

Doctoral Program in Clinical Sciences

Common Subjects

Course Number	Course Name	Instru- ctional Type	Credit s	stand- ard regist- ration year	Term	Meeting Days, Per- iod etc.	Classro- om	Instructor	Course Overview	Remarks
02EX002	Introduction to Medical Research	1	1.0	1, 2	SprAB	by appointment		Chair and Chief of the Academic Committee of Clinical Sciences, Arai Tetsuaki, Hashimoto Koichi, Tsurushima Hideo, Hasegawa Yuichi, Arakawa Yoshihiro	This course provides the opportunities for the students to learn the essential knowledge of the physical- and chemical-hazard, bio-hazard, information security, research ethics, and legal requirements, and also to understand how to use the research facilities and equipments on biomedical research.	Compulsory Online (Asynchronous) Hybrid or Others
02EX003	Seminar in Medical Sciences	2	3.0	1, 2	Annual	by appointment		Chair and Chief of the Academic Committee of Clinical Sciences	Students attend 3 or more designated "seminars in medical sciences" and participate in discussion. In addition, students will deepen their understanding by reading original research papers in a related field, by conducting a discussion about its contents with their advising faculty, and by writing papers.	Compulsory Online (Asynchronous) Hybrid or Others
02EX004	Special Studies on Medical Sciences	2	2.0	1, 2	Annual	by appointment		Chair of Clinical Sciences, Research supervisors	Students learn fundamental knowledges required to set their PhD research subjects and how to obtain them under the instruction of their research supervisors. Then the students determine their research subjects as well as the methods to fulfill their research questions. The students then submit necessary applications for the PhD research, and make up a prospect for completing the dissertation.	Compulsory Hybrid or Others
02EX005	Special Practice in Medical Sciences	2	5.0	1, 2	Annual	by appointment		Chair of Clinical Sciences, Research supervisors	Students will learn how to analyze the research results and to understand the significance of the results under the supervision of professors. Students will also plan and perform the next research process and repeat this cycle.	Compulsory Hybrid or Others
02EX007	International Practical in Medical in Sciences	1	3.0	1 - 4	Annual	by appointment		Chiba Shigeru	Through presentations of research results at international academic conferences and training abroad, students will acquire language ability and learn presentation methods while experiencing internationally recognizable research by holding discussions with researchers overseas. Furthermore, students will participate actively in discussion and educational research abroad as well as practice teaching in English.	Lecture is conducted in English.
02EX008	Seminar in Clinical Research	2	3.0	1, 2	Annual	by appointment		Chair of Clinical Sciences, All faculty members	To obtain the fundamental knowledge required to conduct clinical studies, students will read original research and review papers and become proficient in explaining their contents. In addition, students will learn how to apply such knowledge to their own research theme.	
02EX009	Advanced Seminar in Medical Sciences	1	3.0	1, 2	Annual	by appointment		Arai Tetsuaki, Faculty in Clinical Sciences	Students will attend lectures about the new concepts and technologies underlying research in the post-genome-era medical and biological sciences and will engage in discussions on their contents.	
02EX010	Lecture on Critical Path Research Management	1	2.0	1, 2	FallABC	Mon6, 7	4F204	Hashimoto Koichi, Tsurushima Hideo, Negoro Hiromitsu	This course aims to equip students with an understanding of the process of critical path research and translational research, so as to translate basic research findings more quickly and efficiently into medical practice.	Lecture is conducted in English.

02EX011	Training in Medical Science Education	3	1.0	2, 3	Annual	by appointment		Chair of Clinical Sciences, Research supervisors	In this subject, students firstly need to understand i) the objectives of the student education of this Doctoral Program, and ii) the role of each course toward achieving the objectives. Then, the students will join in iii) preparing the syllabus of a certain course together with supervisors, iv) give lecture in the course, and v) evaluate participants in the course. The students will be evaluated by the participants of the course which you will join in.	
02EX013	Communication with foreign medical professionals	2	2.0	1, 2	Fall/ABC	Tue6	4G121	Wagatsuma Yukiko	This discussion seminar is open to all students in the medical program including international students. We will read current issue articles in publications such as Nature, and students will be encouraged to think about and express opinions about those issues. The focus will be the medical field and how it connects to broader social, economic, and political matters.	医学学系棟121で実施。 Lecture is conducted in English.
02EX014	English Topics in Science I	2	1.0	1 - 4				Chair of Clinical Sciences	To reinforce English vocabulary and fluency in discussing scientific concepts in a diverse array of research fields while introducing cutting edge technologies. Students will develop critical thinking and questioning skills for use in conferences, presentations and daily scientific work.	TBA Lecture is conducted in English. Not open in 2021.
02EX015	English Topics in Science II	2	1.0	1 - 4				Chair of Clinical Sciences	To reinforce English vocabulary and fluency in discussing scientific concepts in a diverse array of research fields while introducing cutting edge technologies. Students will develop critical thinking and questioning skills for use in conferences, presentations and daily scientific work.	TBA Lecture is conducted in English. Not open in 2021.

Specialized Sciences

Course Number	Course Name	Instruc-tional Type	Credits	stand-ard registration year	Term	Meeting Days, Per-iod etc.	Classro-om	Instructor	Course Overview	Remarks
02EX259	Special Studies on Clinical Sciences	2	2.0	1, 2	Annual	by appointment		Chair of Clinical Sciences, Research supervisors	To decide their future research direction and to finally prepare for publication of their research in a biomedical journal, students will study through practical discussion on the background, purpose, methods, results, discussion, and conclusions of ongoing research in each group.	Compulsory
02EX260	Lecture and Discussion in Clinical Pathophysiology I	1	2.0	1, 2	Spr/ABC	by appointment		Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Ito Hiroyuki, Miyamoto Norimasa, Kaneko Shin, Kaneda Tomohiro, Kuno Atsushi, Sumaru Kimio, Tateno Hiroaki	The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.	

02EX261	Lecture and Discussion in Clinical Pathophysiology II	1	2.0	1, 2	Fall IABC	by appointment	<p>Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Ito Hiroyuki, Narimatsu Hisashi, Miyamoto Norimasa</p>	<p>The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.</p>	
02EX262	Seminar in Clinical Pathophysiology I	2	2.0	1, 2	SprABC	by appointment	<p>Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Narimatsu Hisashi, Miyamoto Norimasa, Ito Hiroyuki</p>	<p>The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.</p>	

02EX263	Seminar in Clinical Pathophysiology II	2	2.0	1. 2	Fall IABC	by appointment	<p>Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Narimatsu Hisashi, Miyamoto Norimasa, Ito Hiroyuki</p>	<p>The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.</p>	
02EX264	Practice in Pathophysiology I	3	2.0	1. 2	SprABC	by appointment	<p>Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Narimatsu Hisashi, Miyamoto Norimasa, Ito Hiroyuki</p>	<p>The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.</p>	

02EX265	Practice in Pathophysiology II	3	2.0	1, 2	Fall/ABC	by appointment	Arai Tetsuaki, Sato Shinji, Sakurai Hideyuki, Isobe Tomonori, Tachikawa Hirokazu, Tanaka Makoto, Inoue Yoshiaki, Homma Masato, Maeno Tetsuhiro, Yokoyama Shoji, Kobayashi Hiroyuki, Wagatsuma Yukiko, Goshō Masahiko, Hashimoto Koichi, Arakawa Yoshihiro, Koyanagi Tomoyoshi, Matsusaka Satoshi, Narimatsu Hisashi, Miyamoto Norimasa, Ito Hiroyuki	The aim of this course is to provide methods to access the pathophysiology of a variety of diseases. Each listed professor will organize specific lectures and opportunities for discussion.
02EX270	Lecture and Discussion in Surgery I	1	2.0	1, 2	Spr/ABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru, Hada Yasushi, Suzuki Yasuyuki	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.
02EX271	Lecture and Discussion in Surgery II	1	2.0	1, 2	Fall/ABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.

02EX272	Seminar in Surgery I	2	2.0	1, 2	SprABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.	
02EX273	Seminar in Surgery II	2	2.0	1, 2	FallABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.	
02EX274	Practice in Surgery I	3	2.0	1, 2	SprABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Matsumura Akira, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.	
02EX275	Practice in Surgery II	3	2.0	1, 2	FallABC	by appointment	Nishiyama Hiroyuki, Oda Tatsuya, Hiramatsu Yuji, Yamazaki Masashi, Sato Yukio, Masumoto Koji, Sekido Mitsuru, Hara Hisato, Satoh Toyomi, Hamada Hiromi, Komatsu Yoji, Matsumaru Yuji, Oshika Tetsuro, Tabuchi Keiji, Bukawa Hiroki, Yanagawa Toru	The aim of this course is to provide methods to conduct research in surgery. Each listed professor will organize specific lectures and opportunities for discussion.	

02EX280	Lecture and Discussion in Internal Medicine I	1	2.0	1, 2	SprABC	by appointment	<p>Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, Koike Akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimano Hitoshi, Yagyu Hiroaki, Matsuzaka Takashi, Kawakami Yasushi, Takada Hidetoshi, Horigome Hitoshi, Sekine Ikuo, Hitomi Shigemitsu, Kaneko Shin, Nomura Toshifumi, Suzuki Hiromichi</p>	<p>The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.</p>	
02EX281	Lecture and Discussion in Internal Medicine II	1	2.0	1, 2	Fall/ABC	by appointment	<p>Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, Koike Akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimano Hitoshi, Yagyu Hiroaki, Matsuzaka Takashi, Kawakami Yasushi, Takada Hidetoshi, Horigome Hitoshi, Hitomi Shigemitsu, Sekine Ikuo, Kaneko Shin, Nomura Toshifumi, Suzuki Hiromichi</p>	<p>The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.</p>	

02EX282	Seminar in Internal Medicine I	2	2.0	1, 2	SprABC	by appointment	<p>Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, Koike Akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimo Hitoshi, Yagyu Hiroaki, Matsuzaka Takashi, Kawakami Yasushi, Takada Hidetoshi, Horigome Hitoshi, Hitomi Shigemi, Sekine Ikuo</p>	<p>The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.</p>	
02EX283	Seminar in Internal Medicine II	2	2.0	1, 2	Fall IABC	by appointment	<p>Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, Koike Akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimo Hitoshi, Yagyu Hiroaki, Matsuzaka Takashi, Kawakami Yasushi, Takada Hidetoshi, Horigome Hitoshi, Hitomi Shigemi, Sekine Ikuo</p>	<p>The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.</p>	

02EX284	Practice in Internal Medicine I	3	2.0	1, 2	SprABC	by appointment	Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, koike akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimo o Hitoshi, Yagyu Hiroaki, Matsuza ka Takashi, Kawakam i Yasushi, Takada Hidetoshi, Horig ome Hitoshi, Hitomi Shigemi, Sekine Ikuo	The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.
02EX285	Practice in Internal Medicine II	3	2.0	1, 2	FallABC	by appointment	Chiba Shigeru, Shoda Junichi, Ohara Makoto, Aonuma Kazutaka, Ieda Masaki, koike akira, Nogami Akihiko, Homma Satoshi, Miyauchi Takashi, Hizawa Nobuyuki, Ishii Yukio, Satoh Hiroaki, Tamaoka Akira, Yamagata Kunihiro, Shimo o Hitoshi, Yagyu Hiroaki, Matsuza ka Takashi, Kawakam i Yasushi, Takada Hidetoshi, Horig ome Hitoshi, Hitomi Shigemi, Sekine Ikuo	The aim of this course is to provide students with methods to conduct research in internal medicine. Each listed professor will organize specific lectures and opportunities for discussion.
02EX293	Lecture and Discussion in Social Medicine I	1	2.0	1, 2	SprABC	by appointment	Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide	The aim of this course is to provide students with methods to conduct research in social medicine. Each listed professor will organize specific lectures and opportunities for discussion.
02EX294	Lecture and Discussion in Social Medicine II	1	2.0	1, 2	FallABC	by appointment	Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide	The aim of this course is to provide students with methods to conduct research in social medicine. Each listed professor will organize specific lectures and opportunities for discussion.
02EX295	Seminar in Social Medicine I	2	2.0	1, 2	SprABC	by appointment	Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide	The aim of this seminar is for students to understand the purpose, methods, and results of the most recent research articles on a variety of aspects in social medicine. Moderated by each supervising professor, students will discuss the significance, problems, and future directions of the study.

02EX296	Seminar in Social Medicine II	2	2.0	1, 2	FallABC	by appointment		Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide	The aim of this seminar is for students to understand the purpose, methods, and results of the most recent research articles on a variety of aspects in social medicine. Moderated by each supervising professor, students will discuss the significance, problems, and future directions of the study.	
02EX297	Practice in Social Medicine I	3	2.0	1, 2	SprABC	by appointment		Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide		
02EX298	Practice in Social Medicine II	3	2.0	1, 2	FallABC	by appointment		Yamagishi Kazumasa, Saito Tamaki, Tamiya Nanako, Kondo Masahide	The aim of this course is to provide students with the principles and methods of research in surgery. Each listed supervising professor will organize a specific field of research.	
02EX230	Methods in Clinical Trials	1	2.0	1, 2	FallAB	Tue7, 8	4F204	Wagatsuma Yukiko, Goshō Masahiko	The aim of this course is to teach students the principles and methods of clinical trials and to introduce good clinical practice (GCP).	Lecture is conducted in English. Hybrid or Others
02EX231	Biostatistics, Basic	1	1.0	1, 2	SprAB	Wed3	4F204	Goshō Masahiko, Maruo Kazushi	The aim of this course is for students to learn the methods of sampling and statistical analysis frequently used in clinical research.	
02EX292	Biostatistics, Advanced	1	2.0	1, 2	FallAB	Wed4, 5	4F305	Goshō Masahiko, Maruo Kazushi	Students will learn about survival data analysis that is essential in medical research, and they will apply the method to real clinical data.	
02EX232	Biostatistics in Practice	3	1.0	1, 2	SprA SprB	Wed5-8	4F305	Maruo Kazushi, Goshō Masahiko	This course provides practice in biostatistical analysis using a statistical analysis software.	授業時間は担当教員に確認のこと。
02EX290	Methods in Epidemiology	1	2.0	1, 2	FallAB	Tue3, 4	4F305	Wagatsuma Yukiko	The fundamental concepts and uses of epidemiology, and its role in formulating principles, are examined. Exercises are conducted in which epidemiological methods are utilized, to promote understanding of the practice of this discipline.	Compulsory Lecture is conducted in English. Hybrid or Others