

Academic Year 2024

**Kumamoto University Health Life Science
S-HIGO Professional Fellowship Program
(S-HIGO Professional Program)**

Syllabus

Contact: Kumamoto University,

Headquarters for Admissions and Education, Graduate Program Education Promotion Division
(Academic support Office (Graduate school support))

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The class timetable

	Oe Campus	Honjyo Campus	Kurokami Campus
1st period	8:40 - 10:10	8:45 - 10:15	8:40-10:10
2nd period	10:20 - 11:50	10:30 - 12:00	10:25-11:55
3rd period	12:50 - 14:20	13:15 - 14:45	12:55-14:25
4th period	14:30 - 16:00	15:00 - 16:30	14:40-16:10
5th period	16:10 - 17:40	16:45 - 18:15	16:25-17:55
6th period	18:30 - 20:00	18:30 - 20:00	18:10-19:40

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1. S-HIGO Professional Program Courses, Credits and How to Apply

S-HIGO Professional Program Courses, Credits and How to Apply

Research Skill Enhancement Package

Subjects	Credits		How to take credits	Others
	Compulsory	Elective		
S-HIGO Practical Training	1		4credits or more	common course
Liberal Arts Course for Graduate Students – Research Frontiers and Knowledge Integration		1		
S-HIGO Cutting-Edge Seminar Series A		1		
S-HIGO Cutting-Edge Seminar Series B		2		

Career Support Package

Subjects	Credits		How to take credits	Others
	Compulsory	Elective		
S-HIGO Internship I	1		5credits or more	common course
S-HIGO Project	2			
S-HIGO Leadership Training Course		1		
S-HIGO Governmental and Business Seminar Series A		1		
S-HIGO Governmental and Business Seminar Series B		2		
S-HIGO Internship II		1		

Graduate School of Medical Sciences (Doctoral Course)
S-HIGO Professional Program Courses Registration Application Form
(General course)

Dean, The Graduate School of Medical Sciences ()year/month/day

Year entered: _____

Name: _____

Student number: _____

E-mail address: _____

Here, I would like to register for the following subjects.

Department		Supervisor's Signature	
Course	General course		

For course request and Transferred request, Put 「○」 onto the blank column of your requested subjects.

Package	Subjects	Credits		Subject Director	Course request	Transferred request
		Compulsory	Elective			
Research Skill Enhancement Package 【How to Apply】 4credits or more	S-HIGO Practical Training	1		SHUTO Tsuyoshi	○	
	Liberal Arts Course for Graduate Students – Research Forefront and Knowledge Integration		1	UMEDA Kahoko		
	S-HIGO Cutting-Edge Research Seminar A		1	NISHINAKAMURA Ryuichi		
	S-HIGO Cutting-Edge Research Seminar B		2	NISHINAKAMURA Ryuichi		
Career Support Package 【How to Apply】 5credits or more	S-HIGO Internship I	1		TAKEO Toru	○	
	S-HIGO Project	2		OGAWA Minetaro	○	
	S-HIGO Leadership Training Course		1	MORIOKA Hiroshi		
	S-HIGO Governmental and Business Seminar A		1	SARUWATARI Jiyunji		
	S-HIGO Governmental and Business Seminar B		2	SARUWATARI Jiyunji		
	S-HIGO Internship II		1	TAKEO Toru		

2. Research Skill Enhancement Package

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-170-99-2	2024whole year	Graduate School of Medical Sciences (24720)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Practical Training(S-HIGO Practical Training)			Shiyutou Tsuyoshi		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……50% 2.Profound inter-disciplinary knowledge ……30% 3.Global perspective and ability to take initiative action ……10% 4.Social leadership drive ……10%					
Type of Class(授業の形態)	Practice				
Teaching Method(授業の方法)	Practical training (2 days per laboratories/departments) will be conducted each training item. Students are required to understand the principle of research/experiment through lectures, carry out experimentals, analyze and summarize the results, and compile them in a report.				
Course Goals(授業の目的)	Health life sciences is an interdisciplinary research field that brings together various disciplines in the fields of medicine, pharmacy, and health sciences, and the experimental methods and techniques used in this field are also diverse. Learning these various experimental techniques is not only necessary to engage in research in the health and life sciences, but understanding the technical background that supports the findings, even in disciplines outside of one's field of expertise, is an important skill for solving problems from multiple perspectives. In the S-HIGO Practical Training, students will learn the principles and actual techniques of various experimental methods and techniques related to health and life sciences. It also aims to increase interest in different fields and to broaden the scope of research and networking.				
Course Learning goals(学修目標)	<p>【A level (A水準)】 The student will be able to understand, explain, and perform the principles and practical procedures of various experimental methods and techniques related to health and life sciences.</p> <p>【C level (C水準)】 The student will be able to understand the principles and practical procedures of various experimental methods and techniques related to health and life sciences.</p>				
Course Outline(授業の概要)	<p>In the course, students will receive hands-on training in various techniques and methods in the host laboratory in the fields of medicine, health sciences, and pharmacy. Some of them are introduced below. (Examples) Immunological analysis ES cell gene modification and expression Muscle tissue regeneration evaluation FACS Intracellular signaling response Small animal metabolic assays, animal CT PCR analysis and other methods Oxidative stress in cellular systems Cardiovascular disease models Insulin measurement Scanning electron microscopy Time-lapse microscopy Tissue staining methods Quantification of RNA and DNA Operant learning experiments, open field tests Two-photon excitation microscopy Lipofection, Western blot Evaluation of biological activity by nematode worms Evaluation of candidate substances for the treatment of lysosomal disease Biostatistics with clinical data Cyclodextrin supramolecules Organocatalysts Magnetic resonance-based life imaging Protein identification by mass spectrometry Methods for obtaining optically active compounds Organic synthesis Physicochemical analysis of biomolecular interactions Lipid extraction from tissue and quantification Protein crystallization and X-ray crystallography Searching for drug leads from microbial resources Aseptic manipulation and anticancer effects GIS analysis based on environmental data of useful plant habitats Drug disposition Gene expression analysis Western blot analysis Nucleic acid-protein binding analysis Fetal ultrasound tomography Effectiveness analysis of maternal and child health education Native-PAGE Serum protein detection</p>				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		The date and time of classes in each field and the content of the training will be notified separately.	The date and time of classes in each field and the content of the training will be notified separately.		
Estimated out-of-class study time	This course consists of content that requires 45 hours of study. Since the class is for 30 hours, 15 hours worth of pre- and post-study (including assignments) is required to deepen the understanding of the class.				
Required Textbook(テキスト)	Not specified.				
Reading List(参考文献)	Not specified.				
Enrollment Conditions(履修)	Each student is required to participate in at least four practical training courses (at least one from each of the				

条件)	fields of medicine, health science, and pharmacy)and submit a report for each. Evaluation will be based on the discussion during the practical training, the level of understanding of the practical training items and the contents of the report. * Students who want to learn more about this training in depth, such as the experimental principles, methods, and techniques, should voluntarily consult with the person in charge of the desired laboratory regarding the extension of the training period.
Assessment Methods and Criteria(評価方法・基準)	Students need to submit a report on the content of the practical training and its relevance to your research. Evaluation will be based on the discussion during the practical training, the level of understanding of the practical training items and the contents of the report.
Language Used in Instruction(使用言語)	Japanese and English
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
KGG5-001-99-2	2024intensive	Advanced Arts and Science (15001)	1, 2, 3	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
Research Frontiers and Knowledge Integration(Creating a Sustainable Future and Resilience - Challenging Issues with No Single Correct Answer to Build a Safe and Healthy Society for a Lifetime -)			Saitou Yasushi, HOSONO Takahiro, TAKEUCHI Yukiko, NISHIKAWA Saori, OKADA Yukio, ONO Yusuke, Shiyutou Tsuyoshi, UMEDA Kahoko		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……15% 2.Profound inter-disciplinary knowledge ……35% 3.Global perspective and ability to take initiative action ……20% 4.Social leadership drive ……30%					
Type of Class(授業の形態)	Lecture and Seminar				
Teaching Method(授業の方法)	The lecture(in Japanese) will be interactive, incorporating elements such as discussions, to facilitate two-way dialogue.				
Course Goals(授業の目的)					
Course Learning goals(学修目標)	【A level (A水準)】 【C level (C水準)】				
Course Outline(授業の概要)	The main aim of this course is to have interactive classes related to the interdisciplinary approaches for a Sustainable Future and Resilience. Professors from different research fields, such as medical, natural and social sciences will deliver the lectures related to cutting-edge research and researchers' viewpoint. Students are expected to participate actively in discussion. In the final class, we will have the overall reflection of the classes of different fields and discuss about the new knowledge students acquired and how they hope to utilize the outcomes in future.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1					
2			A class will be held on the theme of "The impact of the Kumamoto Earthquake on groundwater, economic development, and groundwater." First, regional groundwater reserves and circulation systems will be introduced based on scientific knowledge. Then, the impacts of human activities as well as natural disasters on the groundwater environment are explained. Finally, we will discuss how to use groundwater resources sustainably.		
3					
4					
5					
6					
7					
8					
Estimated out-of-class study time					
Required Textbook(テキスト)					
Reading List(参考文献)					
Enrollment Conditions(履修条件)	<ul style="list-style-type: none"> It is desirable to fully understand the objectives and purposes of the course and to engage in studies with high motivation. It is necessary to have the ability to understand the contents of Japanese classes and to engage in discussions in Japanese. Submitted reports should be written in either Japanese or English. 				
Assessment Methods and Criteria(評価方法・基準)					
Language Used in Instruction(使用言語)	Japanese				
Textbook/Material Language(教科書・資料の言語)	Japanese				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-171-99-2	2024whole year	Graduate School of Medical Sciences (24730)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Cutting-Edge Seminar Series A(S-HIGO Cutting-Edge Seminar Series A)			NISHINAKAMURA Ryuichi, SHIODA Norifumi		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……50% 2.Profound inter-disciplinary knowledge ……25% 3.Global perspective and ability to take initiative action ……20% 4.Social leadership drive ……5%					
Type of Class(授業の形態)	Lecture				
Teaching Method(授業の方法)	Students attend the seminars that are authorized by the course and write reports. The reports should include summary of the lectures and his/her own discussion about the topics. In principle, one-hour seminar is suitable for one report.				
Course Goals(授業の目的)	Health Life Science is an interdisciplinary science that is rapidly evolving as a new field of life science. This practice consists of lectures from researchers who work on health life science in Japan and overseas. Researchers committed to cutting-edge research will be invited and present latest developments of their own. Students are encouraged to attend the seminars to acquire up-to-date knowledge of the fields that may not be covered in the lectures.				
Course Learning goals(学修目標)	【A level (A水準)】 acquire up-to-date knowledge of the fields that may not be covered in the lectures, and skills to discuss scientifically in English 【C level (C水準)】 acquire up-to-date knowledge of the fields that may not be covered in the lectures				
Course Outline(授業の概要)	Topics of the seminars may encompass full range of issues that are related to health life science, which covers all areas of medical and pharmaceutical medicine.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		participate in the weekly seminars	usually every Wed noon at the conference room of IMEG, but subject to change. See the web for the details.		
Estimated out-of-class study time	37 hrs				
Required Textbook(テキスト)					
Reading List(参考文献)					
Enrollment Conditions(履修条件)					
Assessment Methods and Criteria(評価方法・基準)	Students are obligated to attend 8 or more lectures and submit at least 2 reports. The attendance can be extended to three years (Graduate School of Pharmaceutical Sciences) or four years (Graduate School of Medical Sciences) at maximum. Grading will be based on the reports.				
Language Used in Instruction(使用言語)	English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-171-99-2	2024whole year	Graduate School of Medical Sciences (24740)	1, 2, 3, 4	2	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Cutting-Edge Seminar Series B(S-HIGO Cutting-Edge Seminar Series B)			NISHINAKAMURA Ryuichi, SHIODA Norifumi		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……50% 2.Profound inter-disciplinary knowledge ……25% 3.Global perspective and ability to take initiative action ……20% 4.Social leadership drive ……5%					
Type of Class(授業の形態)	Lecture				
Teaching Method(授業の方法)	Students attend the seminars that are authorized by the course and write reports. The reports should include summary of the lectures and his/her own discussion about the topics. In principle, one-hour seminar is suitable for one report.				
Course Goals(授業の目的)	Health Life Science is an interdisciplinary science that is rapidly evolving as a new field of life science. This practice consists of lectures from researchers who work on health life science in Japan and overseas. Researchers committed to cutting-edge research will be invited and present latest developments of their own. Students are encouraged to attend the seminars to acquire up-to-date knowledge of the fields that may not be covered in the lectures.				
Course Learning goals(学修目標)	【A level (A水準)】 acquire up-to-date knowledge of the fields that may not be covered in the lectures, and skills to discuss scientifically in English 【C level (C水準)】 acquire up-to-date knowledge of the fields that may not be covered in the lectures				
Course Outline(授業の概要)	Topics of the seminars may encompass full range of issues that are related to health life science, which covers all areas of medical and pharmaceutical medicine.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		participate in the weekly seminars	usually every Wed noon at the conference room of IMEG, but subject to change. See the web for the details.		
Estimated out-of-class study time	75 hrs				
Required Textbook(テキスト)					
Reading List(参考文献)					
Enrollment Conditions(履修条件)					
Assessment Methods and Criteria(評価方法・基準)	Students are obligated to attend 15 or more lectures and submit at least 4 reports. The attendance can be extended to three years (Graduate School of Pharmaceutical Sciences) or four years (Graduate School of Medical Sciences) at maximum. Grading will be based on the reports.				
Language Used in Instruction(使用言語)	English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

3. Career Support Package

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-703-99-2	2024whole year	Graduate School of Medical Sciences (24760)	1, 2, 3, 4	2	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Project(S-HIGO Project)			OGAWA Minetaro, UMEDA Kahoko, HARI PRASADDEVKOTA		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……45% 2.Profound inter-disciplinary knowledge ……30% 3.Global perspective and ability to take initiative action ……10% 4.Social leadership drive ……15%					
Type of Class(授業の形態)	Other				
Teaching Method(授業の方法)	Once a year, students will present their academic achievement in the S-HIGO Professional Program subjects and the progress of their own research theme.				
Course Goals(授業の目的)	Students will present their academic achievements and research results. They will further improve their research skills and acquire interdisciplinary minds and practical skills by receiving evaluations, guidance, and advice from mentor teachers and industry mentors.				
Course Learning goals(学修目標)	【A level (A水準)】 Students have advanced research skills and interdisciplinary mindset, and can practice them. 【C level (C水準)】 Students have enough levels of research skills and interdisciplinary mindset, and can practice them.				
Course Outline(授業の概要)	The academic achievements in the S-HIGO Professional Program subjects and their research progress will be presented at the annual presentation. Students will receive guidance and advice from the faculty in charge of the S-HIGO program and industry mentor on the contents of the presentation and their skills, and the status of research and academic initiatives.				
Details for Individual Classes(各回の授業内容)					
No.(回数)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Schedule will be notified separately.	Schedule will be notified separately.		
Estimated out-of-class study time					
Required Textbook(テキスト)					
Reading List(参考文献)					
Enrollment Conditions(履修条件)					
Assessment Methods and Criteria(評価方法・基準)	In response to the students' presentation, the level of mastery of research, interdisciplinary mindset, practical ability are evaluated.				
Language Used in Instruction(使用言語)	Japanese and English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目ナンバー)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-173-99-2	2024whole year	Graduate School of Medical Sciences (24750)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Internship I(S-HIGO Internship I)			TAKEO Toru, UMEDA Kahoko, DEVKOTA HARI		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……20% 2.Profound inter-disciplinary knowledge ……35% 3.Global perspective and ability to take initiative action ……15% 4.Social leadership drive ……30%					
Type of Class(授業の形態)	Other				
Teaching Method(授業の方法)	Experience-based training at governmental agencies, business enterprises, etc. that are collaborating with universities for industry-government-academia collaboration. After the on-site experience, students will be required to make presentations and perform discussions to deepen the understanding of the learning content.				
Course Goals(授業の目的)	The S-HIGO Professional Program combines research capabilities with interdisciplinary mindset and practical skills, and provides a bird's-eye view of complex social issues such as aging and the spread of new coronavirus infections from the perspective of health and life science. The purpose is to train professional human resources who can create technology, policies, medical care, etc. based on interdisciplinary evidence. However, in order to cultivate such qualities, it is necessary to acquire not only academic fields such as medicine, health sciences, pharmacy, and life sciences, but also specific knowledge about welfare, public health, multicultural coexistence, corporate management, compliance, and social contribution. In S-HIGO Internship I, based on regional and international field experiences at government agencies, companies, etc. and by acquiring the on-site information, students can acquire knowledge about problem setting, problem solving, practical ability to improve motivation for learning and research, and to foster a sense of professionalism.				
Course Learning goals(学修目標)	<p>[A level (A水準)] Students will acquire the knowledge and practical ability of welfare, public health, multicultural coexistence, knowledge of corporate management, compliance, regional and international social contribution, etc. by on-site experience of social problem solving and social contribution.</p> <p>[C level (C水準)] Students will acquire the knowledge of welfare, public health, multicultural coexistence, knowledge of corporate management, compliance, regional and international social contribution, etc. by on-site experience of social problem solving and social contribution.</p>				
Course Outline(授業の概要)	Experience-based training at governmental agencies, business enterprises, etc. that are collaborating with universities for industry-government-academia collaboration to acquire knowledge about a wide range of social issues such as health and life sciences, regional revitalization, foreign workers, disaster prevention, anti-infectious disease policy, and drug research and development. Training will be conducted mainly in Japanese and interpreted into English when necessary. Companies and organizations that accept interns are subject to change. Additions or changes of host organizations will be informed via e-mail, thus please check emails regularly.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Corporate philosophy, corporate compliance, planning, management, accounting, contribution to society, contribution to community, learning needs, career path *Details will be provided during guidance.	Visit government agencies, universities, companies, medical facilities, etc. to learn about the history, current situation, law, and efforts to address social issues covered in internships. *Details will be provided during guidance.		
Estimated out-of-class study time	This course consists of content that requires 45 hours of study. Since the class is for 30 hours, 15 hours worth of pre- and post-study (including assignments) is required to deepen the understanding of the class.				
Required Textbook(テキスト)	Not specified. Handout on the outline of internship will be distributed.				
Reading List(参考文献)	Not specified.				
Enrollment Conditions(履修条件)	Approval by faculty supervisor and S-HIGO Administrative Committee is required.				
Assessment Methods and Criteria(評価方法・基準)	Students are required to submit a report via e-portfolio or as a hard copy. Students' level of understanding in the areas specified in the course objectives will be evaluated on the basis of questions and answers during the internship, active participation in presentations and discussions, as well as their reports submitted after the internship.				
Language Used in Instruction(使用言語)	Japanese and English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目ナンバー)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-173-99-2	2024whole year	Graduate School of Medical Sciences (24800)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Internship II (S-HIGO Internship I)			TAKEO Toru, UMEDA Kahoko, DEVKOTA HARI		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……20% 2.Profound inter-disciplinary knowledge ……35% 3.Global perspective and ability to take initiative action ……15% 4.Social leadership drive ……30%					
Type of Class(授業の形態)	Other				
Teaching Method(授業の方法)	Experience-based training at governmental agencies, business enterprises, etc. that are collaborating with universities for industry-government-academia collaboration. After the on-site experience, students will be required to make presentations and perform discussions to deepen the understanding of the learning content.				
Course Goals(授業の目的)	The S-HIGO Professional Program combines research capabilities with interdisciplinary mindset and practical skills, and provides a bird's-eye view of complex social issues such as aging and the spread of new coronavirus infections from the perspective of health and life science. The purpose is to train professional human resources who can create technology, policies, medical care, etc. based on interdisciplinary evidence. However, in order to cultivate such qualities, it is necessary to acquire not only academic fields such as medicine, health sciences, pharmacy, and life sciences, but also specific knowledge about welfare, public health, multicultural coexistence, corporate management, compliance, and social contribution. In S-HIGO Internship I, based on regional and international field experiences at government agencies, companies, etc. and by acquiring the on-site information, students can acquire knowledge about problem setting, problem solving, practical ability to improve motivation for learning and research, and to foster a sense of professionalism.				
Course Learning goals(学修目標)	<p>[A level (A水準)] Students will acquire the knowledge and practical ability of welfare, public health, multicultural coexistence, knowledge of corporate management, compliance, regional and international social contribution, etc. by on-site experience of social problem solving and social contribution.</p> <p>[C level (C水準)] Students will acquire the knowledge of welfare, public health, multicultural coexistence, knowledge of corporate management, compliance, regional and international social contribution, etc. by on-site experience of social problem solving and social contribution.</p>				
Course Outline(授業の概要)	Experience-based training at governmental agencies, business enterprises, etc. that are collaborating with universities for industry-government-academia collaboration to acquire knowledge about a wide range of social issues such as health and life sciences, regional revitalization, foreign workers, disaster prevention, anti-infectious disease policy, and drug research and development. Training will be conducted mainly in Japanese and interpreted into English when necessary. Companies and organizations that accept interns are subject to change. Additions or changes of host organizations will be informed via e-mail, thus please check emails regularly.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Corporate philosophy, corporate compliance, planning, management, accounting, contribution to society, contribution to community, learning needs, career path *Details will be provided during guidance.	Visit government agencies, universities, companies, medical facilities, etc. to learn about the history, current situation, law, and efforts to address social issues covered in internships. *Details will be provided during guidance.		
Estimated out-of-class study time	This course consists of content that requires 45 hours of study. Since the class is for 30 hours, 15 hours worth of pre- and post-study (including assignments) is required to deepen the understanding of the class.				
Required Textbook(テキスト)	Not specified. Handout on the outline of internship will be distributed.				
Reading List(参考文献)	Not specified.				
Enrollment Conditions(履修条件)	Approval by faculty supervisor and S-HIGO Administrative Committee is required.				
Assessment Methods and Criteria(評価方法・基準)	Students are required to submit a report via e-portfolio or as a hard copy. Students' level of understanding in the areas specified in the course objectives will be evaluated on the basis of questions and answers during the internship, active participation in presentations and discussions, as well as their reports submitted after the internship.				
Language Used in Instruction(使用言語)	Japanese and English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目ナンバー)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-174-99-1	2024whole year	Graduate School of Medical Sciences (24770)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Leadership Training Course(Leadership training course)			MORIOKA Hiroshi, DEVKOTA HARI, MITCHELL ANDREW NEIL		
Goals with their ratio(学修成果とその割合)					
2.Profound inter-disciplinary knowledge ……20% 3.Global perspective and ability to take initiative action ……40% 4.Social leadership drive ……40%					
Type of Class(授業の形態)	Seminar				
Teaching Method(授業の方法)	Practice and small group discussions				
Course Goals(授業の目的)	Students will learn self-leadership, team-leadership, global leadership and the practical skills in business and social activities.				
Course Learning goals(学修目標)	[A level (A水準)] Students will learn self-leadership, team-leadership and global leadership through their theories and case studies. In addition, they will make and present their leadership development plan for their future actions. [C level (C水準)] Students will learn self-leadership, team-leadership and global leadership through their theories and case studies.				
Course Outline(授業の概要)	Understand the flow of leadership theory and the overall picture of leadership in a 3-day leadership program similar to that learned at MBA (business school), etc.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Leadership theory, self leadership, team leadership, global leadership	Learn about leadership theory, self leadership, team leadership, global leadership through lectures, case studies and small group discussions		
Estimated out-of-class study time	This course consists of content that requires 45 hours of study. Since the class is for 21 hours (7hour × 3 days), 24 hours worth of pre- and post-study (including assignments) is required to deepen the understanding of the class.				
Required Textbook(テキスト)	World Class Leadership (World Scientific)				
Reading List(参考文献)	Not applicable.				
Enrollment Conditions(履修条件)	Students are advised to read “World Class Leadership” beforehand.				
Assessment Methods and Criteria(評価方法・基準)	Students will be evaluated according to their activities during the three-day leadership program (50%) and reports using e-portfolio (50%).				
Language Used in Instruction(使用言語)	English				
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English				
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable				

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-175-99-2	2024whole year	Graduate School of Medical Sciences (24780)	1, 2, 3, 4	1	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Governmental and Business Seminar Series A(S-HIGO Governmental and Business Seminar)			SARUWATARI Jiyunji, UMEDA Kahoko, DEVKOTA HARI		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……20% 2.Profound inter-disciplinary knowledge ……25% 3.Global perspective and ability to take initiative action ……25% 4.Social leadership drive ……30%					
Type of Class(授業の形態)	Lecture				
Teaching Method(授業の方法)	Class discussions will be driven by questions and answers and use PowerPoint, an overhead projector etc. Students will attend the seminars and write reports. The reports should include a summary of the lectures and the students' own thoughts on the topics. In the case of Japanese lecturers the materials will be in Japanese. In the case of non-Japanese lecturers the materials will be in English.				
Course Goals(授業の目的)	<p>The S-HIGO Fellowship Program aims to develop doctoral candidates who combine advanced research skills with interdisciplinary mindset and practical skills in health and life sciences to realize diverse career paths. In the field of health and life sciences, there is a need for human resources who have a bird's-eye view of future medicine and society, and who can plan and implement strategies to address complex health issues. In order to cultivate these qualities, it is necessary to acquire a wide range of knowledge not only in the academic fields of medicine, health sciences, pharmacy, and life sciences, but also to deepen one's understanding of industry, government, and society.</p> <p>In this course, students attend seminars in which managers, researchers, and developers from domestic and foreign companies, government agencies, and universities are invited as lecturers, with the aim of acquiring perspectives from business and government, understanding their needs, becoming aware of their responsibilities to society, and cultivating qualities that will enable them to respond sensitively and help them in their career development. The following is a brief overview of the program. Students will be able to acquire the latest knowledge about solutions to various issues in health and life sciences and other fields, from individual lives to the global scale, including the current status and future prospects, how health and life sciences can be returned to society, and the career paths of lecturers, which are not covered in regular education course lectures.</p>				
Course Learning goals(学修目標)	<p>【A level (A水準)】 In addition to acquiring and applying knowledge not only in the academic fields of medicine, health, pharmacy, and life sciences, but also in welfare, public health, environmental resources, recycling society, biodiversity, environmental ethics, and other health and life science issues ranging from individual life to the global scale, the student should be able to understand industry, government, and society, and to understand their needs. Acquire and practice qualities that enable them to be aware of their responsibility to society with a strong sense of responsibility and be sensitive to the needs of society</p> <p>【C level (C水準)】 Acquire a wide range of knowledge about not only the academic fields of medicine, health science, pharmacy, and life science, but also welfare, public health, environmental resources, recycling society, biodiversity, and environmental ethics, etc., and about solving various problems in health and life science from individual life to global scale, and understand industry, government, and society and their needs strongly. Acquire the qualities to be aware of and sensitive to their responsibility to society.</p>				
Course Outline(授業の概要)	<p>Governmental Seminar Lecturers from the Kumamoto prefectural government, Kumamoto municipal government, national and other government agencies will be invited to discuss topics in medical and pharmaceutical sciences as well as medical and pharmaceutical policy, welfare, environment, public health, health risk management, environmental resources, sustainability, biodiversity, environmental ethics, etc.</p> <p>Business Seminar Lecturers invited from the companies such as following will discuss the medical and pharmaceutical sciences as they related to a diverse range of areas that span everything from corporate philosophy to compliance, corporate social responsibility, community outreach, the local economy, human resources development, internationalization, the environment, sustainability, management, public relations, and more.</p> <p>In the case of Japanese speakers, lectures will be given in Japanese, but English interpretation will be provided in such cases.</p> <p>You must attend at least 8 times for each during your enrollment in the program.</p> <p>It should be noted that, Information on holding seminar and if the companies and organizations that are in charge of the lecture has been added or changed, it will be posted on the HIGO program home page, so please check at any time (Governmental Seminar) https://higoprogram.jp/category/gyousei/ (Business Seminar) https://higoprogram.jp/category/kigyou/</p>				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Medicine, pharmacy, and public health, policy, environment, public health, environmental resources, etc., and examples of solutions to social issues. As soon as the themes are decided, they will be posted on the HIGO Program website.	<p>Introduction of the lecturer's organization and its business, examples of solutions to health or various social issues, career path of the lecturer, message to students, etc.</p> <p>As soon as concrete contents are decided, they will be posted on the HIGO Program website.</p>		
Estimated out-of-class study time	<p>Example: Lecture and seminar courses (2 credits) This course is a two-credit course, so it consists of content that requires 90 hours of study in total. Since the class consists of 2 hours x 15 periods = 30 hours of study, the remaining 60 hours of study should be done by each student according to the following: (Assignments: equivalent to 3.5 hours each time, final report: equivalent to 7.5 hours)</p> <p>Each course consists of 45 hours of required study. The class will be 16 hours worth (2h x 8 sessions), so 29 hours worth of pre- and post-learning (including assignments, etc.) will be required to deepen understanding of the course.</p>				

Required Textbook(テキスト)	None specified, but handouts outlining the seminar will be distributed.
Reading List(参考文献)	None specified.
Enrollment Conditions(履修条件)	You should participate in the seminar as long as there is no special reason. If you want to be absent a seminar for a special reason, you must submit the absence reason statement to the HIGO program office. In that case, you can see the movie of the lecture in Moodle via e-learning.
Assessment Methods and Criteria(評価方法・基準)	You must attend at least 8 seminars and submit at least two reports. The reports should be about the content of the seminar.
Language Used in Instruction(使用言語)	Japanese and English
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable

Course Coding(科目番号)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-176-99-2	2024whole year	Graduate School of Medical Sciences (24790)	1, 2, 3, 4	2	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
S-HIGO Governmental and Business Seminar Series B(S-HIGO Governmental and Business Seminar)			SARUWATARI Jiyunji, UMEDA Kahoko, DEVKOTA HARI		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……20% 2.Profound inter-disciplinary knowledge ……25% 3.Global perspective and ability to take initiative action ……25% 4.Social leadership drive ……30%					
Type of Class(授業の形態)	Lecture				
Teaching Method(授業の方法)	Class discussions will be driven by questions and answers and use PowerPoint, an overhead projector etc. Students will attend the seminars and write reports. The reports should include a summary of the lectures and the students' own thoughts on the topics. In the case of Japanese lecturers the materials will be in Japanese. In the case of non-Japanese lecturers the materials will be in English.				
Course Goals(授業の目的)	<p>The S-HIGO Fellowship Program aims to develop doctoral candidates who combine advanced research skills with interdisciplinary mindset and practical skills in health and life sciences to realize diverse career paths. In the field of health and life sciences, there is a need for human resources who have a bird's-eye view of future medicine and society, and who can plan and implement strategies to address complex health issues. In order to cultivate these qualities, it is necessary to acquire a wide range of knowledge not only in the academic fields of medicine, health sciences, pharmacy, and life sciences, but also to deepen one's understanding of industry, government, and society.</p> <p>In this course, students attend seminars in which managers, researchers, and developers from domestic and foreign companies, government agencies, and universities are invited as lecturers, with the aim of acquiring perspectives from business and government, understanding their needs, becoming aware of their responsibilities to society, and cultivating qualities that will enable them to respond sensitively and help them in their career development. The following is a brief overview of the program. Students will be able to acquire the latest knowledge about solutions to various issues in health and life sciences and other fields, from individual lives to the global scale, including the current status and future prospects, how health and life sciences can be returned to society, and the career paths of lecturers, which are not covered in regular education course lectures.</p>				
Course Learning goals(学修目標)	<p>【A level (A水準)】 In addition to acquiring and applying knowledge not only in the academic fields of medicine, health, pharmacy, and life sciences, but also in welfare, public health, environmental resources, recycling society, biodiversity, environmental ethics, and other health and life science issues ranging from individual life to the global scale, the student should be able to understand industry, government, and society, and to understand their needs. Acquire and practice qualities that enable them to be aware of their responsibility to society with a strong sense of responsibility and be sensitive to the needs of society</p> <p>【C level (C水準)】 Acquire a wide range of knowledge about not only the academic fields of medicine, health science, pharmacy, and life science, but also welfare, public health, environmental resources, recycling society, biodiversity, and environmental ethics, etc., and about solving various problems in health and life science from individual life to global scale, and understand industry, government, and society and their needs strongly. Acquire the qualities to be aware of and sensitive to their responsibility to society.</p>				
Course Outline(授業の概要)	<p>Governmental Seminar Lecturers from the Kumamoto prefectural government, Kumamoto municipal government, national and other government agencies will be invited to discuss topics in medical and pharmaceutical sciences as well as medical and pharmaceutical policy, welfare, environment, public health, health risk management, environmental resources, sustainability, biodiversity, environmental ethics, etc.</p> <p>Business Seminar Lecturers invited from the companies such as following will discuss the medical and pharmaceutical sciences as they related to a diverse range of areas that span everything from corporate philosophy to compliance, corporate social responsibility, community outreach, the local economy, human resources development, internationalization, the environment, sustainability, management, public relations, and more.</p> <p>In the case of Japanese speakers, lectures will be given in Japanese, but English interpretation will be provided in such cases.</p> <p>You must attend at least 15 times for each during your enrollment in the program.</p> <p>It should be noted that, information on holding seminar and if the companies and organizations that are in charge of the lecture has been added or changed, it will be posted on the HIGO program home page, so please check at any time (Governmental Seminar) https://higoprogram.jp/category/gyousei/ (Business Seminar) https://higoprogram.jp/category/kigyou/</p>				
Details for Individual Classes(各回の授業内容)					
No.(回数)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Medicine, pharmacy, and public health, policy, environment, public health, environmental resources, etc., and examples of solutions to social issues. As soon as the themes are decided, they will be posted on the HIGO Program website.	<p>Introduction of the lecturer's organization and its business, examples of solutions to health or various social issues, career path of the lecturer, message to students, etc.</p> <p>As soon as concrete contents are decided, they will be posted on the HIGO Program website.</p>		
Estimated out-of-class study time	<p>Example: Lecture and seminar courses (2 credits) This course is a two-credit course, so it consists of content that requires 90 hours of study in total. Since the class consists of 2 hours x 15 periods = 30 hours of study, the remaining 60 hours of study should be done by each student according to the following: (Assignments: equivalent to 3.5 hours each time, final report: equivalent to 7.5 hours)</p> <p>The course consists of 90 hours of required study. The class will be 30 hours worth (2h x 15 sessions), so 60 hours worth of pre- and post-learning (including assignments, etc.) will be required to deepen understanding of the course.</p>				

Required Textbook(テキスト)	None specified, but handouts outlining the seminar will be distributed.
Reading List(参考文献)	None specified.
Enrollment Conditions(履修条件)	You should participate in the seminar as long as there is no special reason. If you want to be absent a seminar for a special reason, you must submit the absence reason statement to the HIGO program office. In that case, you can see the movie of the lecture in Moodle via e-learning.
Assessment Methods and Criteria(評価方法・基準)	You must attend at least 15 seminars and submit at least 4 reports. The reports should be about the content of the seminar.
Language Used in Instruction(使用言語)	Japanese and English
Textbook/Material Language(教科書・資料の言語)	Combination of Japanese and English
Course Based on Practical Work Experience(実務経験を活かした授業)	Not applicable