechanics (From Academic Year 2016)	FM
	Nanomechanics (Closed by Academic Year 2015)	NM
	Aerospace Engineering	AE
	Quantum Science and Energy Engineering	QE
	Electrical Engineering	EC
		-
	Communications Engineering	CM
	Electronic Engineering	EE
Engineering	Applied Physics	AP
Engineering	Applied Chemistry	AC
	Chemical Engineering	CE
	Biomolecular Engineering	BE
	Metallurgy	ML
	Materials Science	MS
	Materials Processing	MP
	Civil and Environmental Engineering	CI
	Architecture and Building Science	AB
	Management Science and Technology	MT
	Robotics (From Academic Year 2016)	RT
	Bioengineering and Robotics (Closed by Academic Year 2015)	BR
	Biological Resource Sciences	BR
Agriculture	Life Sciences	LS
	Bioscience and Biotechnology for Future Bioindustries	BB
	International Cultural Studies (From Academic Year 2015)	IC
International	Area Studies (Closed by Academic Year 2014)	AS
Cultural Studies	Intercultural Relations (Closed by Academic Year 2014)	IR
	Language Studies (Closed by Academic Year 2014)	LS
	Computer and Mathematical Sciences	СО
Information	System Information Sciences	SY
Sciences	Human-Social Information Sciences	HU
	Applied Information Sciences	AI

	Biomolecular Sciences	BS
Life Sciences	Developmental Biology and Neurosciences	DB
	Environmental Life Sciences	$\mathbf{EL}$
	Environmental Studies for Advanced Society (From Academic Year 2015)	ES
Environmental Studies	Frontier Sciences for Advanced Environment (From Academic Year 2015)	$\mathbf{EF}$
	Environmental Studies (Closed by Academic Year 2014)	EN
Biomedical Engineering	Biomedical Engineering	BI
Educational Informatics Education Division	Educational Informatics	EI

# [3] Academic Field Codes [three letters]

See attached list

# [4] List of Levels/Characteristic Codes [one number]

Degree Program	Level/Characteristics	Code
	General Education Subjects (excluding advanced foreign language courses) and similar courses	1
Undergraduate	Introductory courses, General Education Subjects (advanced foreign language courses)	2
	Courses with developmental content	3
	Courses related to graduation thesis, graduation research project, and clinical training	4
Graduate School	Introductory courses, common courses for all graduate schools	5
(Master/Professional)	Courses with developmental content, research direction courses	6
Graduate School (Doctor)	Major-specific courses	7
Courses to broaden student perspective (interdisciplinary, overview, etc.)		
Courses for which categorization by level etc. is difficult (study abroad, courses related to internships, etc.)		

# (Examples of level codes for General Education Subjects)

Category/Group/Subject			Code
Core Subjec	ts		8
Expansion	Human Sciences, Social	Sciences, Natural Sciences	1
Subjects	Integrated Sciences		8
	Introductory Seminar		8
	Foreign Languages (English)	English A1, A2, B1, B2	1
Common Subjects		English C1, C2, Practical English Skills 1/2	2
	Foreign Languages	Introduction to Foreign Language I, II	1
	(Second languages)	Foreign Language in Practice I, II, III, IV	2
	Others		1
Teacher Training Subjects		1	

# [5] Classification Number [two numbers, assigned as necessary by each faculty]

There is no need to number all the courses offered by a faculty serially from 01 to 99. It is enough to assign numbers so as to not repeat numbers in courses in one of the categories coded by the above methods from [1] to [4]. Therefore, even if there are more than 100 courses offered in a faculty, the two-digit system should be sufficient.

(Example of Code Assignment to General Education Subjects)

Human Sciences Group "Literature"ZDH-LIT103

Foreign Languages "English B1" ZCF-ENG103

If there are more than 100 courses offered in an academic field which is not broken down into smaller categories and therefore the two-digit system is insufficient, it shall be handled by adding/further categorizing [3] Academic Field Code.

# [6] List of Codes for Language Used in Course [one letter]

Languages used in courses will be coded as follows.

Language Used in Course	Code
Japanese	J
English	Е
Non-English foreign languages	F
Two languages or more	В

These codes will be assigned based on the teaching faculty for the course, in accordance with the syllabus of the pertinent academic year. The curriculum map will use codes without additional information, while the syllabus for students etc. will use codes with additional information.

(Ex.) General Education Subjects "Foundation of Calculus" taught by Professor XX (Japanese) ZDN-MAT104J

General Education Subjects "Foundation of Calculus" taught by Associate Professor YY (English) ZDN-MAT104E

Caution:

The translations are unofficial.

Only <u>the original Japanese texts of the Implementation Manual</u> have legal effect, and the translations are to be used solely as reference materials to

aid in the understanding of the Japanese Implementation Manual.

As of January 27, 2016

Area	Discipline	Code
	Principles of Informatics	PRI
	Principles of Informatics	PIN
Informatics	Human informatics	HUI
	Frontiers of informatics	FRI
	Other informatics	OIN
	Environmental social sciences	ENS
	Sustainable and environmental system development	SUD
	Environmental engineering	EEG
	Global environment and earth science	GEE
Environmental science	Environmental humanities	EHS
	Environmental analysis and evaluation	ENE
	Environment geography	EGE
	Natural environmental sciences	NES
	Other environmental science	OES
	Design science	DES
	Human life science	HUS
	Science education/ Educational technology	SCT
	Sociology/History of science and technology	SOT
	Cultural assets study and museology	CUM
	Geography	GEO
Complex systems	Social/Safety system science	SOS
	Biomedical engineering	BME
	Health/Sports science	HES
	Childhood science	CHS
	Biomolecular science	BIS
	Brain sciences	BRS
	Other complex systems	OCO
	Area studies	ARS
Humanities/ Social	Gender	GEN
sciences	Tourism Studies	TOS
	Religious studies	RES
	Other humanities/ social sciences	OHS
	Philosophy	PHI
	Art studies	ART
	Literature	LIT
<b>TT</b>	Linguistics	LIN
Humanities	History	HIS
	Human geography	HUG
	Cultural anthropology	CUA
	Comparative literature and culture	CLC
	Other humanities	OHU
	Law	LAW
	Politics	POL
Social sciences	Public Policy	PUP
	Economics	ECO
	Management	MAN

Social sciences	Accounting	ACC
	Economics and management	ECM
	Sociology	SOC
	Psychology	PSY
	Education	EDU
	Educational technology	EDT
	International political and economic relations	IPE
	Other social sciences	OSO
Interdisciplinary science and engineering	Nano/Micro science	NAS
	Applied physics	APP
	Quantum beam science	QUS
	Computational science	COS
	Other interdisciplinary S/E	OIS
	Mathematics	MAT
	Algebra	ALG
	Geometry	GEM
	Analysis	ANA
	Manifold theory	MFT
	Applied mathematics	APM
Mathematical and	Astronomy	AST
physical sciences	Physics	PHY
	Condensed matter physics	CMP
	Particle and nuclear physics	PNP
	Earth and planetary physics	EPP
	Earth and planetary science	EAS
	Plasma science	PLS
	Other mathematical and physical sciences	OMA
	Basic chemistry	CHE
	Inorganic and analytical chemistry	INO
	Organic chemistry	ORG
	Physical chemistry	PCH
Chemistry	Biochemistry	BIC
	Applied chemistry	APC
	Materials chemistry	MAC
	Other chemistry	OCH
	Mechanical engineering	MEE
	Electrical and electronic engineering	ELE
	Electromagnetism	ELM
	Quantum Mechanics	QTM
	Electrical, Information and Physics Engineering	EIP
	Civil and Environmental Engineering	CEE
	Civil and Architectural Engineering	CAE
Engineering	Building Structures/Materials	ABS
	Building science/Building equipment	ABE
	Urban planning/Architectural planning	ABP
	Architectural history/Design	ABD
	Material science and engineering	MSE
	Process/Chemical engineering	PRE
	Integrated engineering	INE
	Other Engineering	OEN

	Neuroscience	NEU
	Laboratory animal science	LAS
Biological Sciences	Oncology	ONC
	Genome science	GES
	Conservation of biological resources	COR
	Other biological sciences	OBS
Biology	Biological Science	BIO
	Basic biology	BAB
	Anthropology	ANT
	Other biology	OBI
	Plant production and environmental agriculture	PLA
	Agricultural chemistry	AGC
	Forest and forest products science	FOS
	Applied aquatic science	APS
Agricultural sciences	Agricultural science in society and economy	AGE
	Agro-engineering	AGR
	Animal life science	ANS
	Boundary agriculture	BOA
	Other agricultural sciences	OAG
	Pharmacy	PHA
	Basic medicine	BAM
	Public Health	PUH
	Clinical medicine	CLM
	Dentistry	DEN
Medicine, dentistry, and	Fundamental nursing	FMN
pharmacy	Clinical nursing	CLN
	Fundamental radiological science	FRS
	Clinical radiological science	CRS
	Laboratory medicine and basic sciences	LBS
	Laboratory medicine and clinical sciences	LCS
	Other medicine, dentistry, and pharmacy	OME
	English	ENG
	German	GER
	French	FRE
	Russian	RUS
	Spanish	SPA
	Chinese	CHN
	Korean	KOR
Foreign language	Greek	GRE
education	Sanskrit	SAN
	Latin	LAT
	Mongolian	MON
	Italian	ITA
	Czech	CZE
	Arabic	ARA
	Japanese	JPN
	Other Foreign Languages	OFL

Interdisciplinary area	World of thoughts and ethics	WTE
	World of literature	WLI
	World of expression	WEX
	World of fine arts	WFA
	People and culture	PCU
	History and human society	HHS
	Economy and society	ESO
	Law, politics and society	LPS
	Study of society	SSO
	Gender and human society	GHS
	Study of nature	SNA
	Scientific technology and energy	STE
	Life and nature	LNA
	Nature and environment	NEN
	Science and information	SIN
Other area	Introductory science experiments	ISE
	Introductory seminar	IDS
	Natural science	SCI
	Ethics of Research	ETH
	Other area	OAR