2024

Graduate School of Frontier BioSciences

Subject List

S	Subject Group	Year	Requirements						
Group A	Core Subjects	1	2 credits	Total 16 credits	Total 30 credits				
Group B	Elective Subjects	1-2	12 credits	Total To Credits	*Requirements to take an Interim	Total 40 credits			
Group C	Research Subjects	1-2	14 credits		Exam.	*Requirement for students admitted to the 5-year doctoral			
Group D	Project Research Subjects	3-5	2 credits		Total 10 credits *Requirement for	course			
Group E	Research Subjects	3-5	8 credits		3rd-year transferred students				

Group A subjects

Gr	roup	Subject Code	Subject Name	Semeste	Language	Year	Credit	Lecturer	
А	Lecture	320001	Introduction to Physics I	Spring	Japanese	1	2	KIMURA Shin-ichi	
Α	Lecture	320523	Protein Structure and Chemistry	Spring	Japanese	1	1	NAKAGAWA Atushi	-
Α	Exercise	320011	Exercise in Physics	Summer	Japanese	1	1	KIMURA Shin-ichi	Elective
А	Exercise	320015	Exercise in Computer Science	Summer	Japanese	1	1	ISHIJIMA Akihiko	
А	ALA	328001	Introduction to Nanobiology I	Spring	Japanese	1	0.5	ISHIJIMA Akihiko	
Α	ALA	328005	Introduction to Biomolecular Networks II	Spring	Japanese	1	0.5	TAKASHIMA Seiji	
Α	ALA	328007	Introduction to Biomolecular Networks IV	Spring	Japanese	1	0.5	OKAMOTO Koji	
Α	ALA	328009	Introduction to Biomolecular Networks VI	Spring	Japanese	1	0.5	HIROSE Tetsuro	
Α	ALA	328010	Introduction to Integrated Biology I	Spring	Japanese	1	0.5	MORITA Ritsuko	
Α	ALA	328017	Introduction to Organismal Biosystems III	Spring	Japanese	1	0.5	SASAKI Hiroshi	- Mandatory
Α	ALA	328019	Introduction to Neuroscience I	Spring	Japanese	1	0.5	NISHIMOTO Shinji	(at least 1 credit)
Α	ALA	328020	Introduction to Neuroscience II	Spring	Japanese	1	0.5	YAGI Takeshi	ordan
Α	ALA	328021	Introduction to Neuroscience III	Spring	Japanese	1	0.5	HORIE Takeo	
Α	ALA	328023	Introduction to Biophysical Dynamics I	Spring	Japanese	1	0.5	KURAHASHI Takashi	
Α	ALA	328025	Introduction to Biophysical Dynamics III	Spring	Japanese	1	0.5	KIMURA Shin-ichi	
Α	ALA	328027	Introduction to Biomedical Engineering II	Spring	Japanese	1	0.5	HARA Eiji	
Α	ALA	328029	Introduction to Biomedical Engineering IV	Spring	Japanese	1	0.5	KURODA Syunichi	
Α	AGL	329002	Introduction to Nanobiology II	Fall	English	1	0.5	UEDA Masahiro	
А	AGL	329006	Introduction to Biomolecular Networks III	Fall	English	1	0.5	FUKAGAWA Tatsuo	
Α	AGL	329008	Introduction to Biomolecular Networks V	Fall	English	1	0.5	TACHIBANA Makoto	
Α	AGL	329011	Introduction to Integrated Biology II	Fall	English	1	0.5	IKEDA Fumiyo	
Α	AGL	329012	Introduction to Integrated Biology III	Fall	English	1	0.5	KONDO Shigeru	
А	AGL	329014	Introduction to Integrated Biology V	Fall	English	1	0.5	KAI Toshie	Mandatory
А	AGL	329015	Introduction to Organismal Biosystems I	Fall	English	1	0.5	TSUMAKI Noriyuki	(at least 1 credit)
А	AGL	329016	Introduction to Organismal Biosystems II	Fall	English	1	0.5	ISHII Masaru	
Α	AGL	329018	Introduction to Organismal Biosystems IV	Fall	English	1	0.5	NAGASAWA Takashi	
Α	AGL	329022	Introduction to Neuroscience IV	Fall	English	1	0.5	KITAZAWA Shigeru	
Α	AGL	329024	Introduction to Biophysical Dynamics II	Fall	English	1	0.5	INOUE Yasushi	
А	AGL	329026	Introduction to Biomedical Engineering I	Fall	English	1	0.5	TAKAKURA Nobuyuki	
Α	AGL	329028	Introduction to Biomedical Engineering III	Fall	English	1	0.5	NAKAGAWA Atushi	

ALA: Advanced Liberal Arts Educational Subjects AGL: Advanced Global Literacy Educational Subjects

XYou must take a minimum of 2 credits from the core subjects in Group A, including 2 subjects (=1 credit) from ALA subjects and 2 subjects (=1 credit) from AGL subjects. However, for students who are undertaking their studies/research in English, AGL subjects can be regarded as ALA subjects.

XIn case a subject limits the number of students, in principle, 1st year students will be priotized. €

Group B subjects

Group		t Code	Subject Name	Semester	Year	Credit	Lecturer	
В	Spring 320347	7 Fall 329347	Nanobiology IC	Full year	1	4	FUKUOKA Hajime	
В	320348	329348	Nanobiology ID	Full year	1	4	UEDA Masahiro	
В	320353	329353	Biomolecular Networks IA	Full year	1	4	TAKASHIMA Seiji	
В	320354	329354	Biomolecular Networks IB	Full year	1	4	HORI Tetsuya	
В	320355	329355	Biomolecular Networks IC	Full year	1	4	OKAMOTO koji	
В	320656	329656	Biomolecular Networks IE	Full year	1	4	TACHIBANA Makoto	
В	320657	329657	Biomolecular Networks IF	Full year	1	4	HIROSE Tetsuro	
В	320362	329362	Integrated Biology IB	Full year	1	4	MORITA Ritsuko	
В	320363	329363	Integrated Biology IC	Full year	1	4	IKEDA Fumiyo	
В	320364	329364		-	1	4	WATANABE Masakatsu	
		329365	Integrated Biology ID	Full year			KAI Toshie	
В	320365		Integrated Biology IE	Full year	1	4	ISHII Masaru	
В	320371	329371	Organismal Biosystems IA	Full year	1	4		Mandatory (4 credits /
В	320372	329372	Organismal Biosystems IB	Full year	1	4	NAGASAWA Takashi	1st year)
В	320373	329373	Organismal Biosystems IC	Full year	1	4	SASAKI Hiroshi	%Choose
В	320379	329379	Neuroscience IA	Full year	1	4	NISHIMOTO Shinji	your lab
В	320381	329381	Neuroscience IC	Full year	1	4	YAGI Takeshi	
В	320382	329382	Neuroscience ID	Full year	1	4	HORIE Takeo	
В	320384	329384	Neuroscience IF	Full year	1	4	KITAZAWA Shigeru	
В	320391	329391	Biophysical Dynamics IA	Full year	1	4	TAKEUCHI Hiroko	
В	320392	329392	Biophysical Dynamics IB	Full year	1	4	KIMURA Shin-ichi	
В	320394	329394	Biophysical Dynamics ID	Full year	1	4	ISHITOBI Hidekazu	
В	320399	329399	Biomedical Engineering IA	Full year	1	4	SUZUKI Mamoru	
В	320400	329400	Biomedical Engineering IB	Full year	1	4	TAKAKURA Nobuyuki	
В	320401	329401	Biomedical Engineering IC	Full year	1	4	HARA Eiji	
В	320404	329404	Biomedical Engineering IF	Full year	1	4	KURODA Syunichi	
В	320407	329407	Biomedical Engineering IS	Full year	1	4	Affiliated Labs, Cooperated Institutes, Adjunct Faculties	
В	*	*	Biomechanics I	Full year	1	1	Your sub supervisor	Mandatory
В	320205		Special Lectures VI	Spring~Summer	1	1	OKADA Yasushi	
В		320078	Special Lectures I	Fall~Winter	1	1	ТВА	
В		320079	Special Lectures II	Fall~Winter	1	1	ТВА	
В		320080	Special Lectures III	Fall~Winter	1	1	ТВА	Elective
В		320081	Special Lectures IV	Fall~Winter	1	1	ТВА	
В		320082	Special Lectures V	Fall~Winter	1	1	ТВА	
В		320206	Special Lectures VII	Fall~Winter	1	1	ТВА	

**One of the above subjects with your supervisor's name and "Biomechanics I" are the required subjects for the 1st year.

- •If you cannot find your supervisor's name on the list, please register "Biomedical Engineering IS".
- ●You do not need to register "Biomechanics I" by yourself. It will be registered by FBS Educational Affairs after your subsupervisor is fixed.

**Special Lectures VI" requires registration during the course registration period in spring. Those wishing to take the course should remember to register. For all other Special Lectures, please register during the course registration period in the fall. For the details of the "Special Lecture", please check the syllabus from KOAN.

Group B subjects

	Subjec	t Code	0.11.41		.,	0 1"		
Group	Spring	Fall	Subject Name	Semester	Year	Credit	Lecturer	
В	320351	329351	Nanobiology IIC	Full year	2	4	ISHIJIMA Akihiko	
В	320352	329352	Nanobiology IID	Full year	2	4	UEDA Masahiro	
В	320357	329357	Biomolecular Networks IIA	Full year	2	4	TAKASHIMA Seiji	
В	320358	329358	Biomolecular Networks IIB	Full year	2	4	FUKAGAWA Tatsuo	
В	320359	329359	Biomolecular Networks IIC	Full year	2	4	OKAMOTO koji	
В	320658	329658	Biomolecular Networks IIE	Full year	2	4	TACHIBANA Makoto	
В	320659	329659	Biomolecular Networks IIF	Full year	2	4	HIROSE Tetsuro	
В	320367	329367	Integrated Biology IIB	Full year	2	4	MORITA Ritsuko	
В	320368	329368	Integrated Biology IIC	Full year	2	4	IKEDA Fumiyo	
В	320369	329369	Integrated Biology IID	Full year	2	4	KONDO Shigeru	
В	320370	329370	Integrated Biology IIE	Full year	2	4	KAI Toshie	
В	320375	329375	Organismal Biosystems IIA	Full year	2	4	ISHII Masaru	Mandatory
В	320376	329376	Organismal Biosystems IIB	Full year	2	4	NAGASAWA Takashi	(4 credits / 2nd year)
В	320377	329377	Organismal Biosystems IIC	Full year	2	4	SASAKI Hiroshi	%Choose
В	320385	329385	Neuroscience IIA	Full year	2	4	NISHIMOTO Shinji	your lab
В	320387	329387	Neuroscience IIC	Full year	2	4	YAGI Takeshi	
В	320388	329388	Neuroscience IID	Full year	2	4	HORIE Takeo	
В	320390	329390	Neuroscience IIF	Full year	2	4	KITAZAWA Shigeru	
В	320395	329395	Biophysical Dynamics IIA	Full year	2	4	KURAHASHI Takashi	
В	320396	329396	Biophysical Dynamics IIB	Full year	2	4	KIMURA Shin-ichi	
В	320398	329398	Biophysical Dynamics IID	Full year	2	4	INOUE YASUSHI	
В	320408	329408	Biomedical Engineering IIA	Full year	2	4	NAKAGAWA Atsushi	
В	320409	329409	Biomedical Engineering IIB	Full year	2	4	TAKAKURA Nobuyuki	
В	320410	329410	Biomedical Engineering IIC	Full year	2	4	HARA Eiji	
В	320413	329413	Biomedical Engineering IIF	Full year	2	4	KURODA Syunichi	
В	320414	329414	Biomedical Engineering IIS	Full year	2	4	Affiliated Labs, Cooperated Institutes, Adjunct Faculties	
В	*	*	Biomechanics II	Full year	2	1	Your sub supervisor	Mandatory

XOne of the above subjects with your supervisor's name and "Biomechanics II" are the required subjects for the 2nd year.

[•]If you cannot find your supervisor's name on the list, please register "Biomedical Engineering IIS".

[●]You do not need to register "Biomechanics II" by yourself. It will be registered by FBS Educational Affairs after your subsupervior is fixed.

<u>XIn case you did not get enough credits to fulfill group B requirement during your 1st year, please take Special Lectures in the 2nd year as well though these subjects are originally for 1st-year students.</u>

Group C subjects

	Subjec							
Group	Spring	Fall	- Subject Name	Semester	Year	Credit	Lecturer	
С	320417	329417	Seminar in Nanobiology IC	Full year	1	7	FUKUOKA Hajime	
С	320418	329418	Seminar in Nanobiology ID	Full year	1	7	UEDA Masahiro	
С	320423	329423	Seminar in Biomolecular Networks IA	Full year	1	7	TAKASHIMA Seiji	
С	320424	329424	Seminar in Biomolecular Networks IB	Full year	1	7	HORI Tetsuya	
С	320425	329425	Seminar in Biomolecular Networks IC	Full year	1	7	OKAMOTO koji	
С	320660	329660	Seminar in Biomolecular Networks IE	Full year	1	7	TACHIBANA Makoto	
С	320661	329661	Seminar in Biomolecular Networks IF	Full year	1	7	HIROSE Tetsuro	
С	320432	329432	Seminar in Integrated Biology IB	Full year	1	7	MORITA Ritsuko	
С	320433	329433	Seminar in Integrated Biology IC	Full year	1	7	IKEDA Fumiyo	
С	320434	329434	Seminar in Integrated Biology ID	Full year	1	7	WATANABE Masakatsu	
С	320435	329435	Seminar in Integrated Biology IE	Full year	1	7	KAI Toshie	
С	320441	329441	Seminar in Organismal Biosystems IA	Full year	1	7	ISHII Masaru	Mandatory
С	320442	329442	Seminar in Organismal Biosystems IB	Full year	1	7	NAGASAWA Takashi	(7 credits / 1st year)
С	320443	329443	Seminar in Organismal Biosystems IC	Full year	1	7	SASAKI Hiroshi	※Choose
С	320449	329449	Seminar in Neuroscience IA	Full year	1	7	NISHIMOTO Shinji	your lab
С	320451	329451	Seminar in Neuroscience IC	Full year	1	7	YAGI Takeshi	
С	320452	329452	Seminar in Neuroscience ID	Full year	1	7	HORIE Takeo	
С	320454	329454	Seminar in Neuroscience IF	Full year	1	7	KITAZAWA Shigeru	
С	320461	329461	Seminar in Biophysical Dynamics IA	Full year	1	7	TAKEUCHI Hiroko	
С	320462	329462	Seminar in Biophysical Dynamics IB	Full year	1	7	KIMURA Shin-ichi	
С	320464	329464	Seminar in Biophysical Dynamics ID	Full year	1	7	ISHITOBI Hidekazu	
С	320469	329469	Seminar in Biomedical Engineering IA	Full year	1	7	SUZUKI Mamoru	
С	320470	329470	Seminar in Biomedical Engineering IB	Full year	1	7	TAKAKURA Nobuyuki	
С	320471	329471	Seminar in Biomedical Engineering IC	Full year	1	7	HARA Eiji	
С	320474	329474	Seminar in Biomedical Engineering IF	Full year	1	7	KURODA Syunichi	
С	320477	329477	Seminar in Biomedical Engineering IS	Full year	1	7	Affiliated Labs, Cooperated Institutes, Adjunct Faculties	

XOne of the above subjects with your supervisor's name and "Biomechanics I" are the required subjects for the 1st year. €

[●]If you cannot find your supervisor's name on the list, please register "Seminar in Biomedical Engineering IS".

Group C subjects

Group C subjects										
Group	Subjec	t Code	Subject Name	Semester	Year	Credit	Lecturer			
	Spring	Fall	,							
С	320421	329421	Seminar in Nanobiology IIC	Full year	2	7	ISHIJIMA Akihiko			
С	320422	329422	Seminar in Nanobiology IID	Full year	2	7	UEDA Masahiro			
С	320427	329427	Seminar in Biomolecular Networks IIA	Full year	2	7	TAKASHIMA Seiji			
С	320428	329428	Seminar in Biomolecular Networks IIB	Full year	2	7	FUKAGAWA Tatsuo			
С	320429	329429	Seminar in Biomolecular Networks IIC	Full year	2	7	OKAMOTO koji			
С	320662	329662	Seminar in Biomolecular Networks IIE	Full year	2	7	TACHIBANA Makoto			
С	320663	329663	Seminar in Biomolecular Networks IIF	Full year	2	7	HIROSE Tetsuro			
С	320437	329437	Seminar in Integrated Biology IIB	Full year	2	7	MORITA Ritsuko			
С	320438	329438	Seminar in Integrated Biology IIC	Full year	2	7	IKEDA Fumiyo			
С	320439	329439	Seminar in Integrated Biology IID	Full year	2	7	KONDO Shigeru			
С	320440	329440	Seminar in Integrated Biology IIE	Full year	2	7	KAI Toshie			
С	320445	329445	Seminar in Organismal Biosystems IIA	Full year	2	7	ISHII Masaru	Mandatory		
С	320446	329446	Seminar in Organismal Biosystems IIB	Full year	2	7	NAGASAWA Takashi	(7 credits / 2nd year)		
С	320447	329447	Seminar in Organismal Biosystems IIC	Full year	2	7	SASAKI Hiroshi	::Choose		
С	320455	329455	Seminar in Neuroscience IIA	Full year	2	7	NISHIMOTO Shinji	your lab		
С	320457	329457	Seminar in Neuroscience IIC	Full year	2	7	YAGI Takeshi			
С	320458	329458	Seminar in Neuroscience IID	Full year	2	7	HORIE Takeo			
С	320460	329460	Seminar in Neuroscience IIF	Full year	2	7	KITAZAWA Shigeru			
С	320465	329465	Seminar in Biophysical Dynamics IIA	Full year	2	7	KURAHASHI Takashi			
С	320466	329466	Seminar in Biophysical Dynamics IIB	Full year	2	7	KIMURA Shin-ichi			
С	320468	329468	Seminar in Biophysical Dynamics IID	Full year	2	7	INOUYE YASUSHI			
С	320478	329478	Seminar in Biomedical Engineering IIA	Full year	2	7	NAKAGAWA Atsushi			
С	320479	329479	Seminar in Biomedical Engineering IIB	Full year	2	7	TAKAKURA Nobuyuki			
С	320480	329480	Seminar in Biomedical Engineering IIC	Full year	2	7	HARA Eiji			
С	320483	329483	Seminar in Biomedical Engineering IIF	Full year	2	7	KURODA Syunichi			
С	320484	329484	Seminar in Biomedical Engineering IIS	Full year	2	7	Affiliated Labs, Cooperated Institutes, Adjunct Faculties			

[※]One of the above subjects with your supervisor's name and "Biomechanics I" are the required subjects for the 2nd year.

[•] If you cannot find your supervisor's name on the list, please register "Seminar in Biomedical Engineering IIS".

Group D subjects

0	Subject Code		Cubic et Name	0	V	0	Laskinsa	
Group	Spring	Fall	- Subject Name	Semester	Year	Credit	Lecturer	
D	320146	329146	Project Research II	Full year	3~5	2	TACHIBANA Makoto	
D	320147	329147	Project Research III	Full year	3~5	2	ISHIJIMA Akihiko	
D	320148	329148	Project Research IV	Full year	3~5	2	TAKASHIMA Seiji	
D	320149	329149	Project Research V	Full year	3~5	2	FUKAGAWA Tatsuo	
D	320150	329150	Project Research VI	Full year	3~5	2	KAI Toshie	
D	320151	329151	Project Research VII	Full year	3~5	2	HIROSE Tetsuro	
D	320153	329153	Project Research IX	Full year	3~5	2	MORITA Ritsuko	
D	320154	329154	Project Research X	Full year	3~5	2	IKEDA Fumiyo	
D	320155	329155	Project Research XI	Full year	3~5	2	KONDO Shigeru	
D	320156	329156	Project Research XII	Full year	3~5	2	ISHII Masaru	
D	320157	329157	Project Research XIII	Full year	3~5	2	NAGASAWA Takashi	Mandatory (2 credits / 3rd~5th year)
D	320158	329158	Project Research XIV	Full year	3~5	2	SASAKI Hiroshi	
D	320159	329159	Project Research XV	Full year	3~5	2	TSUMAKI Noriyuki	
D	320160	329160	Project Research XVI	Full year	3~5	2	NISHIMOTO Shinji	
D	320161	329161	Project Research XVII	Full year	3~5	2	UEDA Masahiro	
D	320162	329162	Project Research XVIII	Full year	3~5	2	YAGI Takeshi	
D	320163	329163	Project Research XIX	Full year	3~5	2	HORIE Takeo	
D	320165	329165	Project Research XXI	Full year	3~5	2	KURAHASHI Takashi	
D	320166	329166	Project Research XXII	Full year	3~5	2	KIMURA Shin-ichi	
D	320167	329167	Project Research XXIII	Full year	3~5	2	KITAZAWA Shigeru	
D	320168	329168	Project Research XXIV	Full year	3~5	2	INOUE Yasushi	
D	320169	329169	Project Research XXV	Full year	3~5	2	NAKAGAWA Atsushi	
D	320170	329170	Project Research XXVI	Full year	3~5	2	TAKAKURA Nobuyuki	
D	320171	329171	Project Research XXVII	Full year	3~5	2	HARA Eiji	
D	320174	329174	Project Research XXX	Full year	3~5	2	KURODA Syunichi	
D	320208	329208	Project Research XXXI	Full year	3~5	2	OKAMOTO koji	
D	320216	329216	Project Research S	Full year	3~5	2	Affiliated Labs, Cooperated Institutes, Adjunct Faculties	

**To fulfill the requirement for Group D project research (lab rotations), you are required to conduct research in a host lab other than your home lab during the 3rd-5th year. If you conduct research at...

One of FBS's Core Research Labs or Affiliated Labs.

=>Register one of the above subjects with the name of your supervisor at the "host lab." ②Other

=>Register one of the above subjects with the name of your supervisor at your "home lab."

XIf you cannot find your supervisor's name on the list, please register "Project Research S".

For the detail of Group D project research, please refer to the next page>>

■ Group D (Project Research Subjects) = Lab Rotation

[Basic Policy]

From the third year onwards, for a certain period, students will have the opportunity to participate in research in laboratories other than their home lab, allowing them to gain experience in different fields and broaden their background knowledge.

[Methods]

The method of lab rotation is primarily based on the following principle (0), but it can be flexibly implemented as described in (0) to accommodate the circumstances of each laboratory and individual students.

OParticipate in research at one of FBS's Core Research Labs or Affiliated Labs.

*In this case, evaluation will be conducted by the host supervisor.

- (a) Participate in daily research in a host lab for two weeks in total.
- (b) Attendance at seminars, colloquia, journal clubs, and other research activities in the host lab is expected once a week as a basic requirement, with a total of approximately 8 weeks of participation. Furthermore, it is desirable to provide students with opportunities for presentations.

②Other than (①), if the student's supervisor determines that they are participating in research in another laboratory, it can be recognized as credits under Group D. Below are examples of cases where such recognition may be possible for reference:

*In this case, evaluation will be conducted by the supervisor at the students' home lab.

- (c) Participate in a practical experimentation course or short-term intensive course in Japan or overseas.
- (d) Attend lectures or journal clubs given by a non-Japanese faculty:
- -In case a student has already taken a special intensive course by one foreign faculty member and wishes to take a different intensive course by another foreign faculty member.
- -In case a student intends to attend a journal club conducted by a foreign faculty member who is not in charge of a special intensive lecture course
- -Other
- (e). Participate in research in a lab in Japan or overseas.
- (f).Participate in an internship at a company.

[When to conduct]

It is preferable to conduct the lab rotation as early as possible after April of the 3rd year. However, the circumstances of each laboratory will be considered.

[Maximum number of students accepted in each lab]

Maximum 5 in general. However, the circumstances of the host laboratory will be considered.

[How to select a host lab]

It is desirable to consult with the supervisor to determine the accepting lab and negotiate acceptance.

Group E subjects

	Subject Code		0.11			0 "		
Group	Spring	Fall	Subject Name	Semester	Year	Credit	Lecturer	
Е	320177	329177	Advanced Seminar in Nanobiology C	Full year	3~5	8	ISHIJIMA Akihiko	
Е	320340	329340	Advanced Seminar in Nanobiology D	Full year	3~5	8	UEDA Masahiro	1
Е	320178	329178	Advanced Seminar in Biomolecular Networks A	Full year	3~5	8	TAKASHIMA Seiji	1
Е	320179	329179	Advanced Seminar in Biomolecular Networks B	Full year	3~5	8	FUKAGAWA Tatsuo	1
Е	320180	329180	Advanced Seminar in Biomolecular Networks C	Full year	3~5	8	OKAMOTO koji	
Е	320181	329181	Advanced Seminar in Biomolecular Networks D	Full year	3~5	8	HIROSE Tetsuro	1
Е	320228	329228	Advanced Seminar in Biomolecular Networks E	Full year	3~5	8	TACHIBANA Makoto	
Е	320183	329183	Advanced Seminar in Integrated Biology B	Full year	3~5	8	MORITA Ritsuko	1
Е	320184	329184	Advanced Seminar in Integrated Biology C	Full year	3~5	8	IKEDA Fumiyo	1
Е	320185	329185	Advanced Seminar in Integrated Biology D	Full year	3~5	8	KONDO Shigeru	1
Е	320335	329335	Advanced Seminar in Integrated Biology E	Full year	3~5	8	KAI Toshie	1
Е	320186	329186	Advanced Seminar in Organismal Biosystems A	Full year	3~5	8	ISHII Masaru	Mandatory
Е	320187	329187	Advanced Seminar in Organismal Biosystems B	Full year	3~5	8	NAGASAWA Takashi	(8 credits /
Е	320188	329188	Advanced Seminar in Organismal Biosystems C	Full year	3~5	8	SASAKI Hiroshi	3rd~5th year)
Е	320190	329190	Advanced Seminar in Neuroscience A	Full year	3~5	8	NISHIMOTO Shinji	
Е	320192	329192	Advanced Seminar in Neuroscience C	Full year	3~5	8	YAGI Takeshi	
Е	320193	329193	Advanced Seminar in Neuroscience D	Full year	3~5	8	HORIE Takeo	
Е	320223	329223	Advanced Seminar in Neuroscience F	Full year	3~5	8	KITAZAWA Shigeru	
Е	320195	329195	Advanced Seminar in Biophysical Dynamics A	Full year	3~5	8	KURAHASHI Takashi	
Е	320196	329196	Advanced Seminar in Biophysical Dynamics B	Full year	3~5	8	KIMURA Shin-ichi	
Е	320198	329198	Advanced Seminar in Biophysical Dynamics D	Full year	3~5	8	INOUYE YASUSHI	
Е	320199	329199	Advanced Seminar in Biomedical Engineering A	Full year	3~5	8	NAKAGAWA Atsushi	
Е	320200	329200	Advanced Seminar in Biomedical Engineering B	Full year	3~5	8	TAKAKURA Nobuyuki	
Е	320201	329201	Advanced Seminar in Biomedical Engineering C	Full year	3~5	8	HARA Eiji	
Е	320204	329204	Advanced Seminar in Biomedical Engineering F	Full year	3~5	8	KURODA Syunichi	
Е	320217	329217	Advanced Seminar in Biomedical Engineering S	Full year	3~5	8	Affiliated Labs, Cooperated Institutes, Adjunct Faculties	

^{**}One of the above subjects with your supervisor's name is the required subjects for 3rd-5th year

[●]If you cannot find your supervisor's name on the list, please register "Advanced Seminar in Biomedical Engineering S".

<Credit requirements for 3rd-5th year>
At least 2 credits from Group D and 8 credits from Group E