

Course number		U-LAS14 20066 SE68					
Course title (and course title in English)	Biological Sciences through Scientific Articles I-E2				Instructor's name, job title, and department of affiliation	Graduate School of Science Associate Professor, TAKENAKA, Mizuki	
	Biological Sciences through Scientific Articles I-E2						
Group	Natural Sciences			Field(Classification)	Biology(Issues)		
Language of instruction	English			Old group	Group B	Number of credits	2
Number of weekly time blocks	1	Class style	seminar (Face-to-face course)		Year/semesters	2026 • First semester	
Days and periods	Tue.5		Target year	Mainly 1st & 2nd year students	Eligible students	For all majors	
[Overview and purpose of the course]							
Genome editing is one of the hottest topics in modern biology. Various genome editing technologies have been developed and applied to basic science, industry, and medicine. In this seminar, we will read several papers on genome editing in English to discuss the technical background, history, and applications of genome editing. If necessary, supporting information such as scientific background, history, and experimental methods will be provided. 【内容説明】ゲノム編集は現代生物学で最も注目される分野のひとつである。これまで様々なゲノム編集技術が開発され、基礎科学や産業、医療に応用されている。本セミナーでは、ゲノム編集に関するいくつかの英文論文を読み、ゲノム編集の歴史や技術的背景、応用などについて英語で議論する。論文にのっていない科学的背景や歴史、実験手法の詳細などは必要に応じてセミナー中に説明する。							
[Course objectives]							
Students will learn how to read scientific reviews, essays, and articles. To grasp the essence of the article and summarize it efficiently. To find interesting points in scientific articles. To find complementary articles if necessary. To read articles critically and purposefully. Students will understand the background of gene editing technology.							
[Course schedule and contents)]							
1) In the first week, I will give an instruction of the seminar course. I will discuss an article to show the style of presentation. Then I provide an article on gene editing technology. 2) Brief lecture on the background knowledge of gene editing. 3)-14) Each student prepares a presentation about the article with my support if necessary and presents it at the seminar in turn. Other students are expected to actively participate in the discussion. Complementary information for the article will be provided as needed. We will read 4-5 articles in a semester. 15) I will provide a course summary for the feedback session.							
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Biological Sciences through Scientific Articles I-E2(2)

[Course requirements]

This course is open to all students, BUT it is recommended that students have at least a high school "basic biology" level of knowledge.

[Evaluation methods and policy]

Class attendance and active participation (70%), presentation following questions and answer session (30%).

[Textbooks]

Instructed during class

Several recently published biological articles especially on gene editing will be provided as candidates at the first lesson. We will read 4-5 articles in a semester.

[Study outside of class (preparation and review)]

Students should read the provided article in advance.

[Other information (office hours, etc.)]

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Any questions and requests are welcome by prior arrangements via E-mail.

[Essential courses]

Faculty of Science