Doctoral Program in Sports Medicine

■ Doctor of Philosophy in Sports Medicine

Program Educational Objectives

To train researchers and highly-skilled professionals who can contribute to sports medicine from the following perspectives and who can be accepted internationally, as well as University faculty professors who can nurture such personnel.

- Researchers and highly-skilled professionals who can contribute to the enhancement of athletic performance from a scientific perspective.
- Researchers and highly-skilled professionals who can contribute to the maintenance and promotion of health, and the prevention and improvement of diseases by evaluating the prevention of lifestyle-related diseases and aging from a scientific perspective.

Graduate Profile	Individuals who have basic knowledge of sports and health, enhancement of athletic performance, and prevention of sports injury and disease, and who are motivated to enhance their research ability in sports medicine based on this knowledge, and who can play an active role in various related fields such as support for competitive sports and sports for health.

Diploma Policy

The degree of Doctor of Philosophy in Sports Medicine is commenced to those who have fulfilled the requirements for the completion of the Doctoral programs, as set out in the Graduate School Regulations of the University of Tsukuba and related university regulations, and who are deemed to have the following competences.

	Competences	Evaluation perspectives
Knowledge and Skills	1. Knowledge creation competence: Ability to create new knowledge that can contribute to future society	①Are there any research findings that can be considered new knowledge? ②Can we expect you to create knowledge that will contribute to future society?
	2. Management competence: Ability to plan and implement measures to identify and solve challenges from a higher perspective	①Can you make and implement long-term plans for critical challenges? ②Can you identify challenges, even in other areas of expertise, and solve them from a higher perspective?
	3. Communication competence: Ability to express the true nature of academic findings positively and clearly	①Can you explain the true nature of research content and specialized knowledge clearly and logically to researchers from different areas and to people other than researchers? ②Do you proactively share your findings with researchers and experts from your field of expertise and accurately answer questions?
	4. Leadership competence: Ability to have objectives get accomplished under your leadership	①Can you set attractive and compelling goals? ②Are you capable of building systems to realize goals and accomplish objectives as the leader?
	5. Internationality competence: Possession of a high level of awareness and motivation to be internationally active and contribute to international society	①Do you have strong awareness and motivation to contribute to international society and international activities? ②Have you obtained adequate linguistic skills for international information collection and action?
	6. Research skills: Ability to conduct original research in sports medicine	①Do students have original research results in sports medicine? ②Can students be expected to contribute to the development of sports medicine?
	7. Expertise: Advanced and specialized knowledge and operational skills in sports medicine	①Do students have cutting-edge and advanced expertise in sports medicine? ②Do students have research findings related to sports medicine?

	Competences	Evaluation perspectives
Knowledge and Skills	8. Ethics: High ethical standards and ethical knowledge appropriate for a researcher or highly-skills professional	①Can students engage in research based on high ethical standards and ethical knowledge? ②Can students conduct research activities with integrity and responsibility?
	9. Interdisciplinarity: Ability to fully demonstrate the interdisciplinary characteristics of sports medicine	①Can students engage in research that demonstrates the interdisciplinary characteristics of sports medicine? ②Do students have interdisciplinary research results in sports medicine?
Guidelines for Assessing Learning Outcomes	The assessment of learning outcomes objectively confirms and evaluates the acquisition status of competences based on the Diploma Policy at each of the following stages, using an achievement evaluation based on the “Achievement Evaluation Sheet（Rubric)”. The stages and methods of this evaluation are outlined below. The evaluation of learning outcomes is conducted by confirming and assessing the acquisition status of competences based on the Diploma Policy using the “Achievement Evaluation Sheet (Rubric)”. Evaluation Subjects and Methods: Competence evaluation is based not only on coursework grades but also on research presentations, oral examinations, daily research activities, and research outcomes (conference presentations, published papers). Evaluation Timing and Framework: Evaluations are conducted at four stages prior to degree completion (Research Proposal Presentation, Interim Report Meeting, Preliminary Review, and Final Review). In addition to assessments by the main supervisor, during the final examination, the main and sub-supervisors collaborate to conduct the review based on the Achievement Evaluation Sheet. Subsequently, a final achievement review is conducted by all faculty members at the Educational Council.	

Evaluation Criteria for Degree Theses/ Dissertations	After satisfying the requirements prescribed in School Regulations of the University of Tsukuba, the doctoral dissertation must be approved as valid regarding the following evaluation items and judged as a pass in the final examination. (Evaluation items) 1. Based on understanding of domestic and international research trends and previous research in related fields, the significance and position of the research in the field of sports medicine must be clearly described. 2. Appropriate amount of original research results that contribute to development of the field of sports medicine must be contained as a dissertation. 3. Reliability of research results must be sufficiently verified based on sufficient knowledge regarding research integrity. 4. Discussion for the research results must be reasonable, and the conclusions must be based on objective evidence. 5. Background, purpose, methods, results, discussion and conclusions etc. of the research must be summarized in an appropriate format as dissertation in the field of sports medicine. (Review system, review method etc.) 1. After the doctoral dissertation is completed, a preliminary examination is held to evaluate the dissertation and determine whether or not to proceed to the final examination. 2. The final examination consists of the submission of the dissertation and a question-and-answer session, and is conducted by an examination committee consisting of the primary examiner (other than the primary advisor), two associate examiners, and at least one faculty member other than the faculty member in charge of this degree program. 3. In the field of sports medicine, the criteria for passing will be that results appropriate for the doctoral degree have been obtained and the appearance is appropriate. The examination will be opened to the public.

Curriculum Policy

In addition to cultivating basic knowledge and abilities, general knowledge and abilities, and sense of ethics that form the basis of sports medicine, education and research guidance will be provided to cultivate the advanced research skills necessary to independently conduct research related to sports medicine by organizing a broad curriculum in sports medicine with faculty members belonging to the physical education, medical science, and human science departments in charge of curricula that cannot be encompassed by existing fields.

Curriculum Design Framework	– It is recommended that students take several courses from the Degree Programs' Common Courses, Interdisciplinary Courses, and Graduate General Education Courses in order to contribute to the cultivation of basic knowledge, broad perspectives, and general knowledge and abilities in related fields, with the major field of study as the axis. – The department offers General Foundation Subjects to learn knowledge and research methodologies in a wide range of sports medicine fields. In addition, Major Subjects will be arranged to study the latest sports medicine research and research methods. – Students will learn basic knowledge and research methodologies of sports medicine through “Introduction to Sports Medicine I and II” and acquire interdisciplinary and ethical perspectives. – Students will learn the research methods of the most advanced sports medicine research through “ Sports Medicine Seminar I and II” and acquire research skills and expertise. – In “ Sports Medicine Seminar III” , students learn about cutting-edge sports medicine research and career path formation from researchers active in Japan and abroad, and acquire management skills, leadership skills, internationality, and interdisciplinarity. – In “ Advanced Study for Sports Medicine Research I”, students learn the basics of doctoral dissertation writing and acquire the Competence of knowledge creation, management skills, communication skills, leadership skills, internationality, research skills, expertise, and ethics. – In “Advanced Study for Sports Medicine Research II and III, students will learn the advanced knowledge and research methods necessary to write a doctoral dissertation, and acquire the Competence of knowledge creation, communication skills, research skills, expertise, and ethics. – Students will acquire the Competence of knowledge creation, communication skills, internationality, research skills, expertise, and ethics through presentations at academic conferences in Japan and abroad. – Students will acquire the Competence of knowledge creation, internationality, research skills, expertise, and ethics by writing papers in academic journals. – Students will acquire leadership, management, and communication skills by planning and organizing doctoral dissertation presentations for prospective degree recipients.

Teaching and Learning Methods	– In the first year, students learn basic knowledge and abilities related to sports medicine, general knowledge and abilities, and ethics, and are required to plan a doctoral dissertation and start research. In the second year and thereafter, students will learn more specialized sports medicine and is able to be guided in their research. – In the first year, students take the Graduate General Education Courses “Introduction to Sports Medicine I and II” to learn the basic knowledge of sports medicine and research methodology. – In the first year, students take “ Advanced Study for Sports Medicine Research I” to plan their doctoral dissertation. In this course, they present their research plan for the doctoral dissertation and receive research guidance from their advisors. – In the first and second years, students take “ Sports Medicine Seminar I and II” to learn about the latest sports medicine research and research methods, and apply them to their own research. – In the first, second, and third years, students take “Sports Medicine Seminar III” to learn not only the latest sports medicine research but also career path formation. – In the “Advanced Study for Sports Medicine Research II and III” in the second and third years, students receive research guidance for their doctoral dissertations from their advisors.

Admission Policy

Desired Student Profile	Students are expected to have knowledge of sports and health, athletic performance enhancement, sports injury prevention, and disease prevention, and to have a desire to enhance their research ability in sports medicine based on this knowledge, and to play an active role in related fields such as competitive sports and sports for health.
Student Selection Process	– In the entrance examination, knowledge of sports medicine and willingness to study will be comprehensively evaluated through an English examination and an oral examination of past research and future research plans. – Although there will be no special entrance examinations or course-taking considerations for working adults, we actively welcome working adult students, who are generally highly motivated and possess a strong sense of purpose.

Learning Support Framework

Academic Support	This program provides individualized research guidance, editing support for thesis writing, and presentation coaching for academic conference presentations from supervisors. Supervisors also assist with English proofreading and writing, and provide career counseling to help students set learning goals and manage their studies. The program also hosts seminars that invite graduates of the degree program to support both research and career development, fostering an environment for valuable exchange.

Opportunities for Peer Interaction	Regular research presentations are held to provide students with opportunities to share their research findings. Through the Q&A sessions and feedback from students in different fields, they gain new perspectives and improve the quality of their research. Additionally, this program creates opportunities for students to interact with peers and faculty from other universities, beyond the confines of their own lab or university. This not only deepens their knowledge outside their specialized field but also allows them to explore the possibility of collaborative research.
Opportunities for Student–Faculty Interaction	Professors set office hours to create an environment where students can feel free to consult on research and ask questions. Additionally, supervisors and students hold regular meetings to not only confirm research progress but also to address personal concerns regarding their studies and career paths. The degree program holds regular research progress report meetings to provide students with opportunities to present their research and interact with professors from different fields.

Approaches to Assuring and Enhancing Educational Quality

The Curriculum Committee evaluates PhD student learning outcomes to verify the validity of the curriculum and the appropriateness of academic supervision. Furthermore, a joint committee comprising the Curriculum Committee and the Research Promotion Committee is established to continuously monitor and improve overall educational activities. This ensures the quality of education and strengthens the framework for achieving the objectives of the degree program.