Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology

April 1, 2004

Regulation No. 21

Article 1 (Purpose)

These regulations stipulate matters necessary for registration by students of the Graduate School of Biological Sciences in accordance with Article 34 of the Regulations of Nara Institute of Science and Technology(2004 Regulations No.1)("NAIST Regulations").

Article 2 (Research instructors)

- 1. Two or more research instructors of different courses, etc. shall be designated for each student to provide guidance on choosing subjects and preparing a degree thesis, etc. (hereinafter referred to as "research guidance").
- 2. One of such research instructors shall be designated as the main research instructor.
- 3. Research instructors may be changed if needed in the course of studying or research guidance.

Article 3 (Research guidance)

The details of research guidance shall be defined for respective students.

Article 4 (Subjects and number of credits)

- 1. The subjects, number of credits, and registration methods for the Master's Course shall be as shown in Schedule 1 and Schedule 2.
- 2. The subjects, number of credits, and registration methods for the Doctoral Course shall be as shown in Schedule 3.

Article 5 (Registration procedures)

- 1. Students shall be required to submit the prescribed registration form, under the guidance offered by the main research instructor, to the dean of the graduate school by the specified date.
- 2. Students who want to change their chosen subjects written on the registration form shall report the changes to the dean of the graduate school, with the approval of the faculty member in charge of such subjects and the main research instructor.

Article 6 (Awarding of credits)

- 1. Credits shall be awarded by means of an examination or a research report. Credits may be awarded based on an evaluation of day-to-day study activities, instead of such examination.
- 2. Academic performance based on an examination or a research report shall be evaluated by points (full score: 100 points); 60 points or more is a "pass", and 59 points or less is a "fail". For evaluation purposes, academic performance may be represented as "Excellent," "Good," "Fair," and "Fail" in accordance with the categories below.

80 points or more Excellent 70–79 points Good

60–69 points Fair 59 points or less Fail

- 3. In the event that it is difficult to evaluate academic performance based on points as described in the preceding paragraph, "pass" or "fail" may be used instead of such points.
- 4. Prescribed credits shall be awarded to students whose academic performance is "pass" in accordance with the two preceding paragraphs.
- 5. Subjects whose credits have been earned cannot be taken again.

Article 7 (Approval of research guidance)

Research guidance shall be approved by the main research instructor and reported to the dean of the graduate school.

Article 8 (Theme of the degree thesis)

Students shall be required to report the theme of their degree thesis by the specified date, with the approval of the main research instructor.

Article 9 (Submission of the degree thesis)

- 1. Students are required to submit a degree thesis by the specified date, with the approval of the main research instructor.
- 2. A degree thesis can be submitted by students who (i) have earned or who are expected to earn credits necessary for completion of the course and (ii) have completed the necessary research guidance offered by research instructors.

Article 10 (Disqualification of credits for students who have been expelled due to unpaid tuition)

Credits accrued during the period of unpaid tuition will be disqualified when the student has been expelled from school, pursuant to Article 53-2-4 of Regulation.

Article 11 (Miscellaneous provision)

Other matters relating to registration by students shall be stipulated separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2004.

(Transitional measures)

2. For students who were admitted in academic year 2003 or earlier (hereinafter referred to as "enrolled students"), the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall remain in effect even after these Regulations come into effect. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

(An omission)

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2010.

(Transitional measures)

2. For students who were admitted in academic year 2009 or earlier (hereinafter referred to as "enrolled students"), the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2011.

(Transitional measures)

2. For students who were admitted in academic year 2010 or earlier (hereinafter referred to as "enrolled students"), the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2012.

(Transitional measures)

2. For students who were admitted in academic year 2011 or earlier (hereinafter referred to as "enrolled students"), the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2013.

(Transitional measures)

2. For students who were admitted in academic year 2012 or earlier (hereinafter referred to as "enrolled students"), the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2014.

(Transitional measures)

2. For students who were admitted in academic year 2013 or earlier (hereinafter referred to as "enrolled students") with regard to subjects, number of credits, and registration, the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision notwithstanding the provisions of appended Schedule 1, 2 and 3. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2015.

(Transitional measures)

2. For students who were admitted in academic year 2014 or earlier (hereinafter referred to as "enrolled students") with regard to subjects, number of credits, and registration, the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision notwithstanding the provisions of appended Schedule 1, 2 and 3. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2016.

(Transitional measures)

2. For students who were admitted in academic year 2015 or earlier (hereinafter referred to as "enrolled students") with regard to subjects, number of credits, and registration, the former Registration Regulations for the Graduate School of Biological Sciences at the Nara Institute of Science and Technology shall supersede these Regulations after revision notwithstanding the provisions of appended Schedule 1, 2 and 3. In the event that enrolled students take subjects within the scope of these Regulations, such subjects shall be deemed to be replaced with former subjects as set forth separately.

Supplementary provisions

(Effective date)

1. These Regulations shall come into effect on April 1, 2017.

Curriculum table of the Graduate School of Biological Sciences

(1) Sul	oject name, etc.								(Master's Course)
		Subject	Number	Frontier	Bio course	Bio-Ex	pert course	;	
Section	Subjects name	Numbe r	of credits	Required/ elective	Number of credits required for completion	Required/ elective		of credits completion	Registration method, etc
Common Course	Commentaries on Science and Technology	000201	1	0	1	0		l	Common Subjects for All Graduate Schools
	Computer System	000101	1	0		0	0		Common Subjects for All Graduate Schools
	Algorithm	000102	1	0		0			Common Subjects for All Graduate
	Foundation of Materials Science	000301	1	0		0			Schools Common Subjects for All Graduate
	Science Communication	000203	1	0	(*)	0		k)	Schools Common Subjects for All Graduate
									Schools Common Subjects for All Graduate
ŭ	Philosophy of Science	000103	1	0		0			Schools Common Subjects for All Graduate
	Technology and Professional Ethics	000104	1	0		0			Schools Common Subjects for All Graduate
	Introduction to Biological Sciences	000202	1	Δ		Δ			Schools
	Global Entrepreneur I	111011	1	Δ		Δ			Subject in Information Science
	Global Entrepreneur II	111012	1	Δ		Δ			Subject in Information Science
	Global Entrepreneur III	112013	1	Δ		\triangle			Subject in Information Science
	Global Entrepreneur IV	112014	1	Δ		\triangle			Subject in Information Science
o o	Global Entrepreneur V	112015	1	Δ		Δ			Subject in Information Science
ours	Professional English I	210001	1	0		0			'
) le	Professional English II	210002	1	0		0			
General Course	Professional English III	210002	1	0		0			
Ğ	Communication Strategies	210003	1	Δ					
	Communication Strategies Communication Quality through Phonology	210004	1	Δ	5		:	5	
	Logic in Scientific Discovery	210003	1	Δ					
	Social Life Science	210000							
			1	0		0			
	Advanced Genome Science and Technology	210008 220001	1	0		© ©			
	Introduction of Current Biology Practical Biology for Advanced ScienceI	220001	1 1	0		0			
	Practical Biology for Advanced ScienceII	220002	1	0		0			
	Basic Bioscience Seminar I	220003	1	0		0			
	Basic Bioscience Seminar II	220005	1	0		0			
urse	Microbial Biotechnology	220006	1						
Ŝ	Environmental Plant Science	220007	1		9		g)	
Basic Course	Biomedical Sciences	220008	1						
	Bioinformatics	220009	1						
	Practical Bioscience Seminar I	220010	1	0		0			
	Practical Bioscience Seminar II	220011	1	0		0			
	Bioexpart Seminar for Research Project	220012	1			0			
	Frontier Bioscience Seminar for Research Project	220013	1	0					
	Advanced Lecture in Developmental Biology	230001	1	0		0			(Bio-Expert course) Students who select a combination
	Bio-industrial Technology	230002 230003	1	0		0			of Research Experiment and Thesi
	Practice in Bio-industrial Technology Topics in Animal Science	230003	1 1	Δ		0			are required to earn three credits or more.
ē.	Frontiers of Plant Sciences	230004	1	0		0			Students who select a combination of Research on Biological Subjects
Course	Advanced Systems Biology	230005	1	0		0			and Project Report are required to
Q C	Lecture of intellectual property right	230007	1	0	2	0	-	2	earn an additional two credits or more (five credits or more in total)
Specialized	Topics in Bioinformatics	230008	1	Ö	3	Ö	5	3	
ecia	Bio-Imaging	130037	1	Ō		Ō			Subject in Information Science (Bio-Imaging, Systems Biology II)
Sp	Systems Biology II	130039	1	0		0			(Dio magaig, oystems Biolog) 117
	International Forefront in Bioscience I	230009	1	0					
	International Forefront in Bioscience II	230010	1	0					
	Frontier Bioscience Tutorial	230011	1	0					
Semina		240001	2						
Semina		240002	2		4		4	4	
Semina	r III	240003	2						
Seminar IV		240004	2						
Research Experiment I		240005	3						
Research Experiment II		240006	3						(Bio-Expert course)
Research Experiment III		240007	3		6			6	Students who select
1		240008	3						Research Experiments
					2			2	are also required to take Thesis.
		250001	2	0	2			2	1110818.
•		240009	2						
Research on Biological Subjects II		240010	2				4		(Bio-Expert course)
Research on Biological Subjects III		240011	2				7		Students who select
Research on Biological Subjects IV		240012	2						Research on Biological Subjects are also
ļ	Report	250002	2				2		required to take Project
-,,,,,,,	Number of credits required for comp				30		30	30	
1. In the	"Required/elective" column, \bigcirc , \square , and \bigcirc represent required s		quired elec	tive subjects,		cts, respectively.	50	50	l

^{1.} In the "Required/elective" column, \odot , \Box , and \bigcirc represent required subjects, required elective subjects, and elective subjects, respectively.

2. In the "Required/elective" column, subjects marked \triangle do not count as credits toward the completion requirements.

(2) Registration procedures

- A. Students are required to select either the Frontier Bio course or the Bio-Expert course under the guidance offered by the education committee of the school
- B. Students who select the Bio-Expert course are also required to select either Research Experiment or Research on Biological Subjects, based on consultation with their research instructors.
- C. In accordance with Article 37 of the NAIST Regulations, up to two credits in total earned by taking (i) subjects that are offered by other graduate schools or (ii) common courses marked by an asterisk (*) may be counted as credits earned by taking specialized courses that constitute the completion requirements.

(3) How to read the subject numbers

Subject numbers consist of 6-digit numbers based on levels, difficulties, and other elements of courses. Please review the following information carefully before you register for courses

First digit: The first digit in the 6-digit numbers indicates categories of common subjects or subjects offered by each Graduate School:

0XXXXX = Common Subjects for All Graduate Schools

1XXXXX = Subjects offered by the Graduate School of Information Science

2XXXXX = Subjects offered by the Graduate School of Biological Sciences

3XXXXX = Subjects offered by the Graduate School of Materials Science

Second digit: The second digit in the 6-digit numbers indicates levels of subjects:

X0XXXX = Common subjects[For master's course]

X1XXXX = General subjects [For master's course]

X2XXXX = Basic subjects[For master's course] X3XXXX = Specialized subjects[For master's course]

X4XXXX = Advanced topics (Laboratory Activities) / Seminar[For master's course]

X5XXXX = Thesis / Specialized research / Research For master's course

X6XXXX = Doctoral subjects (Except below doctoral subject) [For doctoral course]

X7XXXX = Dissertation / Research[For doctoral course]

Third digit: The third digit in the 6-digit numbers indicates difficulties of subjects:

XX0XXX = No category

XX1XXX = Basic

XX2XXX = Intermediate

XX3XXX = Advanced

Fourth digit: The fourth digit in the 6-digit numbers indicates subjects for international course:

XXX0XX = No category

XXX3XX = Subjects for international program for master's course

Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers based on levels of subjects categorized by second digit:

XXXXXX = Serial numbers(ranging from 01 to 99) based on levels of subjects categorized by second digit

Regarding the fourth to sixth digits in the 6-digit numbers of common subjects or subjects offered by other Graduate Schools refer to the following.

i) For common subjects with the first digit of "0", please refer to the following guideline.

Fourth digit: The fourth digit in the 6-digit numbers indicates categories of subjects offered by each Graduate School:

XXX1XX = Subjects offered by the Graduate School of Information Science

 $XXX{\color{red}2}XX = Subjects \ of fered \ by \ the \ Graduate \ School \ of \ Biological \ Sciences$

XXX3XX = Subjects offered by the Graduate School of Materials Science

Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers assigned by each Graduate School.

XXXXXX = Serial numbers (ranging from 01 to 99) assigned by each Graduate School

ii) For subjects offered by other Graduate Schools with the first digit of "1 or 3", please refer to other Graduate Schools guideline

Educational Curriculum for Graduate School of Biological Sciences

(1)List of subjects and requirements

(International program for master's course) Subject Credits required Classification (*) Section Subject Credit Comment Number for completion Japanese Class for Beginners I 000303 2 \triangle Common Subjects for All Graduate Schools Japanese Class for Beginners II (1) 000204 1 \triangle Common Subjects for All Graduate Schools Japanese Class for Beginners II (2) 000205 1 \triangle Common Subjects for All Graduate Schools Common Japanese Class for Beginners III (1) Δ 000206 1 Common Subjects for All Graduate Schools Japanese Class for Beginners III (2) 000207 1 Δ Common Subjects for All Graduate Schools Japanese Culture 000105 2 Δ Common Subjects for All Graduate Schools Technology and Professional Ethics 000104 1 Common Subjects for All Graduate Schools Professional English I 210301 1 Δ Professional English II 210302 Δ 1 Professional English III 210303 1 \triangle General Communication Strategies 210304 Δ Communication Quality through Phonology 210305 1 0 2 0 Logic in Scientific Discovery 210306 1 Molecular Cell Biology 220301 1 0 Advanced Topics in Bioscience 220302 1 0 Laboratory Rotation I 220303 1 0 Laboratory Rotation II Basic 220304 1 0 7 Literature in Bioscience Research I 220305 1 0 Literature in Bioscience Research II 220306 0 1 Research Presentation Forum 0 220307 1 International Forefront in Bioscience I 230301 1 International Forefront in Bioscience II 230302 1 Bioscience Colloquium 230303 3 1 Special UCD Online Seminar 230304 1 Systems Biology I 130038 1 Subject in Information Science Bioresource Research Proposal 230305 1 \triangle 2 Seminar I 240301 Seminar II 240302 2 6 Seminar III 2 240303 Seminar IV 240304 2 Research Experiment I 240305 3 Research Experiment II 240306 3 9 240307 Research Experiment III 3 240308 Research Experiment IV 3 250301 0 Thesis 2 30 Total credits required for completion * Symbols indicate: , compulsory; , elective-compulsory; , credits of this subject are not counted as those required for completion

(2) How to read the subject numbers

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2XXXXX = Subjects offered by the Graduate School of Biological Sciences

3XXXXX = Subjects offered by the Graduate School of Materials Science

Second digit: The second digit in the 6-digit numbers indicates levels of subjects:

X**0**XXXX = Common subjects[For master's course]

X1XXXX = General subjects [For master's course]

X2XXXX = Basic subjects [For master's course]

X3XXXX = Specialized subjects [For master's course]

X4XXXX = Advanced topics (Laboratory Activities) / Seminar[For master's course]

X5XXXX = Thesis / Specialized research / Research [For master's course]

X6XXXX = Doctoral subjects (Except below doctoral subject) [For doctoral course]

X7XXXX = Dissertation / Research[For doctoral course]

Third digit: The third digit in the 6-digit numbers indicates difficulties of subjects:

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Fourth digit: The fourth digit in the 6-digit numbers indicates subjects for international course:

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Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers based on levels of subjects categorized by second digit:

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Fourth digit: The fourth digit in the 6-digit numbers indicates categories of subjects offered by each Graduate School:

XXX1XX = Subjects offered by the Graduate School of Information Science

XXX2XX = Subjects offered by the Graduate School of Biological Sciences

XXX3XX = Subjects offered by the Graduate School of Materials Science

Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers assigned by each Graduate School.

XXXXXX = Serial numbers (ranging from 01 to 99) assigned by each Graduate School

ii) For subjects offered by other Graduate Schools with the first digit of "1 or 3", please refer to other Graduate Schools guideline

Curriculum table of the Graduate School of Biological Sciences

Subject name, etc. (Doctoral Course)

Subject name, etc.					(Doctoral Course)		
Subject name	Subject Number	Number of credits	Required/elective	Number of credits required for completion	Registration method, etc.		
Research Project Design	260001	1	0	1			
Overseas Internship I	260002	3	Δ				
Overseas Internship II	260003	3	\triangle				
International Bio-Seminar I	260004	1	0				
International Bio-Seminar II	260005	1	0				
International Bio-Seminar III	260006	1	0		Students are required to		
International Bio-Seminar IV	260007	1	0		take at least one subject of		
International Bio-Seminar V	260008	1	0	3	International Bio Seminar		
International Bio-Seminar VI	260009	1	0		I to VI in the first academic year.		
Research Project Presentation	260010	1	0				
International Student Workshop	260011	1	0				
UCD Research Retreat	260012	1	0				
Communication Strategies	260013	1	Δ				
Communication Quality through Phonology	260014	1	\triangle		These courses cannot be taken in cases where they have already been taken at		
Professional English I	260015	1	\triangle				
Professional English II	260016	1	\triangle				
Professional English III	260017	1	\triangle		Frontier Bio Master Course level.		
Responsible Conduct of Research	260018	1	\triangle				
UCD Online Seminar	260019	1	\triangle				
Research Experiment I	270001	6					
Research Experiment II	270002	6		6			
Research Experiment III	270003	6					
Number of credits requir	10						

^{1.} In the "Required/elective" column, ⊚, □ and ○ represent required, required elective and elective subjects, respectively.

^{2.} Subjects marked △ in the "Required/elective" column do not count as credits toward the completion requirements.
※ This curriculum is also used for double degree program students.

(2) How to read the subject numbers

Subject numbers consist of 6-digit numbers based on levels, difficulties, and other elements of courses. Please review the following information carefully before you register for courses.

First digit: The first digit in the 6-digit numbers indicates categories of common subjects or subjects offered by each Graduate School:

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X1XXXX = General subjects [For master's course]

X2XXXX = Basic subjects [For master's course]

X3XXXX = Specialized subjects [For master's course]

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X5XXXX = Thesis / Specialized research / Research [For master's course]

X6XXXX = Doctoral subjects (Except below doctoral subject) [For doctoral course]

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Third digit: The third digit in the 6-digit numbers indicates difficulties of subjects:

XX0XXX = No category

XX1XXX = Basic

XX2XXX = Intermediate

XX3XXX = Advanced

Fourth digit: The fourth digit in the 6-digit numbers indicates subjects for international course:

 $XXX\mathbf{0}XX = No category$

XXX3XX = Subjects for international program for master's course

Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers based on levels of subjects categorized by second digit:

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i) For common subjects with the first digit of "0", please refer to the following guideline.

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Fifth and Sixth digits: The fifth and sixth digits in the 6-digit numbers indicate serial numbers assigned by each Graduate School.

XXXXXX = Serial numbers (ranging from 01 to 99) assigned by each Graduate School

ii) For subjects offered by other Graduate Schools with the first digit of "1 or 3", please refer to other Graduate Schools guideline