

Category (科目区分)	Cluster common basic subjects		
Course Title (授業科目名)	Basic medical technology training “learning photo-inducible chemical experiments”		
Instructors (担当者名)	Tomohiro Numata	Academic Year (配当年次)	1
Required Course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	1
Class Format (授業形態)	Lecture		
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)	Every Monday from 18:00 to 21:30 (schedule details on request)		
Course Outline/ Course Objectives (授業の概要・到達目標)			
Purpose of the class: The goal of the course is to experience photo-inducible chemical experiments and understand biomedical engineering technology.			
Achievement goal of class: The purpose is to experience photo-inducible chemical experiments and learn and practice cell excitement and its physiological response technology.			
Class outline:			
1. Learn about photoinducible compounds.			
2. Localize photo-inducible chemicals by drug delivery technology.			
3. Functionally assess cell excitement.			
4. Evaluate physiological responses such as endocrine and neural excitement induced by cell excitement.			
Course Planning (授業計画)			
	Course Outline/ Course Objectives(授業の概要及び到達目標) (Contents of Class) ( (授業内容) )	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
1	Experiments to adjust experimental conditions for photoinduced compounds	Tomohiro Numata	Department of Integrative Physiology [ Research Building for Basic Medicine, 5th floor Seminar Room ]
2			
3	Experiments for the preparation of drug delivery compounds		
4			
5			
6	Experiments for cell localization of photoinducible compounds		
7			
8	Experiments for recording physiological responses by light stimulation		
9			
10			
Grading Criteria (成績評価の基準と方法)			
Thirty hours of practical training and 15 hours of self-study in the seminar room, a total of 45 hours, will be used for one unit.			
Grades will be considered by attendance, examination results, and reports.			
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 about courses: If you cannot attend the training due to work, such as working graduate students, we will adjust the schedule, including remote lectures and discussions.			
We accept participation not only from the medical field but also from a wide range of fields.			
Textbooks / References: Textbooks / References: “Standard Physiology” Igaku-Shoin			