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|---|------------------|--|----------------------------------|--|--------------------------|---|---|
| <b>Course number</b>  |                  | U-LAS14 20051 LE68                               |                                  |  |                          |   |   |
| <b>Course title<br/>(and course title in English)</b>   |                  | Basic Plant Science-E2<br>Basic Plant Science-E2 |                                  | <b>Instructor's name, job title, and department of affiliation</b> |                          | Graduate School of Agriculture<br>Associate Professor,Garry John PILLER |   |
| <b>Group</b>  | Natural Sciences |  |                                  | <b>Field(Classification)</b>                                       |                          | Biology(Issues)   |   |
| <b>Language of instruction</b>  | English          |  |                                  | <b>Old group</b>   | Group B                  | <b>Number of credits</b>  | 2 |
| <b>Number of weekly time blocks</b>   | 1                | <b>Class style</b>                               | Lecture<br>(Face-to-face course) |  | <b>Year/semesters</b>    | 2025 • First semester   |   |
| <b>Days and periods</b>   | Mon.2            |  | <b>Target year</b>               | Mainly 1st & 2nd year students                                     | <b>Eligible students</b> | For science students  |   |
| <b>[Overview and purpose of the course]</b>   |                  |  |                                  |  |                          |   |   |
| The purpose of this course is to provide a fundamental understanding of plant biology with potential applications to the fields of agriculture, horticulture, botany, food, ecology and conservation. In this course basic knowledge of flowering plant structure, function, reproduction, physiology, and genetics will be covered.  |                  |  |                                  |  |                          |   |   |
| <b>[Course objectives]</b>  |                  |  |                                  |  |                          |   |   |
| Upon successful completion of this course students will be able to: <ul style="list-style-type: none"> <li>* Identify major plant parts and function</li> <li>* Explain the fundamentals of plant physiology and reproduction</li> <li>* Collect, analyze and interpret data related to plant growth and development</li> <li>* Think critically about plant science and research</li> </ul>  |                  |  |                                  |  |                          |   |   |
| <b>[Course schedule and contents)]</b>  |                  |  |                                  |  |                          |   |   |
| Course Schedule <ol style="list-style-type: none"> <li>1. Plants &amp; People</li> <li>2. Cells, Tissues, &amp; Meristems</li> <li>3. Stems</li> <li>4. Leaves &amp; Roots</li> <li>5. Cell Function</li> <li>6. Resource Acquisition &amp; Transport Systems</li> <li>7. Respiration</li> <li>8. Photosynthesis/ Mid Term exam</li> <li>9. Life Cycles</li> <li>10. Flowers &amp; Sexual Reproduction</li> <li>11. Seeds &amp; Fruits</li> <li>12. Control of Growth &amp; Development</li> <li>13. Genetics &amp; Evolution</li> <li>14. Biotechnology</li> <li>15. End of Term Exam</li> <li>16. Feedback</li> </ol> |                  |  |                                  |  |                          |   |   |
| -----   |                  |  |                                  |  |                          |   |   |
| Continue to Basic Plant Science-E2(2)   |                  |  |                                  |  |                          |   |   |

## Basic Plant Science-E2(2)

### [Course requirements]

None

### [Evaluation methods and policy]

Grading: Class attendance, active participation & listening quizzes (20%), presentation (20%), weekly quizzes based on assigned pre-class reading materials (30%), and an end of term exam (30%)

### [Textbooks]

Not used

### [References, etc.]

( References, etc. )

Handouts and supplemental readings will be distributed electronically and/or as a hard copy in class

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

Students should read or listen to the required pre-class materials and submit any required assignment before the class, and come to class ready to participate in class activities. Typically, this will entail listening to a short video or podcast (10 min. or less), as well as reading a 2 or 3 page handout and be prepared to write answers to 1 or 2 questions about the reading material in the following class (15 to 20 minutes provided in class).

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

Open door policy during office hours, and anytime by email.

### [Essential courses]