

## Course Manager

## Requisite

## Undergraduate Medical Science Program for International Students

## Major Subjects (Required Courses)

| Course Number | Course Name                                   | Instructional Type | Credits | Standard Academic Year | Course Offering Term | Weekday and Period     | Instructor  | Course Overview   | Remarks  |
|---------------|---|--------------------|---------|------------------------|----------------------|------------------------|---|---|--|
| HE40011       | Medical Microbiology                          | 1                  | 2.0     | 3, 4                   | FallAB               | by appointment         | Kazuya Morikawa   | This course offers a series of lectures and discussions regarding the molecular mechanisms underlying in bacterial pathogens. Students will learn hot topics and techniques in molecular bacteriology fields. | This course is for foreign students in School of Medical Sciences. Lectures are conducted in English. face-to-face(partially online) Face-to-face classes at first, then online. |
| HE40061       | English Communication for Medical Sciences I  | 1                  | 3.0     | 3                      | FallABC              | Intensive              | Masanori Sakaguchi, Satoru Takahashi, Michito Hamada, Kenji Irie, Norihiro Ohbayashi, Atsushi Kawaguchi, Takashi Matsuzaka, Masatoshi Miyakoshi                   | This course covers a variety of medical science research topics. Students will learn basic concepts, methodology, and scientific thinking through each research topic.  | This lecture is open for only the student of International Medical Science only. Lectures are conducted in English. Details will be announced. face-to-face(partially online)    |
| HE40071       | English Communication for Medical Sciences II | 1                  | 3.0     | 4                      | SprAB<br>SprC        | Mon/Fri 1<br>Mon/Thu 1 | Chigusa Oda, Yukihide Watanabe, Yukari Okita, Masafumi Muratani, Cat Khanh Vuong, Takeji Sakae, Hiroaki Kumada, Eiji Mizutani, Tsuyoshi Saito, Masanori Sakaguchi | This course covers a variety of medical science research topics. Students will learn basic concepts, methodology, and scientific thinking through each research topic.  | This lecture is open for only the student of International Medical Science only. Lectures are conducted in English. face-to-face(partially online)                               |
| HE40081       | Topics in Medical Sciences I                  | 1                  | 1.0     | 3                      | FallAB               | Wed3                   | Kiong Ho  | This course helps students to understand the basics of genes and genomes and enable them to develop critical thinking in medical science.   | Lectures are conducted in English. Lectures are conducted in English. face-to-face(partially online)   |
| HE40091       | Topics in Medical Sciences II                 | 1                  | 1.0     | 4                      | SprBC                | Tue4                   | Kiong Ho  | This course helps students to understand the recent developments in medical science research by active learning and discussion.   | Only International Medical Science Course students. Lectures are conducted in English. face-to-face  |
| HE40102       | Seminar on Medical Sciences                   | 2                  | 1.0     | 3                      | FallBC               | by request             | Yo Oishi  | This course helps students deepen their understanding of the research in medical sciences by proactively investigating issues in medical sciences and coming up with solutions.                               | This course is for students in the International Medical Science Major. Lectures are conducted in English. face-to-face  |
| HE40112       | Research Seminar                              | 2                  | 2.0     | 3                      | FallBC               | by request             | Yo Oishi  | The students will select their theme from a variety of fields in medical sciences based on their own interests, and participate in research seminar and actual research activity in the laboratory.           | Offered exclusively for students in the International Medical Science Major. Lectures are conducted in English. face-to-face   |

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| HE40113       | Graduation Research          | 3                  | 8.0     | 4                      | SprABC, FallABC      | by request         | Yo Oishi   | The aim of this course is to learn the knowledge of medical sciences and problem-solving skills through a research in laboratories. The students can select their theme from a variety of fields in medical sciences based on their own interests.   | This course is for students in the International Medical Science Major. Lectures are conducted in English. face-to-face   |
| HE40131       | Clinical Hematology          | 1                  | 2.0     | 3                      | FallABC              | by request         | Naoshi Obara   | 血液の組成、血液の生理的機能、血球の産生とその調節機構、造血因子および造血微小循環などについて教授する。主要な血液疾患の病態生理とその診断のための血液学的検査法の原理と手法、血球の形態学的検査の原理と手法について教授する。白血病の病理的診断(FAB分類)、リンパ腫の病理的診断法を教授する。  | Students should obtain permission of the instructor before taking this course. Basically online lessons. Lectures are conducted in English. Online(Asyncronous)   |
| HE40141       | Coagulation and Fibrinolysis | 1                  | 1.0     | 3                      | FallABC              | by request         | Naoshi Obara   | 血液の凝固・線溶系の生理的機構を教授し、その失調に伴う出血傾向や血栓症に関する基本的検査法について教授する。凝固・線溶系の検査法の原理と手法、血小板の機能検査の原理と手法について教授する。   | Students should obtain permission of the instructor before taking this course. Basically online lessons. This course for English program students. Lectures are conducted in English. Online(Asyncronous) |
| HE40151       | Clinical Pathophysiology     | 1                  | 2.0     | 3                      | FallABC              | by appointment     |  | This course introduces the fundamentals of the cell mechanism and abnormalities thereof as well as cell division, cell death, tumor growth and aging. This course then deals with a wide range of topics, from abnormalities of the heat and energy balance, via the pathomechanisms of diseases of the blood, lungs, kidneys, gastrointestinal tract, heart and circulation, and of the metabolism, including endocrinological abnormalities, diseases of skeletal muscle, the senses, and the peripheral and central nervous system.             | Students should obtain permission of the instructor before taking this course. This course will not be provided in 2024. Lecture is conducted in English. Lectures are conducted in English.              |
| HE40161       | Topics in Vascular Biology   | 1                  | 1.0     | 3, 4                   | FallABC              | Intensive          | Hiromi Yanagisawa, Kenichi Kimura, Ryutaro Ishii, Raja Erna, 恵一 浅野 | To provide basic knowledge and understanding of vascular biology, ranging from normal vascular development and physiology to molecular mechanisms of vascular diseases, as well as novel diagnostic and therapeutic approaches. The course aims to solicit active participation of students in lectures and journal clubs.   | 原則英語、場合によっては日本語でも授業。 Lectures are conducted in English. Details will be announced. face-to-face   |
| HE40201       | Immunology                   | 1                  | 2.0     | 3, 4                   | Annual               | by appointment     | Chigusa Oda, Kazuko Shibuya, Yu-Hsien Lin                          | Humans have built a highly integrated immune system as a biological defense mechanism against pathogenic microorganisms. However, infectious diseases are still the greatest threat to humankind even today. On the other hand, abnormalities in the immune system are also an essential cause of intractable diseases such as autoimmune diseases and allergies. In addition, cancers and rejection of transplanted organs are also issues that are directly related to the immune system. This course provides an overview of the immune system. | This course for English program students. Lectures are conducted in English.  |
| HE40231       | Clinical pharmacology        | 1                  | 1.0     | 3                      | SprC                 | by request         | Michael Lazarus, Yo Oishi  | Learn the mechanisms of various drugs used in clinical practice and understand the indications and contraindications of drugs. Through these studies, students deepen their understanding of physiological functions in living organisms.  | This course is for English program students. Lectures are conducted in English. face-to-face  |
| HE40263       | Seminar on Medical Sciences  | 3                  | 1.0     | 3                      | Annual               | by request         | Yo Oishi   | This course helps students deepen their understanding of the research in medical sciences by proactively investigating issues in medical sciences and coming up with solutions.  | This course for students in the G30 program of the International Medical Science Major. Lectures are conducted in English. face-to-face   |

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| HE40272       | Research Seminar                                    | 2                  | 2.0     | 3                      | FallBC               | by request         | Yo Oishi                      | The students will select their theme from a variety of fields in medical sciences based on their own interests, and participate in research seminar and actual research activity in the laboratory.  | Offered exclusively for students in the G30 program of the International Medical science Major who enrolled in the program in 2020 or later. Lectures are conducted in English. face-to-face |
| HE40273       | Graduation Research                                 | 3                  | 8.0     | 4                      | Annual               | by request         | Yo Oishi                      | The aim of this course is to learn the knowledge of medical sciences and issue-solving skills through a research in laboratories. The students can select their theme from a variety of fields in medical sciences based on their own interests. | This course for English program students. Lectures are conducted in English. face-to-face  |
| HE41170       | International Forum on Medical Biology Research     | 0                  | 1.0     | 2 - 4                  | Annual               | by request         | Kazuya Morikawa               | Students will participate in international meeting in the field related to their own research, or participate in research activity in oversea laboratory.  | Lectures are conducted in English. face-to-face  |
| HE41175       | Training Abroad on Medical Biology                  | 5                  | 1.0     | 3, 4                   | Annual               | by request         | Yuji Funakoshi                | Students study at foreign university or enroll in an approved international program regarding medical related field.   | Only Medical Sciences students. Lectures are conducted in English. Details will be announced. Online (Synchronous)   |
| HE41181       | Workshop for Medical Science Students               | 1                  | 1.0     | 3                      | FallC                | Wed1, 2            | Kiong Ho, Thomas David Mayers | The course consists of seminar-style lectures and group discussions to introduce questions and problems in Global Health and Medical Sciences.   | Only medical science students enrolled after 2019. Lectures are conducted in English. face-to-face (partially online)  |
| HE41190       | International Forum on Medical Biology Research II  | 0                  | 1.0     | 2 - 4                  | Annual               | by request         | Kazuya Morikawa               | Students will participate in international meeting in the field related to their own research, or participate in research activity in oversea laboratory.  | Only Medical Sciences students. Lectures are conducted in English. face-to-face  |
| HE41200       | International Forum on Medical Biology Research III | 0                  | 1.0     | 2 - 4                  | Annual               | by request         | Kazuya Morikawa               | Students will participate in international meeting in the field related to their own research, or participate in research activity in oversea laboratory.  | Only Medical Sciences students. Lectures are conducted in English. face-to-face  |
| HE41210       | International Forum on Medical Biology Research IV  | 0                  | 1.0     | 2 - 4                  | Annual               | by request         | Kazuya Morikawa               | 国際学会参加や短期間の調査研究をとおして、海外の担当者あるいは研究者と意見交換し、国際的な研究の動向を把握し、自身のキャリアに活かす。  | Only Medical Sciences students. Lectures are conducted in English. face-to-face  |
| HE41215       | Training Abroad on Medical Biology II               | 5                  | 1.0     | 3, 4                   | Annual               | by request         | Yuji Funakoshi                | Students study at foreign university or enroll in an approved international program regarding medical related field.   | Only Medical Sciences students. Lectures are conducted in English. Online (Synchronous)  |
| HE41220       | International Forum on Medical Biology Research V   | 0                  | 1.0     | 2 - 4                  | Annual               | by request         | Kazuya Morikawa               | 国際学会参加や短期間の調査研究をとおして、海外の担当者あるいは研究者と意見交換し、国際的な研究の動向を把握し、自身のキャリアに活かす。  | Only Medical Sciences students. Lectures are conducted in English. face-to-face  |
| HE41225       | Training Abroad on Medical Biology III              | 5                  | 1.0     | 3, 4                   | Annual               | by request         | Yuji Funakoshi                | Students study at foreign university or enroll in an approved international program regarding medical related field.   | Only Medical Sciences students. Lectures are conducted in English. Online (Synchronous)  |

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|---------------|---|--------------------|---------|-------------------------|----------------------|--------------------|--------------------------------------|---|--|
| HE41241       | Genetic Testing and Chromosome Analysis | 1                  | 1.0     | 3                       | SprBC                | by request         | Emiko Noguchi, Hiroko Miyadera, 綾 川崎 | Students will learn the basic knowledge of DNA, chromosome and genetics of the diseases through lectures and e-learning. The date of the classes will be announced. The instructor will provide materials (handout, text and e-learning materials) and students are expected to learn the materials prior to the class. At the class, the instructor and students will discuss the contents of the materials provided and students will take short tests. | This course for English program students. Lecture is conducted in English. Details will be announced. Lectures are conducted in English. Details will be announced. face-to-face |