

# Application Guidelines for Graduate Students

# Academic Year 2024

# Master's Degree Programs Medical Science Life Sciences and Biostatistics

Graduate program entrance examinations for the 2024 academic year will be held August 22, 2023 and January 16, 2024

<Day and Evening Course Graduate Program>

Kurume University Graduate School of Medicine

# Kurume University Graduate School of Medicine Overview of Master's Degree Programs

#### 1 Admissions Policies for Master's Degree Programs

Kurume University Master's Degree Programs are designed for students who have bachelor's degrees in various fields and come from a wide range of academic backgrounds who aspire to make contributions in the fields of medicine and medical care.

These programs aim to help meet the need for human resources with highly specialized research capabilities in the fields of nursing, basic medicine, social medicine, molecular life sciences, and biostatistics, who also have a solid grounding in the liberal arts, and who care deeply about their fellow men. We thus welcome applicants who meet the following criteria.

- 1. Applicants who aim to become highly specialized skilled professionals in the medical field upon graduation.
- 2. Applicants who intend to go on to study for a Ph.D., and become educators or researchers.
- 3. Applicants who are eager to contribute to the international community.
- 4. Applicants awarded a bachelor's degree in any field and who have working experience in the health care, medical, and social welfare fields.
- 5. Applicants without a bachelor's degree but who possess a specialized medical or social welfare related government certification, are currently engaged in the medical or social welfare field, and have strong motivation to improve their skills while balancing work and study.
- \* "Admissions policies" refers to the "eligibility criteria including capability and aptitude required for prospective students".

#### Our Philosophy

The Kurume University Graduate School aims to contribute to the advancement of human culture and society by carrying out rigorous teaching and research activities that cover both theory and practice, in accordance with the provisions of the School Education Act.

(Kurume University Graduate School Regulations, Chapter 1, Section 1, "Objectives") The Kurume University Graduate School of Medicine promotes pioneering academic research in the fields of medicine and healthcare and aims to train researchers and professionals with a wide range of perspectives, specialized expertise and a rich grounding in the liberal arts, so that they may work in the international arena while helping to support medical care in their own local communities.

The Master's Degree Programs are designed to develop human resources who can work in specialized fields that require advanced research capabilities and specialized medical knowledge, and who also have a solid general education and deep sense of humanity.

(Kurume University Graduate School of Medicine, Graduate School Regulations, Chapter 1 "Educational Purposes and Goals", Section 1)

## 2 Master's Program Coursework

To fulfil the educational and research criteria of this graduate program, the following course of study has been set.

## Medical Science Major

(1) Basic Medical Science Division

This course of study is designed to train researchers to carry out cutting-edge research in the field of Basic Medical Sciences.

(2) Social Medicine Division

This course of study is designed to give researchers and educators practical training in the areas of epidemiology, medical administration, rehabilitation, health advancement, and preventative medicine.

#### Life Sciences and Biostatistics Major

(1) Life Sciences Division

Train researchers in cutting-edge bioscience fields such as molecular genetics, cell engineering, and bio-macromolecular chemistry.

(2) Biostatistics Division

Japan's lack of trained and qualified biostatisticians in the medical and pharmaceutical R&D sectors has become a strategic national issue in recent years. A shortage of adequate human resources in this field can reduce Japan's international competitiveness in both the academic and industrial sectors. To help cope with this shortage, Kurume University established a Master's Program in Biostatistics in April 2004.

Kurume University's Biostatistics research program is based on internationally accepted standards developed in the United States, and aims to produce human resources with expertise in protocol design and data analysis who will be able to support translational research based on clinical trials and genome data, who can help meet the needs of medical science, clinical research and pharmaceutical corporations, and who will also be capable of promoting the type of evidence-based medicine so urgently required by the health care, medical, and social welfare sectors.

This program aims to cultivate human resources with high ethical standards and effective communication skills who will be able to collaborate effectively with doctors, computer technicians, nurses, and other specialists.

#### 3 Requirements for Graduation

(Refer to course outline and certification requirements on p. 24-28.)

## Medical Science Major

Division	Basic Course Requirements	Major Courses	Graduate Program Seminar Series	Minor Electives	Electives
Basic Medicine Social Medicine	10 credits minimum	12 credits minimum (Including 4 credit seminar, 4 credit thesis	1 credit	4 credits minimum (Lectures)	3 credits from subjects not previously studied.
THOUSE THE		guidance seminar)			

#### Life Sciences / Biostatistics Majors

Division	Basic Course Requirements	Major Courses
Life Sciences	10 credits minimum	26 credits minimum (Specialized Applied Subjects (Life Sciences) 18 required credits, Specialized Applied Subjects (Life Sciences) 8 or more elective credits
Biostatistics		30 credits minimum (Includes 7 lab courses)

## (Master's degree academic schedule)

Students admitted to the Kurume University Graduate School of Medicine Master's Degree program will select their first year courses depending on their major, and their current knowledge and skill set. These will include courses on basic medicine as well as courses in

areas new to the student. In year two students will select a dissertation topic in consultation with their academic advisor, create a research plan, collect data (beginning in year 1), and then complete their Master's dissertation.

#### 4 Day and Evening Classes (Special Program) Courses and Research Methods

#### (1) Purpose and Objectives

Day and evening classes have been offered since 2003 to provide learning opportunities to working adults, and to enable them to acquire the advanced medical knowledge, technical skills, and research ability they need to function successfully as specialists in various fields. Under the day/evening study system classes are offered in the evenings or other specific times to give medical researchers and other healthcare professionals better access to graduate level courses and enable them to receive guidance on their research projects. [Standard of Establishment of Graduate Universities (1974 Ministry of Education Ordinance No. 28) Article 14, Education methods: Special cases.]

#### (2) Class Hours

To better meet the needs of working adults, classes may be offered during the sixth period (18:00-19:30) and seventh period (19:40-21:10) in addition to the regular class periods

- 1-5. Classes may be offered on Saturday, Sunday and during summer holidays.
- ❖ The day/evening study system will be available to all graduate students.

#### 5 Special Features of Kurume University's Graduate School Programs

Following are some of the new features that have been introduced in the Master's Degree program in recent years.

#### (1) Clinical Research Nurse Unit

Although many clinical trials are conducted at university hospitals, medical professionals who undertake them do not necessarily have sufficient knowledge of clinical trials.

Therefore, this unit was established to cultivate clinical research nurses who have sufficient knowledge of clinical research.

#### (2) Cutting-edge/ Field Specific Research Methods Unit

Centered around physiology lectures, students can participate not only in general experiments, but also in cross-sectional experiments in various fields and gain hands-on experience using specialized equipment. This unit was established in April 2007 to enrich our basic educational program, and to enable students to experience and understand a wider range of experimental methods.

(3) Establishment of the Department of Rehabilitation Biomechanics

There is a great need in Japan for healthcare professionals specializing in the field of rehabilitation, particularly due to the aging of society and the fact that the medical setting is becoming increasingly complex and specialized. Currently available human resources are often unable to cope with advances in specialized medical services. To help remedy this situation Kurume University established the Department of Rehabilitation Biomechanics in April 2007, and we have been training highly skilled specialists and educators in this field ever since.

Moreover, to promote the application of evidence-based medicine in the rehabilitation field we offer a series of specialized lectures in biostatistics, focusing on the objective, scientific analysis of human motor function, evaluation techniques, data collection, data analysis, statistics processing, thesis writing and presentation.

#### 6 Conferment of Degrees

A Master's Degree in Medical Science will be awarded to students who have been enrolled in this graduate program for at least two years, have obtained the required credits, whose thesis has been submitted and approved, and who have passed the final examinations. The minimum enrollment period may be shortened to 1 year for students who produce exceptional research results and who have completed the other prescribed requirements.

- 7 Enterprises and Projects within Kurume University Graduate School of Medicine that relate to the Master's Degree Program
- Training Plan for Cancer Professionals (Ministry of Education, Culture, Sports, Science and Technology)

Cancer is the number one cause of death in Japan. One of every two people is likely to be diagnosed with cancer during their lifetime, so there is a great need for new cancer therapies to improve the lives and health of our citizens. Furthermore, the Ministry of Health's "Future Directions of Cancer Treatment" and "Acceleration Plan for Cancer Control" have stimulated research on gene therapy, pediatric and rare cancer management, cancer treatment for different life stages such as AYA (Adolescent and Young Adult) and geriatric care, and is promoting education on palliative care.

As part of the government's "Training Plan for Cancer Professionals", "Training Centers for Cancer Professionals" have been established at a number of universities, including the Kurume University Graduate School of Medicine. These have created an inter-university cooperative network where the strengths of each university are combined to create a unique curriculum aimed at developing "Cancer Treatment Specialists (Cancer Professionals)" who

are able to meet the demand for new cancer therapies and significantly improve the level of cancer treatment in Japan.

Our graduate program has been coordinating with other medical universities in the Kyushu region for over 10 years. We have established a sustainable collaborative educational system that has helped educate specialized cancer health professionals capable of meeting a diverse range of needs. The "Training Plan for Cancer Professionals" was jointly adopted in 2017, and we introduced the following courses in academic 2018 to further contribute to the development of cancer health professionals.

Our curriculum is among the first to incorporate a home nursing practicum within the special nursing major that involves coordination between local healthcare professionals from various fields. Our experience with this program has shown that there is an urgent need for human resources with the ability to coordinate community resources to promote home healthcare services, to optimize the cooperation between healthcare professionals from various fields, and who also have the skills to carry out educational activities among local residents.

In addition to an advanced practical nursing curriculum approved by the Japan Nursing Association, in 2018 we introduced a program to promote locally-based education programs to improve palliative care for cancer patients. This program takes advantage of our strength as a comprehensive university to offer, in collaboration with educational specialists, small-group learning, along with leadership training lectures and practicums. Students who complete this course as credited auditors will learn to solve organizational problems, and give them the skills they will need to function effectively as community coordinators.

# Admission Procedures for Academic Year 2024 Kurume University Graduate School of Medicine Master's Degree Program

#### 1. Number to be admitted

Medical Science Major: 8 persons

Life Sciences / Biostatistics Major: 8 persons

[Includes working professionals and international students admitted through Special Selection Exams]

#### 2. Eligibility

Applicants must meet at least one of the following criteria.

# [B] Special Selection Exam for Working Professionals

Working Professionals, defined as a person who has worked at a corporation or an educational institution for two years at the time of enrollment, and who intends to continue to work after April 2024.

- 1. Applicants who have graduated or expect to graduate from a university (as defined by the School Education Act, Article 83) by March 2024.
- 2. Applicants who have been awarded or expect to be awarded a Bachelor's degree (as defined by the School Education Act, Article 104 section 7) by March 2024.
- 3. Applicants who have completed 16 years of education at an overseas educational institution.
- 4. Applicants who will have completed a special program at a vocational school (must be a 4-year program and meet the standards set by the Minister of Education, Culture, Sports, Science and Technology) on or after the date set by the Minister of Education, Culture, Sports, Science and Technology.
- Applicants designated by the Minister of Education, Culture, Sports, Science and Technology (1953 Ministry of Education Ordinance No.5)
- 6. Applicants over 22 years of age who have shown in a separate prescreening that they have academic abilities equivalent or superior to the holder of a Bachelor's degree.

#### [C] International Applicants

1. Applicants who have completed or will complete 16 years of education at an overseas educational institution by March 2024.

- International applicants who have graduated or expected to graduate from a
  Japanese university (as defined by the School Education Act, Article 83) by March
  2024.
- 3. International applicants who have shown in a separate prescreening that they have academic abilities equivalent or superior to the holder of a Bachelor's degree, and who are over 22 years old.

#### [Notes]

- 1. For applicants applying under section [B] 6, [C] 3, please refer to the Application Guidelines.
- 2. Applicants applying under section [B] 6, [C] 3 must meet the following requirements.
  - a. Must have graduated from a medical or nursing junior college, vocational school, or other specialized school, and must be over 22 years of age as of March 31, 2024. All the below must also apply.
    - Must have a national qualification in the medical, nursing, or social-welfare field.
    - ii. Must have 4 years or more work experience based on the above qualification.
    - iii. Must have published a research paper, or have presented at a conference or research workshop.

Note: Following is a list of medical, nursing, and social-welfare related national qualifications.

- A) Licensed doctor (includes dentists and veterinarians), shiatsu masseuse, acupuncturist, moxibustion therapist, judo therapist, or any other medical license holder who is allowed to have their own practice.
- B) Nurse, midwife, public health nurse, radiological technologist, clinical technologist, pharmacist, nutritionist, dietitian, clinical engineer, dental hygienist, dental technician, physical therapist, prosthetist, speech therapist, occupational therapist, orthoptist, medical technologist, or any other licensed healthcare professional.
- C) Psychiatric social worker, social worker, care worker, or any other social care related licensed professional.
- b. Must have graduated from a junior college, vocational school, or other specialized school, and be over 22 years of age as of March 31, 2024. All the below must also apply.
  - i. Must have work experience conducting medical research or have over 4 years of direct experience in a medical, nursing, or social-welfare related field. (Must

- submit a certificate from the respective institution describing their work experience).
- ii. Must have published a research paper, or have presented at a conference or research workshop.

#### 3. Prescreening Process

Applicants applying under section [B] - 6, [C] - 3 must submit the following to determine their eligibility. Please make sure to contact the prospective supervisor(s) well in advance and discuss the relevant academic and research guidelines prior to submitting the prescreening application.

(1) Prescreening Documents (Documents 1~4 must be submitted by all applicants)

1	Application form	Form 9
2	List of Achievements	Form 8
3	Graduation Certificate	Original copy. Not required for Kurume
		University graduates.
4	Academic Transcripts	Original copy. Not required for Kurume
		University graduates.
5	Copy of Medical and Nursing licenses	For applicants applying under [B] - 6,
		[C]- 3 only
6	Term of Employment Certificate	For applicants applying under [B] - 6,
	(Documentation proving 4 years or	[C]- 3 only
	more of professional experience)	

(2) Submission Deadlines for Prescreening Applications

Kurume University Graduate School of Medicine holds entrance examinations twice
a year. The submission periods for each examination are listed below.

Enrollment Term	Submission Period for "Prescreening Application"
First term	Must be received between June12, 2023 (Monday) ~ June 16, 2023 (Friday).
Second term	Must be received between November 13, 2023 (Monday) ~ November 17, 2023 (Friday).

Note: Prescreening applications received outside of these dates will not be accepted.

- Once a prescreening application has been accepted, a formal application notice will be issued. This formal application is valid up to the following school year.
- Use only registered mail when applying via the postal service. Make sure to write "Kurume University Graduate School of Medicine, Graduate Program Application

- Enclosed" on the front of the package in red lettering
- ❖ Reception hours are 9:00~17:00 (except 12:00~13:00) excluding Saturdays, Sundays, and holidays.
- Submitted applications will not be returned.
- (3) Submission Address: please refer to p.12.
- (4) Results of Prescreening Application
  Applicants will be notified by mail of the results of the prescreening application
  prior to the formal application deadline.
- Successful applicants will be able to sit the entrance examination for the Kurume University Graduate School of Medicine Master's Degree program.

## 4. Formal Application Process

Applicants must consult with their prospective advisor(s) about curriculum and research prospects prior to submitting the formal application documents.

\* Documents already submitted during the prescreening process may be omitted.

1.	Application Form	Form 1
2.	Personal Statement	Form 2 (Maximum of 500 Japanese characters or 250 English words)
3.	Academic	Original transcripts issued by the university, junior college, or
	Transcripts *	vocational schools you have attended. (Not required if you graduated or expect to graduate from Kurume University)
4.	Two Identical Photographs	Submit identical photographs taken within three months, showing a front view above chest level. No cap or hat is allowed. The photograph must be 5 cm high by 4 cm wide.  Please affix one directly to the Application Form (Form 1) and another to the Applicant's Examination Admission Card (Form 3).
5.	Graduation Certificate(s) *	One original copy issued from the university, junior college, or vocational schools you have attended. (Not required if you graduated or expect to graduate from Kurume University)  For applicants who have completed (or expect to complete) 16 years of education at an overseas educational institution, documentary proof is required. Such applicants must also submit a letter of recommendation from their university president or academic advisor.
6.	Applicant's Examination Admission Card	Form 3

7.	Application Fee	¥30,000 (Form 4)		
F F		Fill out the designated bank transfer form and pay the application		
		fee at any convenient financial institution (banks, credit unions,		
		credit associations, agricultural cooperative). (Money transfers		
		from Japan Post Bank, convenience stores, and internet banking		
		are not available) The application fee will not be refunded under		
		any circumstances.		
8.	Employer's	Required from working professional applicants only. Form 5 must		
	Consent Form	be filled out and completed by the applicant's supervisor at his or		
		her current place of employment.		
9.	Registration	Form 6		
0.	Extension	Required from working professional applicants who would like to		
	Program	take advantage of the Registration Extension Program.		
10	Certificate of	Required from working professional applicants who wish to take		
10.	Employment	part in the Registration Extension Program. This differs from the		
	2mployment	Term of Employment Certificate.		
11	Formal	For applicants who received a formal application notice, submit a		
11.	Application	copy of the document.		
	Notice	copy of the document.		
12	English	Submit relevant Certifications. Refer to p.13-14.		
12.	Proficiency	(Does not apply to Biostatistics majors)		
	Exemption	(Does not apply to Diostatistics majors)		
	Application			
13.	Copy of Degree	Required from those who have received a Degree from the National		
		Institution for Academic Degrees and Quality Enhancement of		
		Higher Education. For those who are expecting to receive such a		
		degree, submit the application acceptance notification.		
14.	Copy of passport	International Student applicants must submit a copy of their		
	and Resident	passport and Resident Card. International students who reside		
	Card	outside of Japan and do not have a Resident Card need only submit		
		a copy of their passport.		
15.	International	This is an original form from the Graduate School. Contact the		
	Student	Administrative office before prescreening to obtain the form.		
	Questionnaire	<ul> <li>Attach a Japanese translation of all foreign certificates and</li> </ul>		
	(Only for	documents.		
	International	❖ Obtain an official certificate or registration record if your		
	Student Special	name has changed due to changes in marital status or family		
	Examination	circumstances.		
	applicants)	<ul> <li>Attach documentation proving your ability to cover your</li> </ul>		
	•			
		expenses.		

## 5. Application Submission

#### (1) Submission Period

First term	Must be submitted between July 18, 2023 (Tuesday) $-$ July 21,
	2023 (Friday).
Second term	Must be submitted between December 18, 2023 (Monday) — December
	22, 2023 (Friday).

Note: Applications received outside of these dates will not be accepted.

- Use only registered mail when applying via postal service. Make sure to write "Kurume University Graduate School of Medicine, Graduate Program Application Enclosed" on the front of the package in red lettering.
- ❖ Reception hours are 9:00~17:00 (closed 12:00~13:00) except Saturdays, Sundays, and holidays.

# (2) Where to submit applications, and contact information

Kurume University Graduate School of Medicine, Graduate, Admissions office, Medical School Academic Affairs Section 67 Asahi-machi, Kurume, Fukuoka 830-0011 Japan

Tel: +81-0942-31-7528 (direct)

E-mail: igaku-kyomu@kurume-u.ac.jp

Homepage: https://www.kurume-u.ac.jp/faculty/gmed/examination/

Important Notice regarding Application Submission.

- Submitted applications will not be returned.
- No changes can be made to submitted applications. If any false or incorrect information is found in the submitted documents, application eligibility will be revoked, and the admission of any already enrolled student shall be cancelled.

#### 6. Selection Methods

(1) Applicants will be selected based on the results of the entrance examination described in (3) below, and a review of submitted documents.

#### (2) Examination Date

First term	August 22, 2023(Tuesday)
Second term	January 16, 2024 (Tuesday)

<sup>\*</sup> Those who fail the first term examination may apply to take the second term examination.

#### (3) Examination Subjects and Venue

[Medical Science, Life Sciences and Biostatistics majors (Life Sciences Division)]

Examination Subjects	Schedule	Venue
English	9:30~10:30	Room 1611, 6th floor, Academic Building 1,
Essay	11:00~12:00	Kurume University School of Medicine
Interview	13:00~	Details will be announced at above venue

- 1) Applicants are required to be present at the venue by 9:10 am on the examination date.
- 2) The English language test will be a written examination. (Printed dictionaries allowed, but no electronic dictionaries are permitted in the examination hall.)

[Life Sciences and Biostatistics majors (Biostatistics Division)]

Examination Subjects	Schedule	Venue
		Conference Room 1, 2nd floor, Academic
English	10:30~12:00	Building 1, Kurume University School of
		Medicine
Interview	13:00~	Details will be announced at above venue

- 1) Applicants are required to be present at the venue by 10:10 am on the examination date.
- 2) English will be tested using High school level Math I · II problems given in English. (Printed dictionaries allowed, but no electronic dictionaries are permitted in the examination hall.)

#### [Exemption from the English Examination]

Note: Not applicable for Life Sciences and Biostatistics majors from the Biostatistics Division.

Applicants will be exempt from the English Examination if one of the following conditions are met. A copy of the relevant English Proficiency results must be submitted along with the test application.

1) TOEIC (Listening & Reading Test) score of over 650

- 2) TOEFL score of over 65 points
- 3) Practical English Proficiency Test, Level 2 or above
- ❖ The official test scores are valid within 4 years of the entrance examination, with the exception of the Practical English Proficiency Test.
- ❖ For those who are exempt from taking the English subject examinations, the minimum passing mark for the English subjects will be counted as their grade. Those who have requested an exemption from the English subject examinations have the option to take the examination, in which case the higher score will be used as their grade.

#### 7. Announcement of Results

Results will be posted at the entrance to Kurume University Academic Building 1 and on the School of Medicine website on the date and time shown below. Results will also be sent by mail to the address provided on the application form.

Enrollment Term	Announcement Schedule
First term	September 15, 2023 (Friday) at 10:00 am
Second term	February 16, 2024 (Friday) at 10:00 am

## 8. Enrollment Procedure (Admissions fee and enrollment application deadlines)

First term	September 29, 2023 (Friday)	Please submit all necessary documents and complete
Second term	February 22, 2024 (Thursday)	payment by the deadline. If not, enrollment will be canceled.

# 9. Admission Fees and Tuition

# Medical Science, Life Sciences and Biostatistics majors

Admission Fee		JPY 240,000	(JPY 120,000 for Kurume University graduates)
Tuition (First Semester)	First Semester	JPY 240,000	(Annual JPY 480,000)
Laboratory Fee	First Semester	JPY 60,000	(Annual JPY 120,000)
Educational Development Fee	First Semester	JPY 30,000	(Annual JPY 60,000)

- Applicants using the Registration Extension Program, please refer to p. 16.
- ❖ If an accepted applicant must for some reason decline enrollment after going through the admission procedures, all fees except for the admissions fee will be refunded if a letter notifying the school of the declined enrollment is received by the

Admissions Office no later than 17:00 on Thursday 22, 2024. Otherwise no refunds will be made.

10. Kurume University Graduate School of Medicine Master's Degree Scholarship Program Kurume University has a school loan program awarding JPY 85,000 per month.

#### 11. International Student Fee Reduction System

Tuition reduction for selected international students is available. This program covers either 50% or 100% of your enrollment fees and tuition.

#### 12. Notes

- (1) Examination admission cards will be issued on the day of the examination at the venue. Once you have obtained a receipt for your entrance examination fee the application process is completed.
- (2) Requests for change of major will not be accepted once the application is submitted. An exception is made for Life Sciences and Biostatistics majors in the Biostatistics Division, who will be assigned a "tentative supervisor" their first year, and a permanent academic supervisor in the second year of their Master's program.
- (3) For those who have applied with "expected" documentation, please submit such certifications, and medical, nursing, and social-welfare related licenses as soon as possible.
- (4) Past Graduate Department entrance examination questions will be posted in the Academic Building 1, 2nd floor hall in front of the medical department administration office from 9:00~16:00 weekdays (excluding national and university holidays). Copies are not allowed.

#### **Personal Information Policy**

Kurume University will manage the personal information of applicants in compliance with relevant laws and regulations concerning the protection of personal information during the admission process. The University strives to ensure proper handling of personal information and takes necessary measures for safe management.

Personal information provided during the application and admission procedure is used as required for the entrance examination, acceptance announcement, enrollment procedures, student and faculty relations, and support for student life upon employment.

Personal information acquired by the University will not be disclosed or provided to a third party without consent.

# [Extended Study Program]

The Extended Study Program allows students who are also working professionals to extend their graduate program to three years. Please contact the academic office for more information.

## **Program Outline**

## (1) Applicable Candidates

This program is available for an applicant who has been admitted into the graduate program through the Working Professional Special Admission process. The candidate will not be eligible for such an extension if for any reason they cease to be employed after April 2023.

# (2) Eligibility

The following qualifications must be met

- Must be a full time employee at a corporation or a public organization, or be self employed.
- ii. Any other person deemed fit for the Extended Study Program.

#### (3) Acceptance

Application should be submitted after discussions with your professor. Applications will be reviewed and results will be mailed to the applicant's mailing address. Enrollment in the graduate program will not be affected even if applicant not accepted in the Extended Study Program.

(4) Graduation Requirements and Credit Acquisition

The graduation and credit acquisition requirements for participants in the Extended Study Program are the same as for regular students.

- (5) Attendance Period and Enrollment Period
  - a. Attendance period is to be 3 years
  - b. Enrollment period may be extended for a maximum of 5 years. A maximum of 2 years of leave from school is allowed during the extension period.

# (6) Application Requirements

- a. Applicants in the Extended Study Program will not be eligible for early graduation.
- Extension program application and school ID must be submitted at the time of registration.
- c. No changes will be accepted once the application is submitted.

## (7) School Fees

a. The standard two-year tuition will be divided by three and that sum will be paid as an annual tuition for three years. From the fourth year of enrollment, tuition will be the same as the standard annual tuition fees. Laboratory and educational development fees will be charged according to school regulations.

Admission Fee (Example)

Medicine Majors /Life Sciences and Biostatistics Majors

	First	Year	Secon	d Year	Third	l Year	
	Admission Fee	Second Semester	First Semester	Second Semester	First Semester	Second Semester	Total
Admission Fees	240,000						240,000
(Kurume University graduate)	(120,000)						(120,000)
Tuition	160,000	160,000	160,000	160,000	160,000	160,000	960,000
Laboratory Fees	40,000	40,000	40,000	40,000	40,000	40,000	240,000
Educational Development Fee	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Total	680,000		440,000		440,000		1,560,000
(Kurume University graduate)	(560	(000)	(440,000)		(440)	(1,440,000)	

# Course Content and Professors

# Medical Science Majors

Division	Major	Research Fields	Teaching Professor
Basic Medical Science	Human Anatomy and Cell Biology	Gross anatomical research Clinical anatomical research (development of low invasive surgery, etc.)  Structure of the vascular system  Functional anatomy of the musculo- skeletal system (lower extremity, etc.)  Anatomy of the thoracic and abdominal organs  Anatomy of the head and neck region Analysis of the vascular distribution of transplanted tissue (skin flap, etc.)  Research of transcriptional regulation by high-throughput sequencing Identification and characterization of novel cell populations by single-cell analyses  Research of transcriptional regulation by generating genome editing mice	Department of Anatomy (Division of Gross and Clinical Anatomy) Koichi Watanabe  Department of Anatomy (Division of Microscopic and Developmental Anatomy) Yuichi Shima
		<ul> <li>Development of advanced imaging methods for biomedical research and the application</li> <li>3D-cellular network in dermis and others using 3D electron microscopy including FIB-SEM tomography</li> <li>Mitochondorial dynamics and interorganelle interaction by 3D correlative light electron microscopy (CLEM)</li> <li>Visualization of exosome secretion</li> </ul>	Advance Imaging Research Center Keisuke Ohta
	Clinical Neurophysiology		
	Molecular Physiology & Neuro science	<ul> <li>Physiology and molecular biology of ion channels</li> <li>Molecular &amp;Cellular Neuroscience</li> <li>Molecular mechanisms of arrhythmia</li> </ul>	Department of Physiology Makoto Takano

Division	Major	Research Fields	Teaching Professor
Basic Medical Science	Biochemistry of Metabolic	Metabolic diseases such as cardiovascular disease, diabetes and	Department of Medical Biochemistry
	Disorders	gout; cancer, genome analysis and molecular pathology analysis in autoimmune disease, epigenome biomarker identification for the above diseases, and their significance as regards development of chronic disease.  • Familial analysis of single gene disorders and the identification of disease genes.  Neuro and Clinical Pharmacology	Ken Yamamoto  Department of
	Pharmacology	<ul> <li>Dopaminergic signaling mediated through protein phosphorylation</li> <li>Degeneration and regeneration of dopaminergic neurons</li> <li>Regulatory mechanisms of neurotransmitter release evaluated with in vivo microdialysis</li> <li>Neurochemical and behavioral aspects of drug addiction</li> </ul>	Pharmacology Akinori Nishi
	Pathophysiology	<ul> <li>Primary culture of liver cancer cells</li> <li>Molecular pathology of liver cancer (e.g., identification of histogenesis, cancer stem cell, and tissue biomarkers of liver cancer)</li> <li>Experimental pathology of liver cancer (e.g., development of new molecular targeted therapy of liver cancer using new and unique drug delivery system)</li> </ul>	Department of Pathology Hirohisa Yano
		<ul> <li>Hematopathology, particularly leukemia, malignant lymphoma and their clinical manifestations.</li> <li>Viruses and tumorigenesis of malignant lymphoma.</li> <li>Molecular pathology of cancer genesis and tumor immunity.</li> </ul>	Department of Pathology Koichi Oshima

Division	Major	Research Fields	Teaching Professor
Basic Medical	Pathology	Surgical pathology, tumor	Department of
Science		histogenesis	Diagnostic Pathology
			Jun Akiba
	Pathology of	Bacteriology	Department of
	Infectious	Microbial Genomics	Infectious Medicine
	Diseases	Evolution of Pathogenesis	Yoshitoshi Ogura
		Host defense mechanisms against	
		bacterial infections	
		New therapeutic agents for bacterial	
		infections	
		Infectious disease	Department of Infection
		Nosocomial Infection Control	Control and Prevention
		Tropical Medicine	Hiroshi Watanabe
		Travel Medicine	
		Trypanosoma brucei is a protozoa that can	Department of
		cause African sleeping sickness. It belongs	Infectious Medicine
		to the kinetoplast family, the oldest and	(Division of Eukaryotic
		most distant eucaryote from mammal	Microbiology)
		species on the ribosome DNA phylogenetic	Masahiro Inoue
		tree. We use this organism to study	
		differences in the signal transduction	
		system of the phosphorylation-dependent	
		molecular chaperone14-3-3, which also	
		exists in mammals, and to look for new	
		functions of molecular 14-3-3 in humans.	
		We also conduct screening for medications	
		targeting molecules affected by the	
		molecular 14-3-3 signal.	
	Host Defense	General immunology, particularly gut	Department of
		immunity, and cell-based	Immunology
		immunotherapy utilizingg suppressor	Atsushi Mizoguchi
		cells.	
		Actively investigating the functional	Department of
		modulation of CEC (colonic epithelial	Immunology
		cells), as a first line of defense in the	Emiko Mizoguchi
		body, to complete our understanding	
		in the pathogenesis of IBD by	
		utilizing animal models as well as	
		clinical samples	

Division	Major	Research Fields	Teaching Professor
Social	Epidemiology and	Health Policy	Department of Public
Medicine	Preventative	• Health Economics	Health
	Medicine	• Epidemiology	Shinichi Tanihara
		Real world data analysis in	
		medicine	
	Environmental	Occupational Medicine	Department of
	Medicine	1) Effects of hyperbaric	Environmental Medicine
		environment on health.	Tatsuya Ishitake
		2) Prevention and management	
		of vibration disorders.	
		3) Health management for	
		Health care and welfare	
		workers.	
		Environmental Medicine	
		1) Health effects of	
		electromagnetic waves.	
		2) Indoor air pollution and sick	
		house syndrome.	
		Community Health	
		1) Research on HIA (Health	
		Impact Assessment)	
		applications.	
	Human Genetics	Forensic medical research on	Department of Forensic
		blood groups and serum	Medicine
		protein.	Yoshiro Koda
		• Genetics research on human	
		blood group	
		fucosyltransferase genes	
	Health Science	Clinical research on exercise	Department of Sports
		(physical activity) and the	Medicine Human Health
		effect of lifestyle changes on	Science Studies, Faculty of
		disease prevention.	Human Health
		Research on the effects of	
		physical activity and	Noriko Yoshida
		nutritional intake on	
		lifestyle diseases and their	
		pathology, along with its	
		effect on arteriosclerosis risk	
		factors.	

Division	Major	Research Fields	Teaching Professor
Social	Rehabilitation	Rehabilitation medicine in	Department of Orthopedics
Medicine	Biomechanics	musculoskeletal system	& Rehabilitation
		Rehabilitation medicine	Koji Hiraoka
		conducts research to help	
		overcome such disabilities.	
		We especially focus on the	
		areas of motor skills,	
		musculoskeletal system, and	
		joint kinematics, kinetics,	
		and we study the role of	
		rehabilitation on the	
		assessment and treatment of	
		disabilities.	
		Exercise therapy for health	Department of Orthopedics
		promotion	& Rehabilitation
		• Exercise therapy for the	Hiroo Matsuse
		chronic pain	
		Electrical stimulation	
		therapy	
		Biomechanics of the physical	
		function	
		Study of the musculoskeletal	
		atrophy during inactivity	
		Study of the muscles and	
		bones linkage	
		Study of management of the	
		muscle skeletal function in	
		aerospace	

# Life Sciences and Biostatistics Majors

Division	Division Major Research Fields						
Life Sciences	Genetic	In this course, you can learn about peptide	Institute of Life				
	Information	hormones	Science (Department				
		Molecular biology of peptide	of Molecular Genetics)				
		hormones	Masayasu Kojima				
		Search for novel physiologically					
		active peptides					
		Neural control of appetite					
	Cell Biology	Molecular biology of cell proliferation:	Institute of Life				
		Cell proliferation control in response	Science (Department				
		to alterations in the nutritional	of Cell Biology)				
		<ul><li>conditions</li><li>Molecular mechanisms ensuring</li></ul>	Shigeaki Saitoh				
		accurate chromosome segregation in					
		mitosis					
	Research	In this course, you can learn and acquire	Institute of Life				
	Management	skills needed for an independent principal	Science (Department				
	3	investigator (PI) or Research	of Molecular Genetics)				
		Administrator (URA)	Masayasu Kojima				
		Scientific writing					
		How to apply for research grants and					
		academic positions					
		Methods of Scientific presentation					
		Intellectual Property Management					
		Management of collaborations					
		between industry and academic					
D: / /: /:	D:	Research ethics	D:				
Biostatistics	Biostatistics	Survival data analysis     Fryiron montal anidomialagu	Biostatistics Center				
		Environmental epidemiology statistics modeling and risk analysis	Kyoji Furukawa				
		Bayesian statistics					
		Clinical Trial Design	Biostatistics Center				
		Diagnostic Medicine	Kenta Murotani				
		Statistical Consulting					

# Medical Science Major (Basic Medical Science and Social Medicine Division)

Division	Subject	Credit L/S	Year eligible	Divi	sion	Subject	Credit L/S	Year eligible
Basic Subjects	Human Anatomy	2	1, 2			Human Anatomy and Cell Biology	4	1,2
	Human Physiology	2	1, 2			Clinical Neurophysiology	4	1,2
	Introduction to Clinical Medicine	2	1, 2		В	Biochemistry of Metabolic Disorders	4	1,2
	Introduction to Social Medicine	1	1, 2		Basic Medicine	Clinical Pharmacology	4	1,2
	Advanced Physics	1	1, 2		dicine	Pathophysiology	4	1,2
	Advanced Biology	1	1, 2			Pathology of Infectious Diseases	4	1,2
	Advanced Chemistry	1	1, 2			Bioregulation	4	1,2
	Medical Education	1	1, 2	M	Major Subjects	*Fundamental Medicine Seminar	4	1
	Bioethics I	1	1,2	ajor Su		Environmental Medicine	4	1,2
	Clinical Genetics	1	1,2	bjects		Epidemiology and Preventative Medicine	4	1,2
	Transplant Medicine	1	1, 2		Social	Human Genetics	4	1,2
	Rehabilitation Medicine	1	1, 2		Social Medicine	Health Science	4	1,2
	Introduction to Medical Engineering	1	1, 2		ne	Rehabilitation Biomechanics	4	1,2
	Laboratory Animal Science	1	1, 2			* Social Medicine Seminar	4	1
	Nursing Ethics	2	1, 2		Choos	se one of two majors		
	Nursing Research	2	1, 2		8 cred	lits minimum (includes 4 sen	ninar cred	dits)
	Nursing Policy	2	1, 2					
	Nursing Theory	2	1, 2					
	Nursing Consultation	2	1, 2					

Division	Subject	Credit L/S	Year	Division	Subject	Credit L/S	Year
- ·		L/S	eligible		25.		eligible
Basic Subjects	Advanced and Specialized Research Techniques (Lab)	2	1, 2		Minimum of 4 credits from no (Lecture)	n-major	subjects
	Intoroductory Biostatistics	1	1, 2	Þ			
	Applied Biostatistics	2	1, 2	Inor S			
	Introduction to Intellectual Property The Basis and Practice	2	1, 2	Minor Subjects			
	Introduction to Clinical Research	2	1, 2				
	Clinical Pharmacology for Nursing Practice	2	1, 2				
	Physical Assessment	2	1, 2		Thesis guidance seminar	4	1-2
	Pathophysiology for Nursing Practice	2	1, 2	С			
	Healthcare Management	2	1, 2	Common Credits			
	Healthcare Economics	2	1, 2	ı Credit	To be taken during the second first academic year and first		
	Minimum 10 Cre	dits Requ	iired	δά	second academic year. 4 credits required.  Must be in line with your major subjects.		
Seminar Series	Graduate School Seminar Series	1	1, 2				
	Special						
	(1 credit n	ninimum	)				

Electives: 3 credits from subjects not yet studied.

Total: 30 credit minimum (for those whose Master's thesis has been accepted) Subjects marked with an asterisk (\*) are required subjects for the particular program.

Life Sciences and Biostatistics Majors (Life Sciences and Biostatistics Division)

Dinisian	Calainat	Credit	Year	D::	ision	Calainet	Credit	Year
Division	Subject	L/S	eligible	DIV	Ision	Subject	L/S	eligible
Basic	Human Anatomy	2	1, 2		Life	Research Ethics	2	1
Subjects					Science	Molecular Cell Biology	2	1
	Human Physiology	2	1, 2		Life Sciences and Biostatistos	Biology of Gene	2	1
						Omics Analysis	1	1
	Introduction to Clinical Medicine	2	1, 2			Bioinformatics	1	2
	Introduction to Social Medicine	1	1, 2			Research Management	2	1
	Advanced Physics	1	1, 2			Science Communication	2	1
	Advanced Biology	1	1, 2			Scientific Writing for Research Paper	2	1
	Advanced Chemistry	1	1, 2			Bioventure Studies	2	1
	Medical Education	1	1, 2			Life Science of Diseases	2	1
	Bioethics I	1	1, 2			Molecular Biology of Intracellular Organelle	2	1
	Clinical Genetics	1	1, 2			Cell Signaling	2	1
	Transplant Medicine	1	1,2	Advanced Application	Life Sciences	Molecular Biology of Organ Interaction	2	1
	Rehabilitation Medicine	1	1,2			Regulations of Appetite, Stress, Aging	2	1
	Introduction to Medical Engineering	1	1, 2			Science of Energy Metabolism	2	1
	Laboratory Animal Science	1	1, 2			Experimental Methods of Bioscience	2	1
	Nursing Ethics	2	1, 2		SS	Experimental Methods of Bioscience (Training)	2	2
	Nursing Research	2	1, 2			Science of Experimental Animals	2	1
	Nursing Policy	2	1, 2			Science of Experimental Animals (Training)	2	2
	Nursing Theory	2	1, 2			Science of Model Organisms I: Yeast	2	1
	Nursing Consultation	2	1, 2			Science of Model Organisms I: Yeast (Training)	2	2
	Advanced and Specialized				Science of Model Organisms II: Fly, Nematode	2	1	
	Research Techniques (Lab)	2	1, 2			Science of Model Organisms II: Fly, Nematode (Training)	2	2

Division	Subject	Credit L/S	Year eligible	Divi	sion	Subject	Credit L/S	Year eligible
Basic Subjects	Intoroductory Biostatistics	1	1, 2			Data base Analysis of Bioscience: Analysis of Mega-Data	2	2
	Applied Biostatistics	2	1, 2			Data base Analysis of Bioscience: Analysis of Mega-Data (Training)	2	2
	Introduction to Intellectual Property The Basis and Practice  Introduction to Clinical Research  2 1, 2  Advantage  Advan	Making of Protocol and Research Design of Bioscience	2	2				
			Making of Protocol and Research Design of Bioscience (Training)	2	2			
	Clinical Pharmacology for Nursing Practice	2	1, 2	Advanced Application		Internship of Bioventure	2	2
	Physical Assessment Pathophysiology for Nursing	2	1, 2	cation		Biostatistical Methodology in Clinical Trials	2	1
	Practice Healthcare Management	2	1, 2		Bios	Medical Data Analysis	2	1
	Healthcare				Biostatistics	Introduction to Bio- Data Analysis	2	1
	Economics	2	1, 2		-	Introduction to Statistical Epidemiology	2	1
	Minimum 10 credits	required				Introduction to Genome Science	2	1

Division		Subject	Credit L/S	Year eligible	Division		Subject	Credit L/S	Year eligible
Advanced Application Subject	Biostatistics	Introduction to Pharmacokinetic/ Pharmacodynamic	1	1			Research Protocol Design	1	2
		Basic Biostatistics	4	1	Advanced Application	Biostatistics	Observational Data Analysis II	1	1
		Theoretical Biostatistics	4	1			Biostatistical Methods in Clinical Trials	1	1
		Survival Analysis	2	1					
		Observational Data Analysis I	1	1			Biostatistics Seminar I	3	1, 2
		Environmental Statistics	1	1			Bioinformatics Seminar I	3	1, 2
		Bio-Data Modeling	2	1			Biostatistics Seminar II	4	1, 2
		Machine Learning	2	1			Bioinformatics Seminar II	4	1, 2

Life Sciences Major: Students must complete a minimum of 36 credits (10 elective credits from Basic Subjects, 18 required credits from Specialized Applied Subjects (Life Sciences), and 8 elective credits from Specialized Applied Subjects (Life Sciences). (Applies to students whose Master's thesis has been accepted).

Biostatistics Major: Students must complete a minimum of 30 credits from Specialized Applied Subjects (Biostatistics). (Applies to students whose Master's thesis has been accepted).

- Note 1: L stands for lecture and S stands for seminar.
- Note 2: Students must complete either Biostatistics seminar I or Bioinformatics Seminar I.
- Note 3: Students must complete either Biostatistics seminar II or Bioinformatics Seminar II.
- Note 4: All classes except those indicated in Notes 2 and 3 are compulsory electives.
- Note 5: All students are free to enroll in basic classes.