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| Course Title                           | Introduction to Biomolecular Sciences  |
| Registration Code                      | L100080001   |
| Number of Credits                      | 2  |
| Years of Eligible Graduate Students    | 1-2  |
| Semester                               | 1st  |
| Period                                 | Mon. 1st   |
| Room                                   | C17-First lecture room (Nakamozu Campus, OPU)  |
| Instructors                            | Yoshihiro Imahori, Shinji Tanimori   |
| Office hours                           | Fri. 2nd   |
| Contact                                | <a href="mailto:imahori@plant.osakafu-u.ac.jp">imahori@plant.osakafu-u.ac.jp</a>   |
| Goals of the course                    | <p>Applied life science is a comprehensive academic field to elucidates various functions and life phenomena which every organisms (animals, plants and microorganisms) constituting the earth life system have, as well as to contribute to further development of bio science and bio technology as its applied technology.</p> <p>This lecture is the basic lecture common to major courses and aims to understand the whole picture of applied life science and social significance by the professors belonging to their majors lecturing the outline and interactionship of each specialized academic field.</p>  |
| Textbooks                              | Not specified. References and documents will be presented as needed.   |
| Books of reference                     | Be specified as needed.  |
| Allied subject                         |  |
| Homework (Preparing for the classwork) | Students must work the assignments specified in the class.   |
| Course outline                         | <p>To achieve the above target, the following lectures are held.</p> <ol style="list-style-type: none"> <li>1. Fermentation control chemistry (Kataoka)</li> <li>2. Biological resource circulation engineering (Sakamoto)</li> <li>3. Chemistry of physiologically active substance (Akiyama)</li> <li>4. Biopolymer functional science (Inui)</li> <li>5. Food metabolism nutrition (Yamaji)</li> <li>6. Food material chemistry (Kasai)</li> <li>7. Microbial function development (Kawaguchi)</li> <li>8. Biophysical chemistry (Kitamura)</li> <li>9. Biocontrol chemistry (Tanimori)</li> <li>10. Applied molecular biology (Sugimoto)</li> <li>11. Cell metabolic function (Ohta)</li> <li>12. Plant cultivation physiology (not decided)</li> <li>13. Plant molecular breeding (Koizumi)</li> <li>14. Plant biology protection (Ohki)</li> <li>15. Plant breeding engineering (Yokoi)</li> <li>16. Resource botany (Aoki)</li> <li>17. Plant development physiology (Imabori)</li> </ol> |
| Class schedule                         | 1st  |
|  | 2nd  |
|  | 3rd  |
|  | 4th  |
|  | 5th  |
|  | 6th  |
|  | 7th  |
|  | 8th  |
|  | 9th  |
|  | 10th   |
|  | 11th   |

|            |   |
|------------|---|
|            | 12th  |
|            | 13th  |
|            | 14th  |
|            | 15th  |
|            | 16th  |
|            |   |
| Evaluation | Evaluate comprehensively by the assignment specified in the class |