

Keep this brochure while you belong to the School

## **Academic Year 2018**

# Guidelines for Graduate School of Systems Life Sciences, Kyushu University

(For students in International Course enrolled in Academic Year 2018)

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## **Introduction**

The guidelines in this brochure provide the rules, credit systems and other relevant information of the Graduate School of Systems Life Sciences, Kyushu University for students who are enrolled in the Academic Year 2018.

In order for the students enrolled in the Academic Year 2018 to complete the courses and earn a Doctoral Degree, you need to complete the class subjects and meet the criteria outlined in this brochure. Be familiar with the guidelines so that you take and finish the subjects required. Keep this brochure with you while you are in the School. (PDF format of the Credits Guidelines will be posted on the Website of the Graduate School of Systems Life Sciences later).

More detailed information on each of the class subjects is provided in the syllabus found on the Website of the Graduate School for your reference.

If you have any questions, contact the Student Affairs Office of the Graduate School of Systems Life Sciences.

## **Information Desk**

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## 1 . Education at the Graduate School

### 5-year doctoral course

The Graduate School offers a 5-year doctoral course without a division of master's program and doctor's program. A Doctoral Degree is given to those who belong to this course for five years, earn the required credits, receive the designated research instruction, submit a doctoral dissertation and take and pass the final examination.

For those who enter as 3<sup>rd</sup> year students in the doctoral course will be given instruction tailored to the credits they earned before entering the Graduate School.

The Graduate School provides a degree on Systems Life Sciences and the students can choose from Science, Engineering and Informatics.

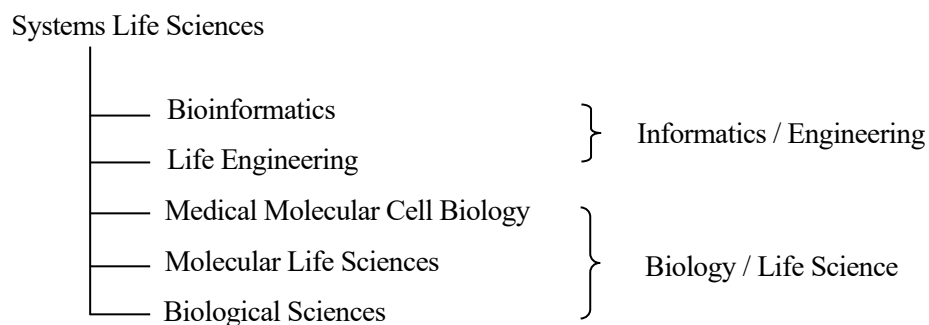
### Human resources development

The graduates of our Graduate School are life scientists who have common sense in informatics and engineering and, at the same time, engineers/informatics scientists who have common sense in biology. They are also expected to be human resources equipped with ethical values and business mind who will create new industries and research fields. Currently in Kyushu University as well as in Japan, there are very few professors who are specializing in the multiple fields of life sciences, informatics and engineering, and therefore it is indispensable for the Graduate School to be staffed by faculty members having expertise in the educational fields of informatics, engineering and biology.

The Graduate School of Systems Life Sciences is staffed by the members of the Graduate Schools/Faculties of Kyushu University including Information Science and Electrical Engineering, Engineering, Agriculture, Mathematics for Industry, Science, Medical Sciences, Medical Institute of Bio-regulation, Arts and Science, and Inamori Frontier Research Center. As they engage in educational research in cooperation, the Graduate School of Systems Life Sciences serves as a major hub of interdisciplinary education.

### Department and divisions of the Graduate School

The Graduate School consists of one department and five divisions.



### Policy of course completion

The graduate students of Systems Life Sciences are expected to acquire basic knowledge of research fields different from the major field of them. Therefore, we offer basic lecture series by the faculties of the five divisions above, by which the students specializing mainly in Informatics, Engineering, Biology, Life Science or other fields can smoothly receive the School's interdisciplinary education.

For the purpose of quickly acquiring the basic knowledge and thinking processes in the first year of doctoral course, we require those students who studied a field in informatics or engineering to take a basic course in Medical Molecular Cell Biology, Molecular Life Sciences, or Biological Sciences. Conversely, to those students who studied subjects in Medical Sciences, Molecular Life Sciences, or Biological Sciences, we require that they take a basic course in Informatics or Engineering.

Table 1: Guideline to Select Basic Subjects

Major in undergraduate	Basic subjects
Informatics / Engineering	Medical Life Sciences I , II Basic Molecular Life Sciences I , II Basic Biological Sciences I , II
Biology	Basic Bioinformatics I , II Basic Life Engineering I , II

The Graduate School designates “Bioethics” as an obligatory basic subject for cultivating researchers equipped with the ability to make balanced judgment in ethical values. This subject is compulsory.

### Quarter system

Kyusyu University has been adopting a quarter system, which is division of an academic year into four parts (Spring, Summer, Fall and Winter semester). Each course holds eight classes during a quarter. When classes are cancelled due to public holidays or any other occasions, they will be rescheduled to other date. Therefore, the University calendar and Systems Life Sciences website are highly recommended being checked regularly.

Normally, an examination is held in each course during the quarter. However, the schedule or the way of evaluation are very depending on the instructor in charge, so that the details should be checked in advance.

The period of each quarter of 2018 is as follows.

Spring semester; from April 9 to June 6

Summer semester; from June 7 to August 9 (8/3 - 8/9 are spare days)

Fall semester; from October 2 to November 29

Winter semester; from November 30 to February 18 (2/12 - 2/18 are spare days)

\* We use two semester system for organizing entrance and degree conferment ceremonies, school register, tuition fee payment and so on.

First semester; from April 1 to September 30

Second semester; from October 1 to March 31

## 2. Course subjects, required number of credits and criteria for completing the course

### A) Curriculum components

The following subjects should be studied to complete the program.

- 1) Basic subjects (compulsory); Subject on bioethics
- 2) Basic subjects (Selective);  
Lectures designated to learn basic knowledge and thinking processes of fields outside the student's specialty
- 3) Specialized subjects;  
Lectures designated to learn deeply the student's specialty
- 4) Technical Reading and Writing of Systems Life Sciences I , II ;  
Course designated to cultivate the ability to read comprehensively scientific papers written in English and to prepare manuscript to report your research results by English. In addition, the course is designated to cultivate the ability for logical thinking required of researchers.
- 5) Special Study of Systems Life Sciences;  
Lectures designated to learn investigation, analyses, demonstrative tests, etc. on interdisciplinary themes with instruction from multiple professors
- 6) Advanced Seminar in Systems Life Sciences I , II ;  
Seminars designed to enable to select doctoral dissertation themes and to pioneer interdisciplinary fields.  
(\*Advanced Seminar I is implemented as doctoral dissertation presentation)
- 7) Seminar of Systems Life Sciences;  
Seminars conducted by a small number of students in a laboratory to develop the abilities to investigate, examine, discuss and present, that are required for conducting doctoral dissertation research.
- 8) Doctoral Dissertation Seminar

### B) Requirements for earning Doctoral Degree

The followings are all required to earn a Doctoral Degree.

- 1) To belong to the Graduate School of Systems Life Sciences for at least five years
- 2) To earn at least 42 credits (See Table 2)
- 3) To receive instruction on research from supervisors and to pass the doctoral dissertation screening and final examination

A Doctoral Degree (in System Life Sciences) is granted to the students who complete the program. The title of the degree could be chosen from Doctor of Engineering, Doctor of Science or Doctor of Philosophy depending on the thesis themes.

We advise students to discuss thoroughly with the supervisor regarding the degree title.

Table 2: Credits required for earning Doctoral Degree

Types of credits	Credits	Course registration	Period required
① Basic subjects (compulsory); Bioethics	1	Required	D1
② Basic subjects (Selective)	4	Required	D1

③ Specialized subjects	6	Required	D1 or D2
④ From basic subject group or specialized subject group (except course subjects attended for ② and ③ above)	3	Required	D1 or D2
⑤ Technical Reading and Writing of Systems Life Sciences I	4	Not required	D1
⑥ Technical Reading and Writing of Systems Life Sciences II	4	Not required	D2
⑦ Special Study of Systems Life Sciences	6	Not required	D1 and D2
⑧ Advanced Seminar in Systems Life Sciences I	2	Not required	D2
⑨ Advanced Seminar in Systems Life Sciences II	2	Not required	After D3
⑩ Seminar of Systems Life Sciences	4	Not required	After D3
⑪ Doctoral Dissertation Seminar	6	Not required	After D3
Total	<b>42 or more</b>		

### C) Requirements for earning Master's Degree

The followings are all required to earn a Master's Degree.

- 1) To belong to the Graduate School of Systems Life Sciences for at least two years
- 2) To earn at least 30 credits (See Table 3)
- 3) To pass the midterm examination as well as master thesis screening

Table 3: Credits required for earning Master's Degree

Types of credits	Credits	Course registration	Period required
① Basic subjects (compulsory); Bioethics	1	Required	D1
② Basic subjects (Selective)	4	Required	D1
③ Specialized subjects	6	Required	D1 or D2
④ From basic subject group or specialized subject group (except course subjects attended for ② and ③ above)	3	Required	D1 or D2
⑤ Technical Reading and Writing of Systems Life Sciences I	4	Not required	D1
⑥ Technical Reading and Writing of Systems Life Sciences II	4	Not required	D2
⑦ Special Study of Systems Life Sciences	6	Not required	D1 and D2
⑧ Advanced Seminar in Systems Life Sciences I	2	Not required	D2
⑨ Midterm Examination, Master's Thesis	N/A (screening only)	Not required	D2
Total	<b>30 or more</b>		

A Master's Degree (System Life Sciences) is granted.

Degree titles other than "Master of Systems Life Sciences" can be selected primarily depending on the Faculty of your supervising professor and completed subject. (See Table 4) In case you intend to earn a Master's Degree other than "Master of Systems Life Sciences", have a thorough discussion with the supervisor before your start to study.

Table 4: Master's Degrees

Denomination	Affiliation of supervising professors	Criteria for earning degree
Master of Engineering 修士 (工学)	• Faculty of Engineering	Earning at least six credits for class subjects of the Graduate School of Engineering
Master of Philosophy 修士 (情報科学)	• Faculty of information Science and Electrical Engineering	Earning at least six credits for class subjects of the Graduate School of Information Science and Electrical Engineering
Master of Science 修士 (理学)	• Faculty of Medical Science • Medical Institute of Bioregulation • Faculty of Science • Faculty of Arts and Science • INAMORI Frontier Research Center	Earning at least six credits from the listed subjects below. • Basic subject of Medical Life Sciences, Molecular Life Science or Biological Sciences • Specialized subject of Medical Life Sciences, Molecular Life Science or Biological Sciences (including its Special Lectures)

\* If you intend to take a Master's Degree out of the Table 4 shows (Ex. Taking "Master of Engineering" even though your supervising professor is belong to Faculty of Science), your request can be accepted by submitting a statement which your supervisor wrote to the Dean. Besides, you must fully completed the above criteria to do so.



### 3. Required number of credits and criteria for completing the course by 3rd year enrolled students

#### A) Requirements for completion

The followings are all required to earn a Doctoral Degree.

- 1) To belong to the Graduate School of Systems Life Sciences for at least three years
- 2) To earn at least 42 credits (See Table 5)
- 3) To receive instruction on research from supervisors and to pass the doctoral dissertation screening and final examination \*1)

#### B) How to complete the course

As shown in Table 5, the students need to receive a package certification of 29 credits which correspond to the credits required to be earned by the end of the second year in the Graduate School (see below \*2). In addition, the students need to earn credits from “Bioethics (1 credit),” “Advanced Seminar II (2 credits),” “Specialized Study (4 credits)” and “Doctoral Dissertation Seminar (6 credits)”.

Table 5: Required Credits to be earned by 3rd Year Enrolled Students

Types of credits	Credits	Course registration
Certified credits *2)	29 *3)	Not required
Basic subjects (compulsory); Bioethics	1 *4)	Required
Advanced Seminar in Systems Life Sciences II	2	Not required
Seminar of Systems Life Sciences	4	Not required
Doctoral Dissertation Seminar	6	Not required
<b>Total</b>	<b>42 or more</b>	

- \*1) A doctoral dissertation can be submitted only by those students who belong to the doctoral program of the Graduate School for at least two years and satisfy required instruction on research activities.
- \*2) Students who move to the 3rd grade of graduate school of Systems Life Sciences after graduating from another graduate school should get credits transferred from their previous school. When approved, these certified credits (maximum: 29 credits) will count as required credits for the completion of the Doctoral course.
- \*3) The 29 credits required to earn in the Graduate School by the end of the second year listed below can be certified as a package in the screening process of the professor meeting which considers the credits and research results achieved by the students in their previous graduate school for master’s program.
- (1) Basic subjects (Selective); 4 Credits
  - (2) Specialized subjects; 6 Credits
  - (3) From basic subject group or special subject group  
(except course subjects attended for 2 and 3 above) ; 3 Credits
  - (4) Technical Reading and Writing of Systems Life Sciences I ; 4 Credits
  - (5) Technical Reading and Writing of Systems Life Sciences II ; 4 Credits
  - (6) Special Study of Systems Life Sciences; 6 Credits
  - (7) Advanced Seminar in Systems Life Sciences I ; 2 Credits
- \*4) In case the professor meeting of the Graduate School recognizes that the students have already earned credits which correspond to “Bioethics” provided in the Graduate School, they can be regarded as having completed “Bioethics” and the credits are certified accordingly.

#### 4. Class systems

• **Basic subjects (compulsory), Basic subjects (Selective), Specialized subjects**

The classes on the subject are held in the form of lectures and practice sessions. In principle, the class is held once a week, 8 times in total for each of the four quarter terms (spring, summer, autumn and winter terms). Those who pass the final examination are granted the credits.

• **Technical Reading and Writing of Systems Life Sciences I·II, Special Study of Systems Life Sciences, Seminar of Systems Life Sciences, Doctoral Dissertation Seminar**

The classes on the subject are held in the form of instruction on research and education. In the individual instruction on research and education provided by the supervising professor, those whom the supervising professor recognizes as having fully reached the designated subject goal are granted the credits. (We advise you to discuss thoroughly with the supervising professor regarding the method of instruction.)

• **Advanced Seminar in Systems Life Sciences I**

This subject is implemented as a doctoral dissertation presentation. Since Advanced Seminar I and the submission procedure of doctoral dissertation are different among the courses and laboratories, we advise students to follow the notices from the Systems Life Sciences Office and check it with the supervisor.

• **Advanced Seminar in Systems Life Sciences II**

Students are expected to give presentation about the doctoral research in Advanced Seminar in Systems Life Sciences II and all-laboratories poster contest which is held once a year. The course can be completed by attending both Advanced Seminar in Systems Life Sciences II and all-laboratories poster contest. (Be advised that the course cannot be completed only by attending either one of these activities.) The course is attended by students in the 3rd year and later of the doctoral program. Those who are enrolled in October are advised to attend the course in the following year (the 4th year of the doctoral program).

The all-laboratories poster contest

This is a poster presentation organized primarily by the students of the Graduate School.

The goal is to learn how to present own research in an easy-to-understand manner to students and professors specializing in other research fields.

One or two coordinators are selected from the students attending the course, who will notify the other students (in the 3rd year or later in the doctoral program and who have not attended all-laboratories poster contest yet) of the planned date and time of the contest. All students are obligated to reply whether they attend or not.

Advanced Seminar in Systems Life Sciences II

This is an oral presentation session held by a group of 5 or 6 students who present their research to students and professors specializing in other research fields. The professor responsible for the subject divides students into several groups, each of which is supervised by one professor. The supervising professor of your group will notify you of the date and time of the presentation.

## 5. Course registration

### 1) Method of course registration

① to register course (subjects) at the Graduate School of Systems Life Sciences, visit Kyushu University Website (Top > Student Life > Course Registration > Registration / Syllabuses > Registration & Final Grade Confirmation).

[Kyushu University Website (for course registration)]  
<http://www.kyushu-u.ac.jp/en/education/class/learning/registration/>

The screenshot shows the Kyushu University website's 'Course Registration' page. At the top, there is a navigation bar with links for 'About', 'Schools & Centers', 'Study', 'Student Life', and 'Research'. Below this is a breadcrumb trail: 'TOP > Student Life > Course Registration > Registration / Syllabuses > Registration & Final Grade Confirmation'. The main heading is 'Course Registration'. A sidebar on the right, titled 'Student Life', contains a list of links: Policy, Academic Calendar, Course Registration (with sub-links for Curriculum and Registration / Syllabuses), Distinctive Education Programs, Tuition, Fee & Scholarships, Campus Life, Procedures, and Contact Information for Consultations. The main content area includes a section for 'Registration / Syllabuses' and 'Registration & Final Grade Confirmation'. There is a link for 'Course registration & grade review (for students)' and a note about the Faculty Web System. An 'Important notice' box mentions server maintenance. At the bottom, a section titled 'Accessing the campus affairs information system (Student Web System)' contains two links, the second of which is highlighted with a red box. A circled '1' is in the top right corner of the screenshot, and a circled '2' is in the bottom right corner.



②Click “Course registration, course review, grade inquiries” and the link to the log-in window appears. Enter your User ID (SSO-KID) and Password, and click “Log-in” (③).  
 For detailed instruction on how to complete course registration, refer to the “Manual (PDF)” on the above URL.

\*For online Web course registration, the following OS and browsers are compatible.

(Windows)

Web browser	Internet Explorer 7 or later
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(Macintosh)

OS	Mac OS X (10.7 Lion has not been confirmed)
Web browser	Safari 5.1.2

## 2) Method of registering course subjects

The method of registration of course subjects in the Graduate School varies depending on the type of subjects, so we advise you to check the details beforehand and complete the registration within the designated period.

Subjects	Method of course registration
<ul style="list-style-type: none"> <li>• Basic subjects (compulsory)</li> <li>• Basic subjects (Selective)</li> <li>• Specialized subjects</li> <li style="padding-left: 20px;">*Except “special lecture”</li> </ul>	Website course registration
<ul style="list-style-type: none"> <li>• Technical Reading and Writing of Systems Life Sciences I , II</li> <li>• Special Study of Systems Life Sciences</li> <li>• Advanced Seminar in Systems Life Sciences I , II</li> <li>• Seminar of Systems Life Sciences</li> <li>• Doctoral Dissertation Seminar</li> <li>• Midterm Examination,</li> <li>• Master's Thesis</li> </ul>	Course registration not required
Specialized subject of special lecture	Other methods different from Website course registration *Advance registration application may be / may not be required *Be advised to check the notifications on the Website and email from the Graduate School of Systems Life Sciences
KIKAN Education for Graduate Schools	Registered on Website of Faculty of Arts and Science of Kyushu University <a href="https://www.artsci.kyushu-u.ac.jp/campus_life/gs/index.html#english">[https://www.artsci.kyushu-u.ac.jp/campus_life/gs/index.html#english]</a>
Other graduate school courses	Submit “Application for Attending other Schools” to the Student Affairs Office of the Graduate School of Systems Life Sciences (it can be also submitted via email)

## 3) Period of course registration

The period of course registration is about four weeks starting the first day of the first semester (spring and summer quarters combined) and second semester (autumn and winter quarters combined), during which registration and confirmation are completed.

Be advised that course registration cannot be accepted after the designated registration periods. In case course registration is not confirmed, students cannot attend the classes, take the exams or earn the credits. **The period of course registration and confirmation is notified for each of the courses or subjects. You are responsible to complete and confirm the registration within the designated period by all means.**

## 6. Attending courses in other graduate schools

In case your supervising professors consider it beneficial for your education, you may attend course subjects given by other graduate schools which are admitted by the Graduate School of Systems Life Sciences. The earned credits could be certified up to 10. However, you need to earn 4 credits for Basic subjects (Selective) and 6 credits for specialized subjects from the courses in the Graduate School. (The certifiable credits from other graduate school courses are “Table 2; ④ three credits from basic subject group or special subject group (except course subjects attended for ② and ③ above)”.)

Credit transfer with the subjects in Faculty of Arts and Science and Consortium Fukuoka is implemented the same manner as the subjects of other graduate schools, but up to two credits in total are certified as the required credits of the Graduate School of Systems Life Sciences.

In case you would like to attend course subjects of other graduate schools, Submit “Application for Attending other Schools” to the Student Affairs Office of the Graduate School of Systems Life Sciences.

## 7. Syllabuses

A syllabus is a design drawing of courses covered in education. It provides information on the purpose, outline, procedure, goal, evaluation methods/standards, textbooks, and reference books of each course subject. The information helps you to visualize your study on the course subject in advance. Read the syllabuses thoroughly and understand fully the purpose and goal of the subjects of your interest.

Students can check the syllabus of each subject on the Website of the Graduate School of Systems Life Sciences below.

[Syllabuses (List of Course Subjects) of the Graduate School of Systems Life Sciences]  
<http://www.sls.kyushu-u.ac.jp/lectures/syllabus/>

## 8. Grade confirmation

Grade confirmation can be done on the Website. Visit the same Website as course registration.

In case you have inquiries or corrections to be made regarding your grades, contact the Student Affairs Office of the Graduate School of Systems Life Sciences before the end of the course period of the subject you attended.

## 9. Website notification from Kyushu University and Student Affairs Office of Graduate School of Systems Life Sciences

The notice board on the Website of the Graduate School of Systems Life Sciences posts information on classes (planned dates, cancellations, materials used, etc.), notices of lectures and seminars, application for scholarship, job advertisement, and so on. We advise you check the notice board frequently.

Please keep in mind that the notice board is currently accessible only on-campus.

[Main page of the Website of the Graduate School of Systems Life Sciences]  
<http://www.sls.kyushu-u.ac.jp/en/>

Important notifications such as exemption from entrance or tuition fees may be sent directly to individual e-mail addresses. Therefore, **be always ready to receive e-mails sent to the address given from Kyushu University (“student id number”@s.kyushu-u.ac.jp).**

In case you are using another e-mail address mainly, enable e-mail forwarding settings.

Be careful also that e-mails from the Student Affairs Office may not reach you in case you use mobile phone e-mail address (docomo, SoftBank, au, etc.) or enable an e-mail due to filtering function of your PC.

**List of Course Subjects of Graduate School of Systems Life Sciences**

Subjects	Credits	Standard completion period (*)				
		D1	D2	D3	D4	D5
Basic subjects (compulsory)						
Bioethics	1	◎				
Basic subjects (Selective)						
Basic Bioinformatics I	1	○				
Basic Bioinformatics II	1	○				
Basic Life Engineering I	1	○				
Basic Life Engineering II	1	○				
Medical Life Sciences I	1	○				
Medical Life Sciences II	1	○				
Basic Molecular Life Sciences I	1	○				
Basic Molecular Life Sciences II	1	○				
Basic Biological Sciences I	1	○				
Basic Biological Sciences II	1	○				
Specialized subjects						
Specialized subject of Bioinformatics						
Bioinformatics, Advanced Course I	1	○				
Bioinformatics, Advanced Course II	1	○				
Bioinformatics, Advanced Course III	1	○				
Bioinformatics, Advanced Course IV	1	○				
Specialized subject of Life Engineering						
Life Engineering, Advanced Course I	1	○				
Life Engineering, Advanced Course II	1	○				
Life Engineering, Advanced Course III	1	○				
Life Engineering, Advanced Course IV	1	○				
Specialized subject of Medical Molecular Cell Biology						
Topics in medical life sciences I	1	○				
Topics in medical life sciences II	1	○				
Topics in medical life sciences III	1	○				
Topics in medical life sciences IV	1	○				

◎; Compulsory subjects, ○; Selective subjects



Subjects	Credits	Standard completion period (*)				
		D1	D2	D3	D4	D5
Specialized subjects						
Specialized subject of Molecular Life Sciences						
Molecular Life Sciences, Advanced Course I	1	○				
Molecular Life Sciences, Advanced Course II	1	○				
Molecular Life Sciences, Advanced Course III	1	○				
Molecular Life Sciences, Advanced Course IV	1	○				
Specialized subject of Biological Sciences						
Biological Sciences, Advanced Course I	1	○				
Biological Sciences, Advanced Course II	1	○				
Biological Sciences, Advanced Course III	1	○				
Biological Sciences, Advanced Course IV	1	○				
Specialized subject of special lecture						
Patent and Venture Company for Life Sciences and Biomedical Engineering	2	○				
Bioinformatics Special Lecture	1	○				
Life Engineering Special Lecture	1	○				
Medical Molecular Cell Biology Special Lecture	1	○				
Molecular Life Sciences Special Lecture	1	○				
Special Lecture of Integrative Life Science I	1	○				
Special Lecture of Integrative Life Science II	1	○				
Special Lecture of Integrative Life Science III	1	○				
Special Lecture of Integrative Life Science IV	1	○				
Special Lecture of Integrative Life Science V	1	○				
Special Lecture of Integrative Life Science VI	1	○				
Special Lecture of Integrative Life Science VII	1	○				
Special Lecture of Integrative Life Science VIII	1	○				
Special Lecture of Integrative Life Science IX	1	○				
Special Lecture of Integrative Life Science X	1	○				

◎; Compulsory subjects, ○; Selective subjects

Subjects	Credits	Standard completion period (*)				
		D1	D2	D3	D4	D5
Technical Reading and Writing of Systems Life Sciences						
Technical Reading and Writing of Systems Life Sciences I	4	⊙				
Technical Reading and Writing of Systems Life Sciences II	4		⊙			
Special Study of Systems Life Sciences	6		⊙			
Advanced Seminar in Systems Life Sciences						
Advanced Seminar in Systems Life Sciences I	2		⊙			
Advanced Seminar in Systems Life Sciences II	2				⊙	
Seminar of Systems Life Sciences	4				⊙	
Doctoral Dissertation Seminar	6				⊙	

⊙; Compulsory subjects, ○; Selective subjects

(\*) "Standard completion period" is represents the grade for which you will acquire credits normally. But if you do not acquire credits in the normal grade, you can acquire its later. However, it is not possible to acquire credits which the "Standard completion period" is after the 3rd grade at the time of the 1st grade and 2nd grade

### Required number of credits and criteria for completing the course

- (1) Basic subjects (compulsory); Bioethics
- (2) Basic subjects (Selective); 4 Credits
- (3) Specialized subjects; 6 Credits
- (4) From basic subject group or special subject group  
(except course subjects attended for (2) and (3) above) ; 3 Credits
- (5) Technical Reading and Writing of Systems Life Sciences I ; 4 Credits
- (6) Technical Reading and Writing of Systems Life Sciences II ; 4 Credits
- (7) Special Study of Systems Life Sciences; 6 Credits
- (8) Advanced Seminar in Systems Life Sciences I ; 2 Credits
- (9) Advanced Seminar in Systems Life Sciences II ; 2 Credits
- (10) Seminar of Systems Life Sciences; 4 Credits
- (11) Doctoral Dissertation Seminar; 6 Credits

Total; 42 Credits or more