

<b>Category</b> (科目区分)	Cluster Common Basic Subjects		
<b>Course Title</b> (授業科目名)	Introduction to Life Science Research		
<b>Instructors</b> (担当者名)	Academic Affairs Chair	<b>Academic Year</b> (配当年次)	1
<b>Required Course / Elective Course</b> (必修/選択)	Required Course	<b>Credits</b> (単位数)	2
<b>Class Format</b> (授業形態)	WebClass		
<b>Schedule</b> (開講期間)	From around late April 2026 to December 31, 2026		
<b>Class Date/Period</b> (開講曜日・時間)	—		
<b>Course Outline/ Course Objectives</b> (授業の概要・到達目標)			
The objective of this course is to understand the main principles and theories of analytical techniques used in life science research, and to master and practice the application of experimental techniques to medical science.			
<b>Course Planning</b> (授業計画)			
	<b>Course Outline/ Course Objectives</b> (授業の概要及び到達目標) ( <b>Contents of Class</b> ) (授業内容)	<b>Instructor</b> (担当教員名)	<b>Department</b> (講座名)
1	Research Ethics Education Plan for Graduate Students at AKITA University –eAPRIN e-learning program (CITI Japan)	—	—
2	How to utilize computers for medical science research –Principles, applications, and security of computers –	Masayuki Katahira	Department of Medical Informatics
3	How to search literature in life science research. This class will show you how to search literatures in the database, such as PubMed.	Yoshihiro Matsumura	Department of Biochemistry and Metabolic Science
4	How to Make a Notebook for Experiments –How to keep clear and detailed notes	Kota Saito	Department of Pharmacology
5	Laboratory safety and waste disposal	Yoshihiro Iwata	Faculty of Education and Human Studies, Akita Univ.
6	How to effectively use the Bioscience Education and Research Support Center	Takashi Ebihara	Department of Biochemistry and Metabolic Science
7	Radioisotope for Radiation Worker	Yuki Wada	Department of Radiology
8	Guide for the Care and Use of Laboratory Animals I (Law, ethics, application to start, etc.)	Shinsuke Seki	Division of Experimental Animal
9	Introduction to Animal Experiments II (Research Methods, etc.)	Satoshi Ishii	Department of Immunology
10	Immunohistochemistry. Principles and applications.	Makoto Yoshida	Occupational Therapy (Department of Quantitative Pathology)
11	Approach to studying by using biological sample	Masatomo Miura	Department of Pharmacokinetics
12	About Intellectual Property Management	Yumi Kariya	Organization for Promotion of Industry–Academia Collaboration Intellectual Property Division
13	Life Science Research, Industry–Academia Collaboration and Patents	Shunsuke Wakayama (part-time work)	(Nagashima International Patent Firm)
14	Responsible Research Conduct –Research Plan from the Goal	Ryoji Suzuki	Department of Anatomy
15	Basics of aseptic technique in the lab	Sei Kuriyama	Department of Molecular Biochemistry

**Grading Criteria** (成績評価の基準と方法)

Grades will be based on the content of submitted reports.

**Contact Information** (問い合わせ先(氏名, メールアドレス等))

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**Comment** (その他特記事項)

Information about the course of study : Please watch the lectures by yourself via WebClass.  
However, especially the first research ethics education (e APRIN) must be taken by December 31 of the first year. Viewing period: Late April – December 31  
Textbooks and references: None in particular  
Study content during self-study time: It is advisable to conduct preparatory study according to the achievement objectives and class content.