Graduate School Bulletin

2024-2025

(Brief English version)

Translation disclaimer

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Graduate School of Medicine, Kyoto University

Kyoto University Academic Calendar 2024-2025

First (Spring) Semester	◇	April 1 to September 30
Entrance Ceremony/Guidance	◇	April 5
Foundation Day (School Holiday)	◇	June 18
Second (Fall) Semester	◇	October 1 to March 31
November Festival	◇	In late November Class cancellation（tentative）: November 20 - 22
Master's and Doctoral Degree Conferment Ceremony	◇	March 24
Graduation Ceremony for Undergraduates	◇	March 25

Contents

Grading System on Coursework for Graduate School of Medicine

The following assessment criteria is applied to evaluate students with their attendance record, class reports, statements at seminars, attitude at practices, and the results of examination.

■Grading Scale for Students enrolled at Academic Year 2015 or after

Grade	Standard		Percentage
A+	Meets the passing standard	Outstanding: High degree of academic achievement noted; exceptional performance	96 to 100
A		Excellent: High degree of academic achievement noted; superior performance	85 to 95
B		Good: High degree of academic achievement noted; good performance	75 to 84
C		Fair: Some degree of academic achievement noted	65 to 74
D		Pass: Minimum acceptable degree of academic achievement noted	60 to 64
F	Does not meet the passing standard	Fail (includes missing examination)	0 to 59

■Grading Scale for Students enrolled in Kyoto-McGill International Program in Genomic Medicine(Doctoral Program)

Grade	Standard		Percentage
A	Meets the passing standard	Outstanding: High degree of academic achievement noted; exceptional performance	85 to 100
A-		Excellent: High degree of academic achievement noted; superior performance	80 to 84
B+		Good: High degree of academic achievement noted; good performance	75 to 79
B		Fair: Some degree of academic achievement noted	70 to 74
B-		Pass: Minimum acceptable degree of academic achievement noted	65 to 69
F	Does not meet the passing standard	Fail (includes missing examination)	0 to 64

- Two-level-grade evaluation, “Pass” or “Fail”, will be applied, if it’s unable to grade in multi-level-grade evaluation.

Grade	Standard
P	Pass: Meets the passing standard
F	Fail: Does not meet the passing standard

Grading System on Dissertation/Thesis for Graduate School of Medicine

Doctoral course in Medicine
Doctoral dissertation will be examined based on its academic significance in the field, novelty and creativity. It will also be screened whether the students have planning and propulsion skills for their research, logical explanation capability for their study results, highly specialized knowledge of their field, and ethical standards.

Kyoto-McGill International Collaborative Program in Genomic Medicine (Doctoral Program)
Doctoral dissertation will be examined based on its academic significance in the field, novelty and creativity. It will also be screened whether the students have planning and propulsion skills for their research, logical explanation capability for their study results, highly specialized knowledge of their field, and ethical standards.

Master course in Medical Sciences
Master thesis will be examined based on its academic significance in the field, novelty and creativity. It will also be screened whether the students have a propulsion skill on their research and logical explanation capability for their study results, specialized knowledge of their field, and ethical standards.

Doctoral course in Medical Sciences
Doctoral dissertation will be examined based on its academic significance in the field, novelty and creativity. It will also be screened whether the students have planning and propulsion skills on their research, logical explanation capability for their study results, highly specialized knowledge of their field, and ethical standards.

Doctoral course in Public Health
Doctoral dissertation will be examined based on its academic significance in the field, novelty and creativity. It will also be screened whether the students have a self-propulsion capability for their research, logical explanation skills for their study results, highly specialized knowledge of their field, and ethical standards.

◆Medicine

- Doctoral Program

1. Graduate Program in Medicine

The medical research fields have been gone beyond the bounds of specialized fields and highly diversified. It's entered an era that needs multidisciplinary approaches. Medical researchers are expected to acquire the comprehensive medical knowledge, wide range of view and ethical standards, and develop their autonomy and uniqueness to uncover and resolve new/syncretic areas.

Therefore, the previous six departments have been amalgamated into a single entity – medicine. In addition to traditional classroom instruction and training seminars, the "Graduate Courses for Integrated Research Training" (GCIRT) was established to cover each specialized field, clinical medicine, basic medicine and social medicine to train the world's leading medical researchers/educators who can become the engines for progress in medicine and healthcare through their wide scientific knowledge and excellent research capacity.

Starting with students enrolled in AY2022, the GCIRT will introduce a Qualifying Exam (QE) and tutoring system to check the progress of graduate students' research and provide advice as necessary. The GCIRT will strengthen the system to support the improvement of the research level. In the 2nd or 3rd year of the doctoral program in Medicine, tutors will check the progress of the research at the QE and confirm and review whether the research is being conducted under an appropriate research policy and whether the research is progressing smoothly.

2. Completion Requirements

Students must satisfy the following requirements to complete the program.

(1) Must be enrolled in the Graduate Program in Medicine for four years or more

(2) Must complete at 30 credits in minimum

(3) Must receive necessary mentoring for research

(4) Must write a doctoral dissertation that is judged satisfactory and pass a final examination

Students enrolled after AY2022 must complete 30 credits as shown as below table.

<table>
<tr><th colspan="2">Course</th><th>1st year credit</th><th>2nd year credit</th><th>3rd year credit</th><th>4th year credit</th><th>Total</th><th>Remarks</th></tr>
<tr><td rowspan="3">Courses of Research Field</td><td>Lectures</td><td>4</td><td>4</td><td></td><td></td><td rowspan="3">24</td><td rowspan="3">Research work under the supervision of your Research Field (Laboratory)</td></tr>
<tr><td>Seminars</td><td>4</td><td>4</td><td></td><td></td></tr>
<tr><td>Experiments/Practices</td><td>4</td><td>4</td><td></td><td></td></tr>
<tr><td rowspan="2">Graduate Courses</td><td>Seminars</td><td colspan="4">4 (from 1st year)</td><td rowspan="2">6</td><td rowspan="2">Courses of the Graduate Courses for Integrated Research Training (GCIRT). (To take "Practices," students must complete the "Seminars" of the same course. Students can earn the credits of "Practices" after passing the QE.)</td></tr>
<tr><td>Practices</td><td colspan="4">2 (from 2nd year)</td></tr>
</table>

* Students enrolled before AY2021 can take "Seminars" and "Practices" in the same academic year.

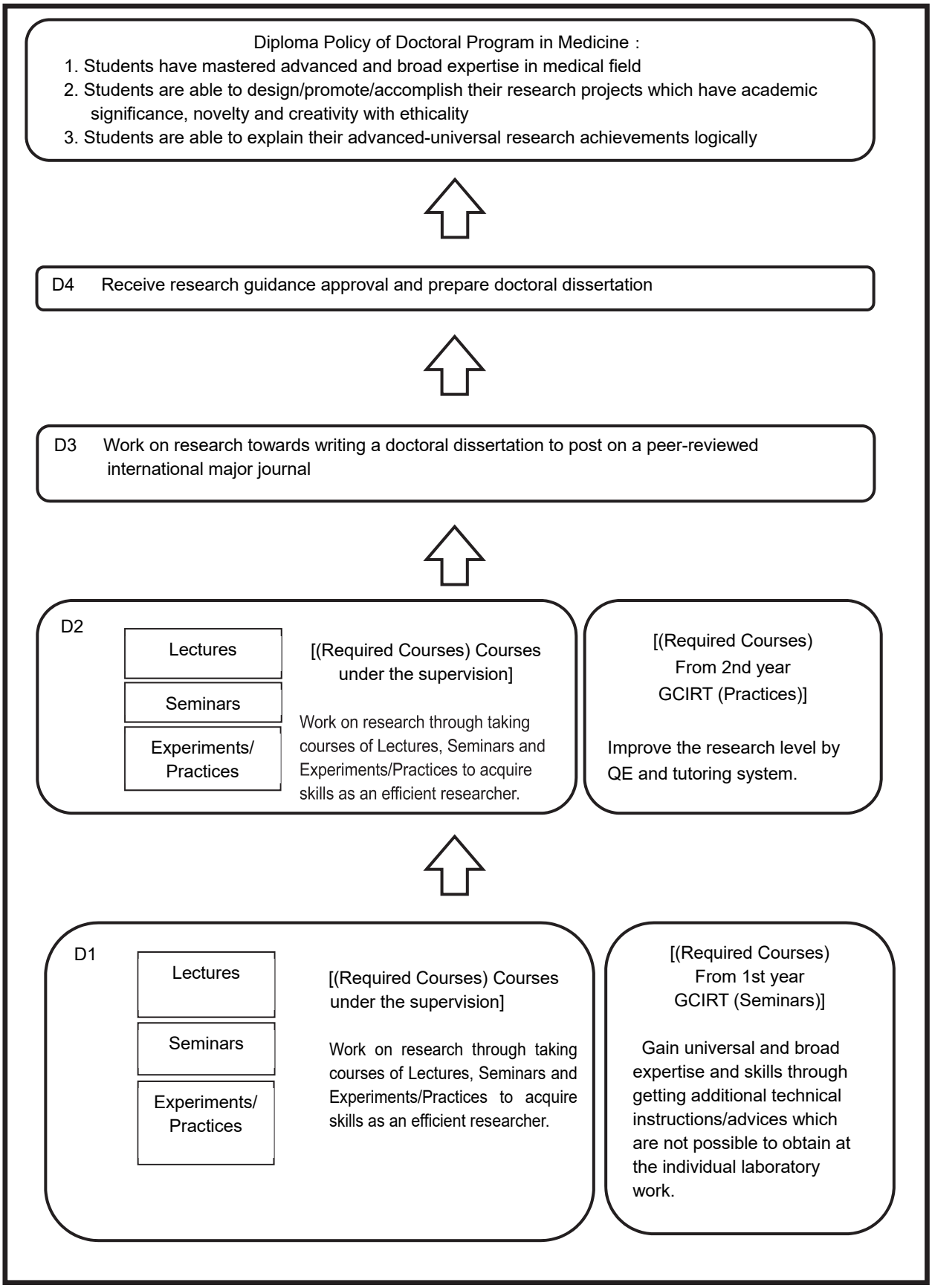
※ The maximum number of classes can be registered in one year in principal is 42 credits except for the following cases;

1) In case of students of Program for Leading Graduate School (LIMS, GSS, etc) taking the LIMS courses

2) In case of students of "Science for REdesining Science, Technology and Innovation Policy (SciREX)" taking the SciREX courses

3) In case of the students of SPH special courses/programs (MCR course, Genetic Counselor course, 1-year MPH course, Management of Technology and Intellectual program, Clinical Biostatistics course) taking the courses for those courses/programs.

3. Course Tree of Doctoral Program in Medicine



◇ Graduate Courses for Integrated Research Training (GCIRT)

1. The aim

1) In addition to traditional classroom instruction and training seminars, the Graduate Courses for Integrated Research Training (hereinafter abbreviated as GCIRT) were established to cover each specialized field, clinical, basic and social medicine. In the courses, students will learn various academic disciplines, knowledge and technical skills. The autonomy as future medical researchers is nurtured.

2) Students will choose and take one or more of the courses which relate to their theme of research. Thus students in the courses will receive a one-to-one research tutoring in specific research area and obtain wide scientific knowledge and technical skills. Therefore, introducing a new point of view and starting the new joint research projects will be considered from different perspectives.

3) GCIRT gives students the opportunity to acquire the skills that they cannot obtain in their major course to which they appertain. The courses are principally run by students. Therefore, they will make presentations and discuss their research results or progress at monthly course meetings, while receiving pertinent advice from teaching staff specialized in different areas.

4) One of the aims of the courses is to foster educators. Students are to encourage autonomy and self-study to facilitate the cultivation of highly innovative creative capacity through making programs of monthly meeting and annual retreat.

5) Students will acquire global communication skills, research/ medical ethics, intellectual property management skills, etc. by attending intensive courses in common with all courses.

6) Instructors attending the course organize the meetings for each course and will set students' objective, give the technical guidance, check attainment of goal and intensive courses, and conduct seminars.

2. Registration process

Students are free to choose courses related to their research theme in consultation with their supervisor. In principle, the course to be taken is the one most closely related to the research theme, but it is also possible to participate in activities in other courses. Students taking the GCIRT will debate actively at the course meeting with professors and students from other fields. Technical support will be given from RI Center, Animal Experiment Center, Morphological Analysis, Proteomics Analysis, Behavioral Analysis, Medical and Biological Statistics, etc. Professors of basic and clinical medicine can attend the same course with their students and they can change the course flexibly. Students will acquire global communication skills, research/medical ethics, intellectual property management skills, etc. by attending intensive courses in common with all courses.

3. Organization of the GCIRT

The aim and contents of the courses are continuously considered at the course meeting. In principle. course meetings are held once a month (about 10 times/ year) and a course retreat meeting will be held once a year in each course.

Students are to encourage autonomy and self-study to facilitate the cultivation of highly innovative creative capacity through preparation of research programs and discussion of their results. Also, the organizer meetings are set up. The GCIRT administrative office operates registration, administration, front desk of exercise, scheduling for each course meeting, orientation and publication for students, set up and run organizer's meeting.

4. Credits

Students have to obtain 4 credits (Seminars) + 2 credits (Practices), total 6 credits to complete each course. Doctoral students enrolled in the program after AY2022 take "Seminars" and "Practices" in the different academic years. Students earn the credits of "Practices" after passing the QE. The grades will be evaluated by the attendance

and presentation at the monthly meetings and the annual retreat meeting. Also, the attendance of common lectures and exercises of each course will be taken into consideration. The common lectures and practices will be informed as soon as the decision is made on the Website of the GCIRT.
(https://www.med.kyoto-u.ac.jp/grad_school/mmg/course/edcourse/)
In the near future, the doctoral dissertation examination will be examined in the course meeting that they belong.

List of courses of Graduate Courses for Integrated Research Training Academic Year 2024-2025

Code	Course	Professor / Organizer	Credit
P029000	Cell, Developmental and Systems Biology (Seminar)	Naoki WATANABE (Cell Pharmacology)	4
P030000	Cell, Developmental and Systems Biology (Practice)	Naoki WATANABE (Cell Pharmacology)	2
P005000	Immunology, Allergy and Infection(Seminar)	Osamu TAKEUCHI (Medical Chemistry)	4
P006000	Immunology, Allergy and Infection (Practice)	Osamu TAKEUCHI (Medical Chemistry)	2
P007000	Cancer (Seminar)	Seishi OGAWA (Pathology and Tumor Biology)	4
P008000	Cancer (Practice)	Seishi OGAWA (Pathology and Tumor Biology)	2
P011000	Neuroscience (Seminar)	Dai WATANABE (Biological Sciences)	4
P012000	Neuroscience (Practice)	Dai WATANABE (Biological Sciences)	2
P013000	Metabolic Syndrome, Aging and Metabolic Medicine (Seminar)	Daisuke YABE (Diabetes, Endocrinology and Nutrition)	4
P014000	Metabolic Syndrome, Aging and Metabolic Medicine (Practice)	Daisuke YABE (Diabetes, Endocrinology and Nutrition)	2
P015000	Regeneration Medicine and Organ Reconstruction (Seminar)	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)	4
P016000	Regeneration Medicine and Organ Reconstruction (Practice)	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)	2
P017000	Pathology and Pathophysiology (Seminar)	Hironori HAGA (Diagnostic Pathology)	4
P018000	Pathology and Pathophysiology (Practice)	Hironori HAGA (Diagnostic Pathology)	2
P033000	Public Health and Clinical Epidemiology Research (Seminar)	Taku IWAMI (Preventive Services)	4
P034000	Public Health and Clinical Epidemiology Research (Practice)	Taku IWAMI (Preventive Services)	2
P027000	Medical Engineering and Physics (Seminar)	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)	4
P028000	Medical Engineering and Physics (Practice)	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)	2
P035000	Digital Transformation of Healthcare (Seminar)	Tomohiro KURODA (Medical Informatics)	4
P036000	Digital Transformation of Healthcare (Practice)	Tomohiro KURODA (Medical Informatics)	2

◆Kyoto-McGill International Collaborative Program in Genomic Medicine

- Doctoral Program

1. Program Outline

The establishment of the Joint Doctoral Degree Program, herewith named the Kyoto-McGill International Collaborative Program in Genomic Medicine, aims to promote complementary educational and research programs that exploit the unique features and expertise of each university, and to thereby provide the highest possible level of education that could not be achieved by one university alone. Under the program, talented individuals will be trained who will master various analytical techniques and skills that make use of biological big data, and who will contribute to the future development of preventive medicine and to the welfare of all peoples.

2. Requirement for Course Completion

Students must satisfy the following requirements and must be enrolled in the program for four years or more to complete the doctoral program.

(1) Must complete four required courses (twelve credits) provided by Kyoto University and must complete two required course (six credits) provided by McGill University

(2) Must complete two elective courses (four credits) or more provided by Kyoto University and must complete two elective courses (six credits) or more provided by McGill University

(3) Must complete the Joint Courses worth two credits at either university

(4) Must obtain a converted overall average grade of B or higher

(5) Must receive necessary mentoring for research and must write a doctoral thesis and pass a public examination

Curriculum

- Students will spend a minimum of one year of the program period at the partner university and, in addition to completing the curriculum coursework, will conduct their research under the supervision of their academic advisors.
- In the first and second years of the program, students will take all the courses in principle.
- As early as possible in their first year, students will discuss with both their academic advisors the research theme and specific content of their doctoral thesis, draw up research plans, and begin their research project.
- In the latter part of their third year, students will, in consultation with their advisors, begin preparations for writing their doctoral thesis.

[Courses and the number of credits must to be taken] *Detailed timetable will be on the website.

	Code	Course	Semester		Credit	Contents
			1st	2nd		
	[Kyoto – McGill joint course]					
Required	S001000	Genome Analysis Using NGS and Its Applications	intensive		2	Lecture/Seminar
	[Kyoto University courses]					
Required	S002000	Genomic Medicine I	○		4	Lecture/Seminar
	S003000	Genomic Medicine II		○	4	Lecture/Seminar
	S004000	Statistical Genetics I	intensive		2	Lecture/Seminar (Not offered in 2024)
	S005000	Statistical Genetics II		intensive	2	Lecture/Seminar (Not offered in 2024)
Elective	S011000	Statistical Learning I	intensive		2	Lecture/Seminar (Not offered in 2024)
	S012000	Statistical Learning II		intensive	2	Lecture/Seminar (Not offered in 2024)
	S013000	Methods of Genome and Omics Analysis I	intensive		2	Seminar (Not offered in 2024)
	S014000	Methods of Genome and Omics Analysis II		intensive	2	Seminar (Not offered in 2024)
	[McGill University courses]					
Required		Human Genetics		Fall	3	Lecture
		PhD Senior Seminar	3rd year or more		3	Seminar
Elective		Genetics and Bioethics		Fall	3	Lecture
		Population Genetics		Winter	3	Lecture
		Beyond the Human Genome		Winter	3	Lecture
		Advances in Human Genetics 1		Fall	3	Lecture
		Research Internship		Winter	3	Lecture
		Stem Cell Biology		Fall	3	Lecture
		Lab Course in Genomics		Winter	3	Lecture/Seminar
		Statistics Concentrated in Genomic & Genomic Analysis		Fall	3	Lecture
		Inherited Cancer Syndromes		Winter	3	Lecture
		Host responses to Pathogens		Fall	3	Lecture
		Using Bioinformatics Resources		Fall	3	Lecture
		Psychiatric Genetics		Fall	3	Seminar
		Techniques in Molecular Genetics		Winter	3	Lecture/Seminar
		Topics on the Human Genome		Winter	3	Lecture
		Human Biochemical Genetics		Winter	3	Lecture

Note) Student cannot register more than 42 credits per year in Kyoto University, in principal.

3. Course Tree of Kyoto-McGill International Collaborative Program (Doctoral Program)

Diploma Policy of Doctoral Program

Upon completion of the program, students are expected to have acquired the ability to:

a) Conduct research in the field of genomic medicine, based on high levels of specialized knowledge, insights and skills, and to engage in professions and occupations that require such expertise.
b) Plan, promote and implement novel and creative research objectives to high standards of academic significance, while considering all relevant ethical issues.
c) Logically and professionally present the results of their research findings in English to high international standards.

D4 Prepare doctoral dissertation

[Required Course]

PhD Senior Seminar

D3 Start to prepare doctoral dissertation with the mentoring from two academic advisors appointed in Kyoto University and McGill University respectively.

D2 Students will spend a minimum of one year of the program period at the partner university and, in addition to completing the curriculum coursework, will conduct their research under the supervision of their academic advisors.

[Required Courses]

Kyoto – McGill joint course:
Genome Analysis Using NGS and Its Applications

Kyoto University courses:
Genomic Medicine I・II
Statistical Genetics I・II

McGill University course:
Human Genetics

[Elective Courses]

Students are expected
Those courses provided by Kyoto University and McGill University are expected to be completed in the 1st and 2nd year of the doctoral program

D1 As early as possible in their first year, students will discuss with both their academic advisors the research theme and specific content of their doctoral thesis, draw up research plans, and begin their research project.

◆Medical Sciences

- Master's Program
- Doctoral Program

1. Graduate Program in Medical Sciences

Recent developments in the life sciences have led to tremendous revolutions in the environment surrounding medicine and medical treatment, with the contents of education and research in the medical fields also growing more complex and advanced. In particular, in addition to traditional medical education and research, which places an emphasis upon training physicians and doing basic medical research, current issues now include how to accurately process the vast amounts of information obtained in conjunction with dramatic developments in the life sciences, as well as how to put this information to full use in actual medical practice. Furthermore, in medical practice settings, not only is the raising of patients' awareness called for, but accurate diagnoses using advanced equipment are also required, with the research and development of these diagnostic skills and medical devices progressing on a daily basis. Among this set of scenarios, there are increasing expectations placed upon these medical advancements towards delaying the arrival of an elderly society.

The overarching mission with which universities, standing at the locus of research and education, have been entrusted is to cultivate researchers and educators capable of creating and maintaining syncretic areas that go beyond the bounds of traditional medical frameworks.

The programs offers students with a background in sciences or engineering an education in medical knowledge from a new perspective unlike the conventional approach in order to train new researchers and educators in medical sciences, where they can combine their specialist knowledge and skills to further transcend existing frameworks in medical sciences as we strive to live up to the social demands placed upon us towards the medical arts, and to fulfill our mission.

2. Educational Structure of Master's Program

Students in the Master's Program will obtain the basic medical knowledge through training.

Students must satisfy the following requirements to complete the program.

1. Must be enrolled in the Graduate Program for two years or more
2. Must complete 30 credits in minimum
3. Must receive necessary mentoring for research
4. Must write a master's thesis that is judged satisfactory and pass the final examination

[Courses and the Number of Credits to be Taken]

*Detailed course schedule will be posted on the website and class room (Only in Japanese).
URL: https://www.med.kyoto-u.ac.jp/for_students/affairs_m/class/

	Code	Title	Semester		Credit	Remarks
			1st	2nd		
Required	E001000	Medical English		○	2	
	-	Seminars on Research Field I	1st year		5	Seminar under the supervision of your Research Field
	-	Seminars on Research Field II	2nd year		5	Seminar under the supervision of your Research Field
Required*	[Refer to other table]	Graduate Courses for Integrated Research Training (GCIRT) for Master's Program: Seminars	Full-year		4	*Chose one from 10 Graduate Courses for Master's: Seminars
	[Refer to other table]	Graduate Courses for Integrated Research Training (GCIRT) for Master's Program: Practices	Full-year		2	*Chose one from 10 Graduate Courses for Master's: Practices
Elective	E060000	Essential Anatomy	○		2	Offered from 2nd Year Undergraduate Human Health Sciences' program
	E061000	Essential Physiology I	○		2	Offered from 2nd Year Undergraduate Human Health Sciences' program
	E062000	Essential Physiology II	○		2	Offered from 2nd Year Undergraduate Human Health Sciences' program
	E064000	Essential General Pathology	○		2	Offered from 2nd Year Undergraduate Human Health Sciences' program
	E003000	Histology		Fall	2	B4a Histology from 2nd Year Undergraduate Program in Medicine
	E004000	Embryology and Developmental Biology		Fall	2	B3 Embryology and Developmental Biology from 2nd Year Undergraduate Program in Medicine
	E006000	Physiology I		Fall	2	B5a Physiology from 2nd Year Undergraduate Program in Medicine
	E007000	Physiology II		Fall	4	
	E027000	Neuroscience		Fall	6	B6a Neuroscience from 2nd Year Undergraduate Program in Medicine
	E036000	Brain Dissection Training		Fall	1	B6b Brain Dissection from 2nd Year Undergraduate Program in Medicine
	E010000	Microbiology I		Winter	2	B7a Microbiology Lecture from 2nd Year Undergraduate Program in Medicine
	E011000	Microbiology II		Winter	4	
	E009000	Immunology	Spring		4	B8 Immunology from 3rd Year Undergraduate Program in Medicine
	E012000	General Pathology II	Spring		4	B9 General Pathology from 3rd Year Undergraduate Program in Medicine
	E015000	Pharmacology I	Spring		2	B11a Pharmacology and its Practice from 3rd Year

E016000	Pharmacology II	Spring		4	Undergraduate Program in Medicine
E013000	Legal Medicine I	Sprig		2	B12a Legal Medicine from 3rd Year Undergraduate Program in Medicine
E014000	Legal Medicine II	Spring		4	
E031000	Medical Genetics	Spring		2	C13 from 4th Year Undergraduate Program in Medicine
E021000	Social, Environmental and Preventive Medicine	Spring		2	B13 from 4th Year Undergraduate Program in Medicine
M046000	Medical Engineering for Society		Intensive	2	Offered from LIMS See 5) below
E037000	Introduction to Drug Discovery and Development	Full-Year (Irregular)		2	
E035000	Genome Informatics		◯	2	
E065000	Practicum on Medical Research	Full-year		2	Practice to obtain knowledge and skills for operating laboratory devices
E033000	Clinical Demonstration			2	Observation of Clinical research at the University Hospital: TBD in 2023
E029000	Fundamentals of Biostatistics	◯		2	Fundamentals of Biostatistics from Program on Public Health
E030000	Introduction to Statistical Computing and Data Management	◯		2	Introduction to Statistical Computing and Data Management from Program on Public Health
M050M01	Legal system in medical information		◯	2	See 5) below
M051000	Medical informatics practice		◯	2	See 5) below
Z203000	Global health		◯	2	Courses in English
E068000	Translational & Clinical Research Management	Intensive		2	Institute for Advancement pf Clinical and Translational Science (iACT)
[Refer to other table]	Courses in English provided by Liberal Arts and General Education	◯	◯		See the table below

1) The requirements for course completion shall be attainment of 30 credits in total, 18 credits in required subjects and more than 12 credits in elective subjects.

2) Students can also take courses from “Management of Technology and Intellectual Property Program” which are required courses from Professional Degree Program in Public Health, or from “The Graduate Courses for Integrated Research Training” as elective courses. In case that students taking the WISE program (Doctoral Program for World-leading Innovative & Smart Education) earn the credits of “Frontier type Human Resource Development in Medical Science” or “Healthcare Innovation Design Entrepreneurship Program”, these credits can be taken as elective courses. Also some courses which provided from “Training Program of Leaders for Integrated Medical System (LIMS)” can be taken for credits of elective courses. (Maximum 4 credits) In that case, students must consult their supervisor and LIMS office to apply, and submit the application form prior to registration period.

3) In principle students cannot take more than 42 credits a year except for the cases listed as following;

(1) Taking the “Leading Program(s)” courses as a program student.

(2) Taking the “Program for Education and Research on Science and Technology in Public Sphere” courses as a program student.

(3) Taking the courses on “Special Programs on Public Health” courses as a program student.

4) Note that some courses of “Liberal Arts and General Education” have restriction of student numbers. Some courses have multiple schedules but only one course can be registered.

5) Medical Engineering for Society, Legal system in medical information, and Medical informatics practice are offered by the Graduate course in Human Health Sciences. The students who wish to take these courses need to

submit "Auditing Request Form" to register. The credits earned from these courses will be recognized as Elective courses.

6) Although the students pass the same course two or more times, only the credits they got first are recognized as the credits required for graduation.

[Courses in English provided by Liberal Arts and General Education]

The courses below are undergraduate elective courses. The course details and schedule must be confirmed with the Syllabus of “Liberal Arts and General Education” on KULASIS.

Course Code	Course title	First semester	Second semester	Number of credits	Day/ period
	Principles of Genetics-E2	○		2	Tue. / 2
	Introduction to Molecular Biotechnology-E2	○		2	Tue. / 3
	Introduction to Biochemistry-E2		○	2	Tue. / 2 or 3
	Introduction to Behavioral Neuroscience A-E2	○		2	Fri./ 5
	Introductory Statistics-E2	○		2	Fri./ 3
	Introduction to Behavioral Neuroscience B-E2		○	2	Fri. / 5
	Introduction to Medical Psychology-E2		○	2	Fri. / 4
	Nutrition and Health-E2		○	2	TBD
	Biology and sociology of chronic diseases-E2	○		2	TBD

3. Graduate Courses for Integrated Research Training (GCIRT) for Master's Program

(1) The aim

1) The Graduate Courses for Integrated Research Training (hereinafter abbreviated as GCIRT) for Master's Program were established to cover each specialized field, clinical, basic and public health and human health science. In the courses, students will learn various academic disciplines, knowledge and technical skills.

2) Students will choose and take one course which relate to their theme of research. Thus students in the courses will receive a one-to-one research tutoring in specific research area and obtain wide scientific knowledge and technical skills. Therefore, introducing a new point of view and starting the new joint research projects will be considered from different perspectives.

3) GCIRT gives students the opportunity to acquire the skills that they cannot obtain in their major course to which they appertain. The courses are principally run by students. Therefore, they will make presentations and discuss their research results or progress at monthly course meetings, while receiving pertinent advice from teaching staff specialized in different areas.

4) One of the aims of the courses is to foster educators. Students are to encourage autonomy and self-study to facilitate the cultivation of highly innovative creative capacity through making programs of monthly meeting and annual retreat.

5) Students will acquire global communication skills, research/ medical ethics, intellectual property management skills, etc. by attending intensive courses in common with all courses.

6) Instructors attending the course organize the meetings for each course and will set students' objective, give the technical guidance, check attainment of goal and intensive courses, and conduct seminars.

(2) Registration process

Students are free to choose courses related to their research theme in consultation with their supervisor. In principle, the course to be taken is the one most closely related to the research theme, but it is also possible to participate in activities in other courses. Students taking the GCIRT will debate actively at the course meeting with professors and students from other fields. Technical support will be given from RI Center, Animal Experiment Center, Morphological Analysis, Proteomics Analysis, Behavioral Analysis, Medical and Biological Statistics, etc. Professors of basic and clinical medicine can attend the same course with their students and they can change the course flexibly. Students will acquire global communication skills, research/medical ethics, intellectual property management skills, etc. by attending intensive courses in common with all courses.

The GCIRT administrative office operates registration and administration. In principle, course meetings are held once a month (about 10 times/ year) and a course retreat meeting will be held once a year in each course. Students are to encourage autonomy and self-study to facilitate the cultivation of highly innovative creative capacity through preparation of research programs and discussion of their results.

(3) Credits

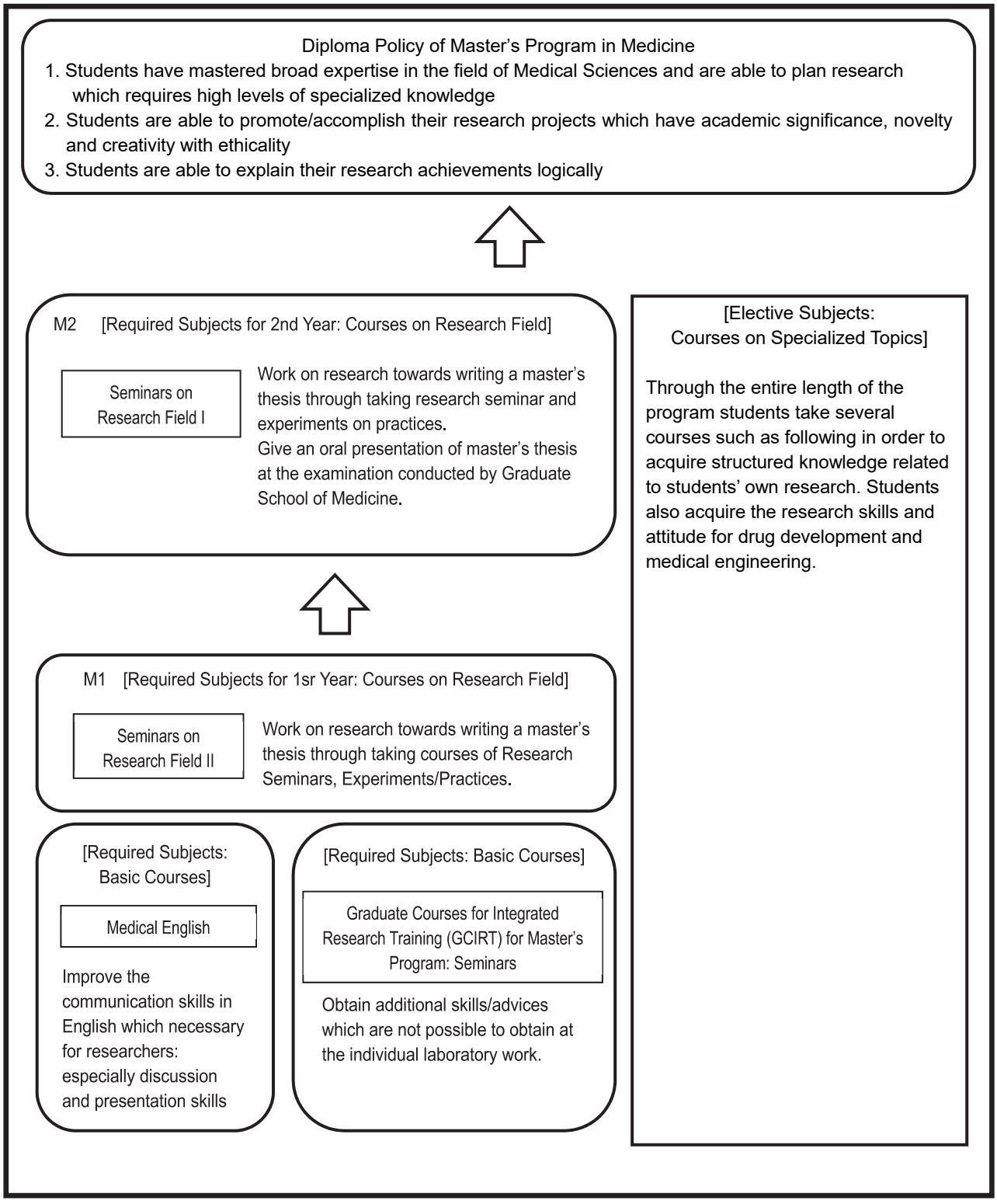
Students have to obtain 4 credits (Seminars) + 2 credits (Practices), total 6 credits to complete each course. The grades will be evaluated by the attendance and presentation at the monthly meetings and the annual retreat meeting. Also, the attendance of common lectures and exercises of each course will be taken into consideration. The common lectures and practices will be informed as soon as the decision is made on the Website of the GCIRT. (https://www.med.kyoto-u.ac.jp/grad_school/mmg/course/edcourse/)

List of courses of GCIRT for Master's Program Academic Year 2024-2025

Code	Course	Professor / Organizer	Credit	Language
E054000	Cell, Developmental and Systems Biology (Seminar)	Naoki WATANABE (Cell Pharmacology)	4	English
E055000	Cell, Developmental and Systems Biology (Practice)	Naoki WATANABE (Cell Pharmacology)	2	English
E038000	Immunology, Allergy and Infection(Seminar)	Osamu TAKEUCHI (Medical Chemistry)	4	English
E039000	Immunology, Allergy and Infection (Practice)	Osamu TAKEUCHI (Medical Chemistry)	2	English
E040000	Cancer (Seminar)	Seishi OGAWA (Pathology and Tumor Biology)	4	English
E041000	Cancer (Practice)	Seishi OGAWA (Pathology and Tumor Biology)	2	English
E042000	Neuroscience (Seminar)	Dai WATANABE (Biological Sciences)	4	English
E043000	Neuroscience (Practice)	Dai WATANABE (Biological Sciences)	2	English
E044000	Metabolic Syndrome, Aging and Metabolic Medicine (Seminar)	Daisuke YABE (Diabetes, Endocrinology and Nutrition)	4	English
E045000	Metabolic Syndrome, Aging and Metabolic Medicine (Practice)	Daisuke YABE (Diabetes, Endocrinology and Nutrition)	2	English
E046000	Regeneration Medicine and Organ Reconstruction (Seminar)	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)	4	English
E047000	Regeneration Medicine and Organ Reconstruction (Practice)	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)	2	English
E052000	Medical Engineering and Physics (Seminar)	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)	4	Japanese
E053000	Medical Engineering and Physics (Practice)	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)	2	Japanese
E069000	Digital Transformation of Healthcare (Seminar)	Tomohiro KURODA (Medical Informatics)	4	Japanese
E070000	Digital Transformation of Healthcare (Practice)	Tomohiro KURODA (Medical Informatics)	2	Japanese
M052002	Rehabilitation Medicine * (Seminar)	Tomoki AOYAMA (Motor Function Analysis)	4	Japanese
M053002	Rehabilitation Medicine * (Practice)	Tomoki AOYAMA (Motor Function Analysis)	2	Japanese
M052003	Artificial Intelligence in Medicine * (Seminar)	Yasushi OKUNO (Department of Biomedical Data Intelligence)	4	Japanese
M053003	Artificial Intelligence in Medicine * (Practice)	Yasushi OKUNO (Department of Biomedical Data Intelligence)	2	Japanese
M052001	Caring Sciences * (Seminar)	Ayae KINOSHITA (Home health care and dementia research)	4	Japanese
M052001	Caring Sciences* (Practice)	Ayae KINOSHITA (Home health care and dementia research)	2	Japanese

* Courses conducted by Human Health Sciences of Graduate Course.

4. Course Tree of Master's Program



5. Doctoral Program

Those who obtained basic medical knowledge through training Master's Programs and who studied relevant field of Biology, mathematics, physics, chemistry, and information science, etc. at faculty and experienced and cope with complicated and wide variety of pathological conditions will educate and cultivate researchers and educators capable of creating and maintaining syncretic areas.

Students must satisfy the following requirements to complete the program.

1. Must be enrolled in the Graduate Program for three years or more
2. Must complete 13 credits in minimum (7 in Major Subjects and 6 in courses from Graduate Courses for Integrated Research Training)
3. Must receive necessary mentoring for research
4. Must write a dissertation that is judged satisfactory and pass an examination

Starting with students enrolled in AY2022, the GCIRT will introduce a Qualifying Exam (QE) and tutoring system to check the progress of graduate students' research and provide advice as necessary. The GCIRT will strengthen the system to support the improvement of the research level. In the 2nd or 3rd year of the doctoral program in Medicine, tutors will check the progress of the research at the QE and confirm and review whether the research is being conducted under an appropriate research policy and whether the research is progressing smoothly.

[Courses and the number of credits to be taken]

	Code	Course	Credit	Supervisor
Major Subject (Required)		Lectures	2	Supervisor from your Research Field
		Seminars	2	Supervisor from your Research Field
		Practices	3	Supervisor from your Research Field
Graduate Courses for Integrated Research Training (GCIRT) (Elective mandatory)	P029000	Cell, Developmental and Systems Biology (Seminar)	4	Naoki WATANABE (Cell Pharmacology)
	P030000	Cell, Developmental and Systems Biology (Practice)	2	Naoki WATANABE (Cell Pharmacology)
	P005000	Immunology, Allergy and Infection(Seminar)	4	Osamu TAKEUCHI (Medical Chemistry)Koichi IKUTA (Biological Protection)
	P006000	Immunology, Allergy and Infection (Practice)	2	Osamu TAKEUCHI (Medical Chemistry)Koichi IKUTA (Biological Protection)
	P007000	Cancer (Seminar)	4	Seishi OGAWA (Pathology and Tumor Biology)
	P008000	Cancer (Practice)	2	Seishi OGAWA (Pathology and Tumor Biology)
	P011000	Neuroscience (Seminar)	4	Dai WATANABE (Biological Sciences)
	P012000	Neuroscience (Practice)	2	Dai WATANABE (Biological Sciences)
	P013000	Metabolic Syndrome, Aging and Metabolic Medicine (Seminar)	4	Daisuke YABE (Diabetes, Endocrinology and Nutrition)
	P014000	Metabolic Syndrome, Aging and Metabolic Medicine (Practice)	2	Daisuke YABE (Diabetes, Endocrinology and Nutrition)
	P015000	Regeneration Medicine and Organ Reconstruction (Seminar)	4	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)
	P016000	Regeneration Medicine and Organ Reconstruction (Practice)	2	Kenji OSAFUNE (Laboratory of Translational Regenerative Medicine)
	P017000	Pathology and Pathophysiology (Seminar)	4	Hironori HAGA (Diagnostic Pathology)
	P018000	Pathology and Pathophysiology (Practice)	2	Hironori HAGA (Diagnostic Pathology)
	P033000	Public Health and Clinical Epidemiology Research (Seminar)	4	Taku IWAMI (Preventive Services)
	P034000	Public Health and Clinical Epidemiology Research (Practice)	2	Taku IWAMI (Preventive Services)

	P027000	Medical Engineering and Physics (Seminar)	4	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)
	P028000	Medical Engineering and Physics (Practice)	2	Yuji NAKAMOTO (Diagnostic Imaging and Nuclear Medicine)
	P035000	Digital Transformation of Healthcare (Seminar)	4	Tomohiro KURODA (Medical Informatics)
	P036000	Digital Transformation of Healthcare (Practice)	2	Tomohiro KURODA (Medical Informatics)

※The requirements for the course completion of the Doctoral Program shall be attainment of 7 credits in Major subject (Required: Lectures, Seminars, Practices provided by your Research Field) Students enrolled after AY2022 must complete more than 6 credits of "Seminars" and "Practices." To take "Practices," students must take "Seminars" of the same course and students can earn its credits after passing the QE.

Students (who graduated undergraduate program from other than medical schools and have completed the Master's Program other than Medical Sciences in Graduate School of Medicine, Kyoto University) are offered an opportunity to establish foundations in medical research as needed in their first-year if necessary.

Also, students are trained their basic skills as a researcher through lectures, seminars and practices and trained to write a dissertation to publish one or more original papers in English in an international journal, as the first author, by the day of their completion as their aim.

※In principle students cannot take more than 42 credits a year except for the cases listed as following;

(1) Taking the "Leading Program(s)" courses as a program student.

(2) Taking the "Program for Education and Research on Science and Technology in Public Sphere"

(3) Taking the "Program for Education and Research on Science and Technology in Public Sphere" courses as a program student.

6. Course Tree of Doctoral Program

Diploma Policy of Doctoral Program in Medicine

1. Students have mastered advanced and broad expertise in the field of Medical Sciences
2. Students are able to design/promote/accomplish their research projects which have academic significance, novelty and creativity with ethicality
3. Students are able to explain their advanced-universal research achievements logically

D3 Receive research guidance approval and prepare doctoral dissertation

D2 Work on research towards writing a doctoral dissertation to post on a peer-reviewed international major journal

[(Required Courses) GCIRT (Practices)]

Improve the research level by QE and tutoring system. (For students enrolled after AY2022.)

D1 [(Required Courses) Courses under the supervision]

Lectures

Seminars

Practices

Work on research towards writing a doctoral dissertation to post on a peer-reviewed international major journal through taking courses of Lectures, Seminars and Experiments/Practices to acquire skills as an efficient researcher during Latter Doctoral Program.
Also give an excellent oral presentation of doctoral dissertation at the public review of dissertation examination conducted by Graduate School of Medicine to show their ability as a Doctor of Medical Science.

[(Required Courses) GCIRT (Seminars)]

Gain universal and broad expertise and skills through getting additional technical instructions/advices which are not possible to obtain at the individual laboratory work.

◆Reference for Procedures

1. Tuition

(1) Payment Period of Tuition

Payment should be made by the end of May for the first semester (April to September) and by the end of November for the second semester (October to March). Deadline date is stated on Money Transfer Request Form issued by Finance Department. (In case of “direct debit” though your bank account, the payment will be made designated date in the each semester.)

(2) Tuition Exemption/Deferment

For those who experiencing financial difficulty will be examined to determine whether tuition fee exemption or deferment criteria apply for each semester. The deadline of applying for the exemption/deferment to the office will be posted on the bulletin board.

(3) In case of leave of absence

If students take a leave of absence from the beginning of the semester (whole semester leave), the tuition for that semester is not charged. However, if students take a leave in the middle of the semester after the due date of the payment, the tuition fee of that semester will be charged.

(4) In case of delinquency in tuition payment

Those who have not paid their tuition for two semesters will be expelled from the school.

* Above rule shall apply to the cases that the delinquency has started from April 1st, 2017, and the cases that the delinquency has started before March 31st, 2017 shall follow the previous rule.

2. Student ID card

(1) Students must carry his/her Student Identification Card at all times.

(2) Reissuance fee (¥1,000) will be charged when your ID card has been lost, theft or damaged. Please purchase “Certificate of Payment of Student ID Reissuance Fee” (Japanese only) at Kyoto University Co-op shop and attached it to the Student ID reissuance request form to submit to the Office of Student Affairs. A new ID card will be reissued on or after seven days from the application date.

3. Leave of absence

In the cases of illness and other reasons, students who have requested a leave for more than three months may obtain a leave of absence from the University with the permission of the Dean of the Graduate School concerned.

(1) The period of leave of absence shall not be counted in the terms of study necessary for graduation.

(2) The term of leave of absence from the University in Master’s, Professional degree, and Doctoral program must not exceed three years in all.

(3) Refer to “1. (3) In case of leave of absence” stated above regarding the handling of tuition. When applying for a leave of absence, a student must submit a “Request for Leave of Absence” to the Office of Student Affairs by the middle of the previous month of the beginning of leave of absence. (The application must be in by March 15, if the students wish to take a leave of absence from April 1, and the application must be in by September 15, if the students wish to take a leave of absence from October 1.) Tuition may be charged for the late application.

(4) If students wish to reenter the University before their leave of absence period expired, they must submit “Request for Cancellation of Leave of Absence”. When students reenter the University in the middle of a semester, the tuition fee will be charged by the month.

(5) During a leave of absence period from the University, students cannot complete credits of courses which offered in the semester (if they’re full year courses, students cannot complete whole credits).

(6) If students take a leave of absence in the middle of the semester, calculation of its periods and terms of residence will be complicated. As a general rule, the leave of absence period shall be the end of the semester, March 31 or September 30, unless the circumstances are exceptional.

4. Withdrawal

Students withdrawing from the University must obtain the permission of the Dean of the Graduate School concerned.

(1) Tuition for the semester will be charged in the case of withdrawal. When applying the withdrawal, students must submit “Request for Withdrawal” to the Student Affairs Office by two weeks before preferred date of withdrawal. (If the preferred date of the withdrawal is March 31, submit the application by around March 15. If the preferred date of the withdrawal is September 30, submit the application by around September 15). Tuition for the next semester may be charged because of the late application. If students take a leave of absence from the middle of the semester, communicate to the Office of Student Affairs by the beginning of April or October (before the designated payment date).

(2) If students’ leave of absence is admitted until the end of the semester, students on leave of absence can withdraw. However, if students’ leave of absence admitted until the middle of the semester, students must pay tuition fees for the whole semester to withdraw.

(3) The former students must return their student ID card to the Office of Student Affairs.

1. The University will accept withdrawal requests from students who have not fully paid their tuition fees (except from those studying to complete a doctoral program with no degree yet awarded).
2. Credits earned by withdrawing students, during a period in which they did not fully pay their tuition, will not be certified. However, if such tuition is paid at a later date, certification will be granted.

Please note that even after a request for withdrawal has been accepted by the University, students will continue to be responsible for the payment of any outstanding tuition fees.

For graduation and withdraw with research guidance approval, students must pay tuition fee completely.

5. Completion of Programs

Procedures for completion differ depending on programs. Refer to the following website.

https://www.med.kyoto-u.ac.jp/grad_school/mmg/degree_application/

6. Issuance of Certificates

Certificates below are issued by the automatic certificate issuing machines in front of the Office of Student Affairs of Graduate School of Medicine and other faculties.

(1) Certificate of Current Enrollment (Japanese/English)
(2) JR Student discount (Japanese only)
(3) Commuter Certification (Japanese only)
(4) Transcript (Japanese only, English one will be issued in 4- 5days on request at the reception)
(5) Certificate of Scheduled Completion (only for the final year of Master’s and Professional degree)
(6) Others

If you need the other certifications, please fill out the “Certificate Request Form” and submit it to the Office of Student Affairs. It will take two to three days to issue Japanese certifications and about a week for English certifications. (except for weekends, holidays, year-end and New Year holidays and school holidays)

7. Notification of Change of Address/Telephone Number

In the case of contact address/telephone number change, students must register new contact information on KULASIS and report it to the faculty or secretary of the field to which they appertain immediately. In case of change of home address, please submit the photocopy of your residence card to the office of student affairs after the registration of your new address at the immigration office, too.

8. Notification of Overseas Travel

When students traveling overseas, notwithstanding the aim of traveling or its length, submit ”Notification of Overseas Travel” to the Office of Student Affairs in advance.

9. Mandatory Annual Health Checkup

All students must have Kyoto University's annual health checkup offered by university health officials in April. Without this checkup, students cannot take regular exams or receive university health certificates that may be required for scholarship applications, TA, and RA, etc. The schedule is posted on bulletin boards at faculty/graduate school offices.

10. Inquiry on Grading

If you have any questions regarding the grading, please inquire at the Office of Student Affairs. If necessary, your supervisor may be deal with it.

[Procedures/ General Inquiries]
Applications (Japanese only) for 3, 4 and 7 are downloaded from the website below.
Graduate School of Medicine (URL: https://www.med.kyoto-u.ac.jp/for_students/affairs_m/notification/)

General inquiries to;
Graduate School of Medicine, Kyoto University
General Affairs/Student Affairs Office (Office of Student Affairs)
1st floor, Building C / 1st floor of Administration Building, Faculty of Medicine Campus
TEL：+81-75-753-4306　FAX：+81-75-753-4405 Email: Kyoumu-in@mail2.adm.kyoto-u.ac.jp

◆Handling of Personal Information at the Graduate School of Medicine

Students' personal information including an academic performance in the Student Affairs Office, Graduate School of Medicine will be handled in accordance with "the Act on the Protection of Personal Information held by Independent Administrative Agencies" and "the Regulations on the Protection of Personal Information at Kyoto University".
It will also be used for (1) student affairs such as registry management, the guidance they received (2) student support such as health care, employment support, tuition exemption, applying for scholarship (3) operation on class fee collection (4) statistical researches, etc.

◆Class cancellation and deferral policy of Graduate School of Medicine

If the weather warning is in effect, or in case of an interruption of the public transport, the classes and examinations of Graduate School (Programs in Medicine, Kyoto-McGill International Collaborative Program in Genomic Medicine, Medical Sciences and Public Health) shall be addressed as flowing for students' safety.

1. Cancellation of classes, deferral of the examinations
   ① Classes shall be cancelled or examinations shall be deferred, in case of the following (1) or (2) situation.
      (1) In case of and Emergency Warning (Tokubetsu-Keiho) or Storm Warning (Boufu-Keiho) in Kyoto City, or the areas including Kyoto City. Or in the situation of (a) or (b) below.
         (a) Full-are service interruption of Kyoto City Bus
         (b) Full or partial service interruption of 3 of the following train lines.
            - JR-West (conventional railway lines via Kyoto station)
            - Hankyu Railway (the line between Kawaramachi station and Umeda station)
            - Keihan Electric Railway (the line between Demachiyanagi station and Yodoyabashi station)
            - Kintetsu Railway (the line between Kyoto station and Yamato-Saidaiji station)
      (2) A case by the decision of the dean
   ② If case (1) or (2) above has caused in the middle of classes or examinations, classes shall be cancelled or examinations shall be deferred.

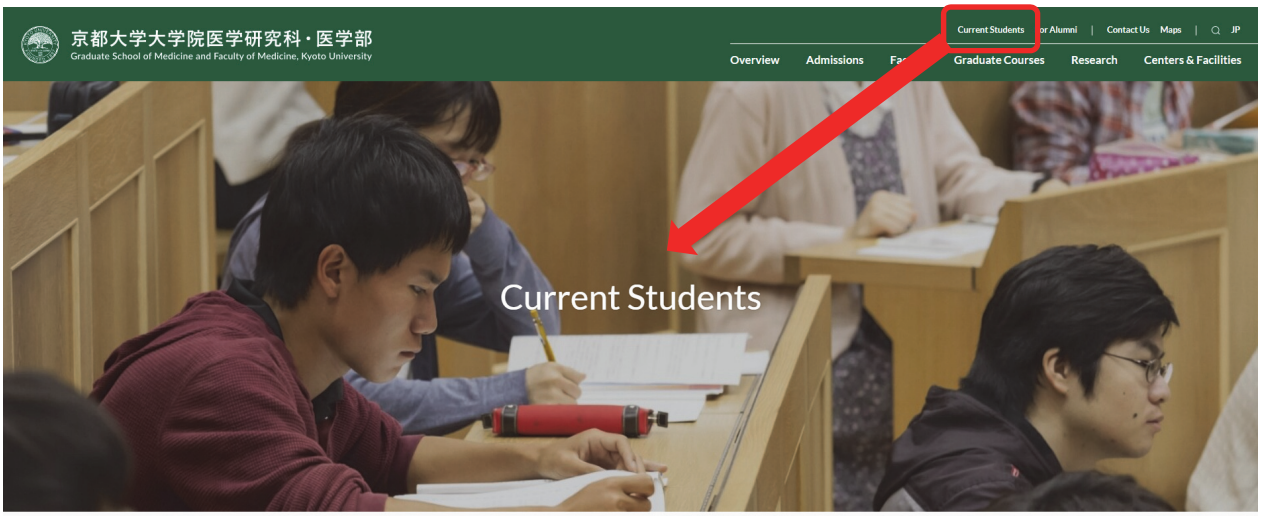
2. Provision of classes or examinations by removal of Emergency Warning/Storm Warning or resumption of public transport service
   In case of the removal of the Emergency Warning/Storm Warning, or resumption of public transport service, the class/examination shall be provided in the following conditions.
   ① Warning removal or resumption of public transport service by 6:30am, the class shall be provided from the 1st period (8:45-10:15)
   ② Warning removal or resumption of public transport service by 10:30am, the class shall be provided from the 3rd period (13:00-14:30)
   ③ Warning removal or resumption of public transport service by 15:00pm, the class shall be provided from the 5th period (16:30-18:00)

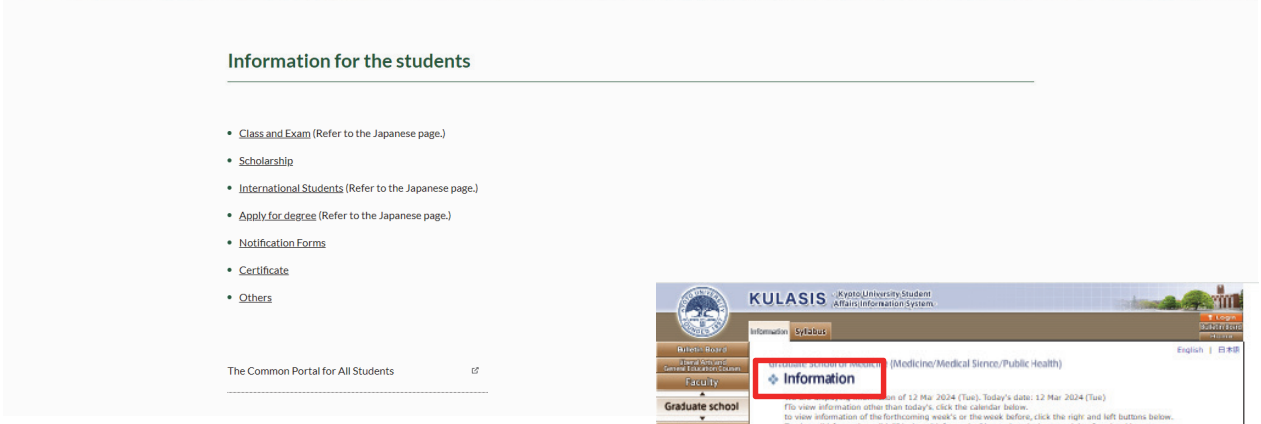
3. How to confirm/announce the status of Emergency Warning/Storm Warning or public transportation service
   ① The status of Emergency Warning/Storm Warning or public transportation service can be confirmed by news on public broadcast such as TV or radio.
   ② The changes on the situation of above notifications after the 1st period (8:45-10:15), the announcement will be posted in the campus.

◆Website of the Graduate School of Medicine (http://www.med.kyoto-u.ac.jp/)

Refer to the Website of Graduate School of Medicine regarding classes, scholarship, format of documents, and procedures for Degree Application, etc. Some information is only on the Japanese page, so please confirm the both following as appropriate.

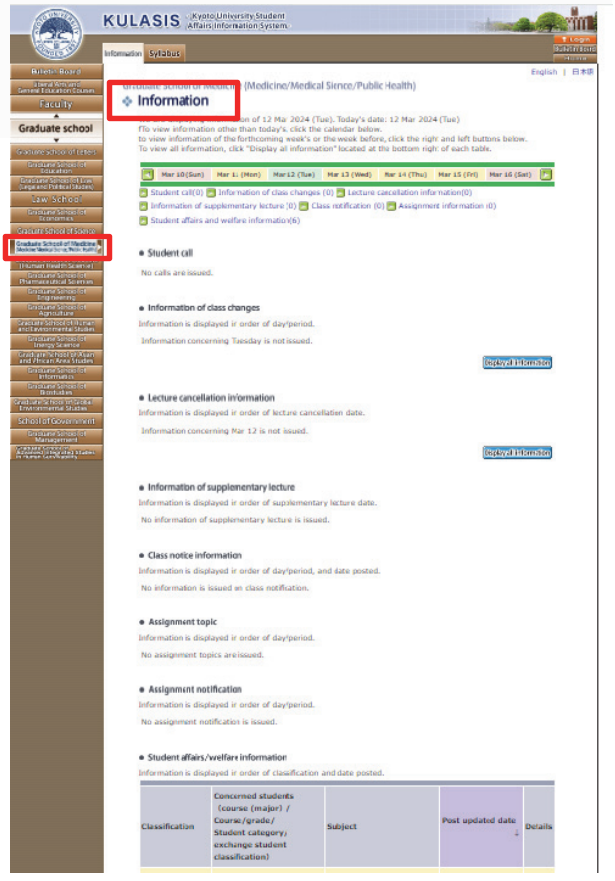
[English Page] https://www.med.kyoto-u.ac.jp/en/



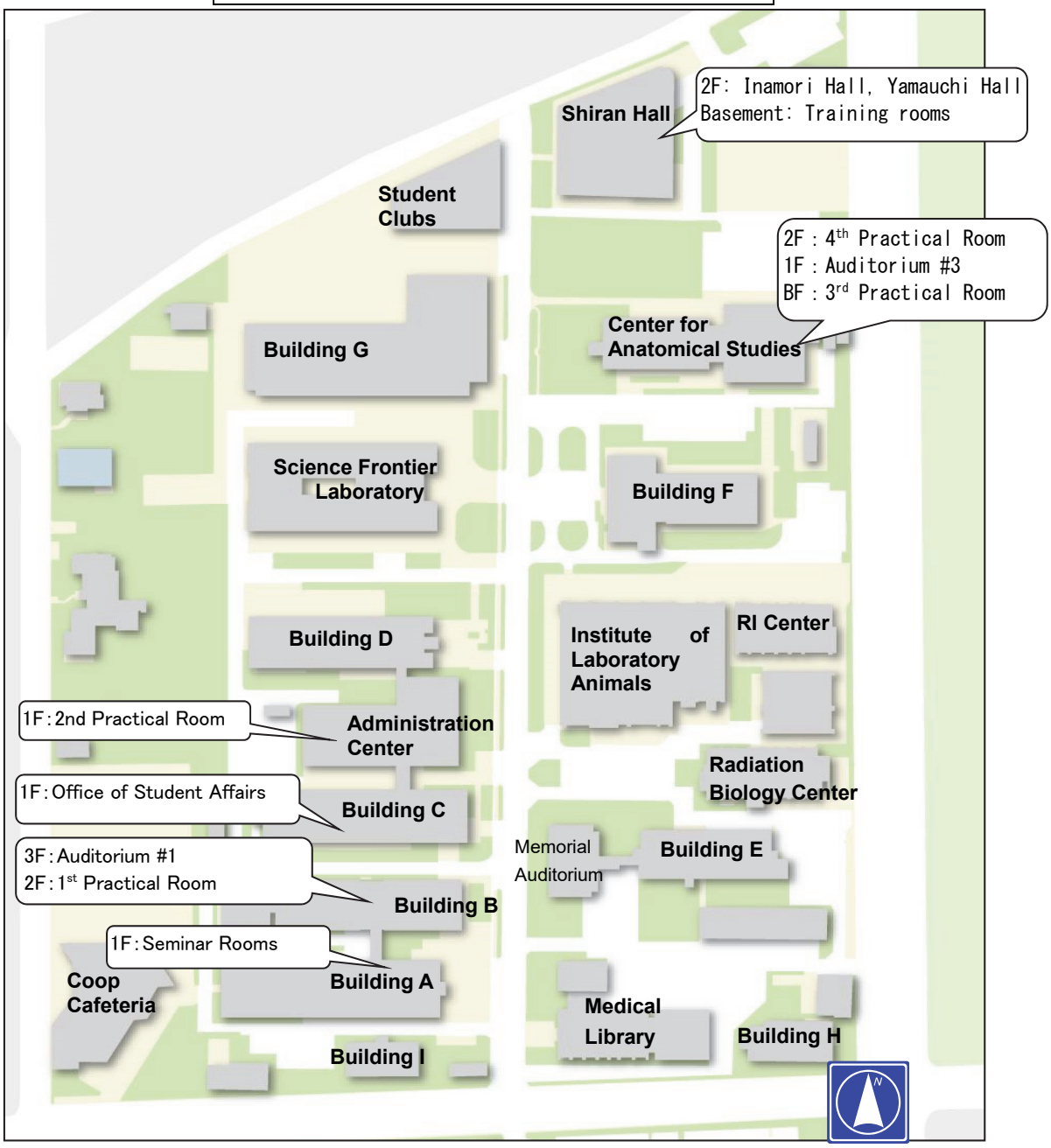


◆ KULASIS（https://student.iimc.kyoto-u.ac.jp/）

Refer to the KULASIS regarding academic affairs (class cancellations, class changes, reports, etc.) and course registration, etc.



Faculty of Medicine Campus Map



◆ Building A • Building B ◆