

| 5. 物質・生命化学系 Material Science and Biotechnology Field | | | MSB-F3 |
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| 授業科目名 Course Title | Organic Chemistry 有機化学 | 単位数 Credit | 2 |
| 担当教員 Instructor | TOKUNAGA Yuji, YOSHIMI Yasuharu, NAITO Masaya 徳永 雄次, 吉見 泰治, 内藤 順也 | 開講学期 Semester | FALL SEMESTER |
| キーワード Keywords | 有機化学, 有機合成, 有機反応 | 曜日/時限 Day & Time | Mon 3 |

| 授業概要 Course summary |
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| <p>有機反応の反応機構と有機合成に関する基礎知識を学び、また有機化合物の性質や構造について学習し、有機化学に関する知識を深める。</p> <p>Students will gain an understanding of the reaction mechanisms of organic reactions and acquire fundamental knowledge of organic synthesis, along with the properties and structures of organic compounds, thereby enhancing their comprehension of organic chemistry.</p> |
| 到達目標 Course goal |
| <p>有機反応の機構を理解し、単純な有機化合物の合成が説明できること。有機化合物の官能基の性質や有機化合物の構造を説明でき、またそれらの関係を理解すること。</p> <p>Students will develop the ability to understand the mechanisms of organic reactions and articulate the synthesis of simple organic compounds. Additionally, they will be able to explain the properties of functional groups in organic compounds, understand the structures of these compounds, and comprehend their interrelationships.</p> |
| 授業内容 Course description |
| <p>Advanced organic chemistry involving synthetic designs, reactions, and mechanisms.</p> <ol style="list-style-type: none"> 1. Photochemical reactions including light absorption and emission of organic molecules 2. Molecular structures and functionalities of organic compounds. 3. Introduction of supramolecular chemistry using organic compounds. |
| 準備学習（予習・復習）等 Preparation / Review |
| <p>In advance, carry out a review of the basic organic chemistry. We require all the review what you learned at the class. (We sometimes assign an examination or paper on the course).</p> |
| 授業形式 Class style |
| <p>講義と演習 Lectures and exercises</p> |
| 成績評価の方法・基準 Method of evaluation |
| <p>Examination (short test) and exercise reports</p> |

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| 教科書・参考書等 Textbook and material |
| 関連資料を配布する。 Prints are supplied as necessary. |
| 受講要件・予備知識 Prerequisite |
| 初歩的な化学の基礎知識が必要。 We require knowledge of the basic chemistry. |
| その他の注意事項 Note |
| 授業形態：対面 |