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| <b>Course number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                       | U-LAS51 10014 SB48 |                                  |                                                                                |                                                                              |                          |                      |
| <b>Course title<br/>(and course<br/>title in<br/>English)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 科学コミュニケーションの基礎と実践 (薬・英) A-E3                                                                          |                    |                                  | <b>Instructor's<br/>name, job title,<br/>and department<br/>of affiliation</b> | Graduate School of Pharmaceutical Sciences<br>Senior Lecturer,MACPHERSON TOM |                          |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Theory and Practice in Scientific<br>Writing and Discussion (Pharmaceutical<br>Sciences, English)A-E3 |                    |                                  |                                                                                |                                                                              |                          |                      |
| <b>Group</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Career Development                                                                                    |                    | <b>Field(Classification)</b>     |                                                                                | International Communication                                                  |                          |                      |
| <b>Language of<br/>instruction</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Japanese and English                                                                                  |                    | <b>Old group</b>                 | Group C                                                                        |                                                                              | <b>Number of credits</b> | 2                    |
| <b>Number of<br/>weekly<br/>time blocks</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1                                                                                                     | <b>Class style</b> | Seminar<br>(Face-to-face course) |                                                                                | <b>Year/semesters</b>                                                        | 2026 • First semester    |                      |
| <b>Days and<br/>periods</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mon.4                                                                                                 |                    | <b>Target year</b>               | 2nd year students or above                                                     |                                                                              | <b>Eligible students</b> | For science students |
| <b>[Overview and purpose of the course]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| <p>Science isn ' t just about discovery; it ' s about how we share it.</p> <p>This course explores how scientists use language to describe, explain, and persuade.<br/>Students will learn the foundations of scientific English; from key vocabulary, symbols, and units to the structure of lab reports, presentations, and research papers.<br/>Through lectures, examples, and practical exercises, you ' ll uncover how Latin and Greek roots shape modern scientific terms, how to describe experiments clearly, and how to present findings with precision and confidence.</p> <p>By the end, you ' ll not only understand how scientific communication works but also develop the skills to write, speak, and think like a scientist, in English.</p> |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| <b>[Course objectives]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| <p>Students will gain a basic understanding of the structure and vocabulary of scientific English.<br/>Students will learn to read and write scientific reports in the structure used in English-language scientific journals.<br/>Students will learn to orally communicate scientific concepts and findings.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| <b>[Course schedule and contents)]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| 1. What is scientific English?<br>2. Units, Sizes, and Dimensions<br>3. Chemicals and Formulas<br>4. Latin and Greek roots of modern scientific English<br>5. Position, Movement, Action, and Direction<br>6. Experimental Setups in Biology and Chemistry<br>7. Mid-term exam + Feedback,<br>Explanation of Class Presentations<br>8. Key scientific vocabulary and phrasing<br>9. How to structure a lab report/scientific article<br>10. How to give a scientific talk<br>11. Scientific English in TV/Film/Media pt.1<br>12 - 15. Final Exam (Class Presentations)<br>16. <u>Feedback</u> - - - - -                                                                                                                                                       |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |
| Continue to 科学コミュニケーションの基礎と実践 (薬・英) A-E3(2)↓↓↓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                       |                    |                                  |                                                                                |                                                                              |                          |                      |

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### [Course requirements]

This is an introductory course and prior knowledge of the topic is not necessary. All essential knowledge for the class and exams will be provided in class. Students need only to be interested in learning about scientific communication in English.

### [Evaluation methods and policy]

Attendance and Participation 20%.

Midterm exam (Multiple Choice) 30%.

Final examination; Press Release (Short Written Report) 25%, Flash Talk (Short Oral Presentation) 25%

### [Textbooks]

Anthony FW FOONG 『Comprehensive Scientific English (A) 4th Edition』 (IMEX. Japan) ISBN:978-4-9905790-2-9 (4th edition, April 2020)

OpenStax Biology, Anatomy and Physiology, Chemistry and Physics, freely available to download at the URL below.

### [References, etc.]

#### (References, etc.)

Introduced during class

#### (Related URL)

<https://openstax.org/details/books/biology-2e>

### [Study outside of class (preparation and review)]

Review from the textbook, listening exercises on the CDs, and preparation for assignments to be presented in class.

### [Other information (office hours, etc.)]

The contents of the syllabus are a guide to the content of the course, the exact content may change. Input and suggests from students are very welcome and I am happy to discuss the course material with students via email or in-person meeting.

### [Essential courses]

Faculty of Pharmaceutical Sciences, Pharmaceutical Sciences, Faculty of Pharmaceutical Sciences, Pharmacy