

Category (科目区分)	Research subject		
Course Title (授業科目名)	Integrative Physiology		
Instructors (担当者名)	Tomohiro Numata	Academic Year (配当年次)	2,3
Required Course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	15
Class Format (授業形態)	experimental practice		
Schedule (開講期間)	Students will be notified by email after completing the course registration.		
Class Date/Period (開講曜日・時間)	Students will be notified by email after completing the course registration.		
Course Outline/ Course Objectives (授業の概要・到達目標) Purpose of the class: To acquire scientific inquiry and logical thinking through presenting experiments and research results after receiving knowledge, techniques, and manners necessary for basic research life. The purpose of this course is to establish a foundation for autonomous learning that leads to lifelong learning by combining training to teach knowledge and skills acquired by medical professionals. Achievement goal of class: The goal is subject to acceptance in international academic journals. Students must have research knowledge, experimental techniques, and philosophies and have the ability to write and present their dissertations on their research content. Outline of the class: This course comprehensively studies ion channels that underlie physiological responses and regulation at multiple levels, including molecules, cells, tissues, and animals. Students will explain their research results to the world through participation and presentations at domestic and international academic conferences. In addition, we hold journal clubs and research progress report meetings regularly to develop presentation and communication skills. Encourage participation in joint research with universities and research institutes in Japan and overseas, and gain research experience at other facilities. Through these experiences, students will master research minds and programs of autonomous learning to learn the basics of lifelong learning.			
Contact Information (問い合わせ先(氏名, メールアドレス等))			
Name: Prof. Tomohiro Numata / E-mail: numata@med.akita-u.ac.jp			
Coment (その他特記事項)			
Information on enrollment: For working graduate students and others who are unable to attend the practical training due to work or other commitments, the schedule can be adjusted to include remote lectures and discussions. We accept participation from a wide range of fields, not only from the field of medicine. Textbooks and References: Textbooks and References: "Standard Physiology" Igaku Shoin			