2025 年度シラバス

| 科目分類/Subject Categories | | | |
|-------------------------|---------------------------------|--------------------|-------------------|
| 学部等/Faculty | /工芸科学部 : /School of Science and | 今年度開講/Availability | /有:/Available |
| | Technology | | |
| 学域等/Field | /全学共通科目:/Program-wide Subjects | 年次/Year | /2年次:/2nd Year |
| 課程等/Program | /英語教育科目:/English | 学期/Semester | /後学期:/Second term |
| 分類/Category | /:/ | 曜日時限/Day & Period | /木 2 : /Thu.2 |

| 科目情報/Course Info | 科目情報/Course Information | | | | |
|-------------------|--------------------------|--------------|---------------|---------------------------|-----------------------|
| 時間割番号 | 10224201 | | | | |
| /Timetable Number | | | | | |
| 科目番号 | 10261031 | | | | |
| /Course Number | | | | | |
| 単位数/Credits | 2 | | | | |
| 授業形態 | 講義・演習:Lecture/Pra | cticum | | | |
| /Course Type | | | | | |
| クラス/Class | С | | | | |
| 授業科目名 | English for Sciences and | Humanities B | : English for | Sciences and Humanities B | } |
| /Course Title | | | | | |
| 担当教員名 | /(ガプリエル トマ) : Gabriel To | ma | | | |
| / Instructor(s) | | | | | |
| その他/Other | インターンシップ実施科 | 国際科学技術 | ゔコース提供 | PBL 実施科目 Project | DX 活用科目 |
| | 目 Internship | 科目 IGP | | Based Learning | ICT Usage in Learning |
| | | | | 0 | 0 |
| | 実務経験のある教員によ | | | | |
| | る科目 | | | | |
| | Practical Teacher | | | | |
| 科目ナンバリング | | | | | |
| /Numbering Code | | | | | |

授業の目的・概要 Objectives and Outline of the Course

- 日 化学分野で研究を進めていくためには、研究室や職場や学界で、様々な文化的圏の出身者と協働し、議論することが必要となる。 今後、化学専攻の学生に不可欠となるのは、専門分野の内容を自分の頭で十分に理解できる力であり、また、英語で自分の考え を効果的に伝えられるスキルである。この授業では、①基本的な英語の科学用語や正確な表現を習得し、②科学記事や論文を正 確に理解し、それについて明確な説明やプレゼンができるようになることを目指す。
- Advancing research in chemistry requires collaboration and discussion with individuals from diverse cultural backgrounds in laboratories, workplaces, and academic settings. For chemistry students, it is essential not only to develop a deep understanding of their field but also to effectively communicate their ideas in English.

This course aims to:

- 1. Equip students with fundamental scientific terminology and expressions in English.
- 2. Enhance their ability to comprehend scientific articles and papers, as well as to explain and present their content clearly.

学習の到達目標 Learning Objectives

- 日 基本的な英語の科学用語や表現を正確に発音できるようになる。
 - 化学や関連分野の学術的な文章を読み、理解できる力を養う。
 - 自分で情報を収集して検証し、批判的に考察する。
 - 口頭発表やポスター発表を通して、自身の考えを自信をもって発表する。

英 Pronounce basic English scientific terms and expressions accurately.
Improve their ability to read and comprehend academic texts in chemistry and related scientific fields.
Develop skills in gathering, verifying, and critically analysing information.
Build confidence in presenting ideas through oral and poster presentations.

| 学習目標の達成度の評価基準 / Fulfillment of Course Goals (JABEE 関連科目のみ) | | |
|--|--|--|
| 日 | | |
| 英 | | |

| 授業 | 計画項 | 頁目 Course Plan | |
|-----|-----|--|--|
| No. | | 項目 Topics | 内容 Content |
| 1 | 日 | The orientation of the course | The orientation of the course |
| | 英 | The orientation of the course | The orientation of the course |
| 2 | 日 | Organic matter and inorganic | Organic matter and inorganic matter. Density. (p.70-73) |
| | | matter. Density. (p.70-73) | |
| | 英 | Organic matter and inorganic | Organic matter and inorganic matter. Density. (p.70-73) |
| | | matter. Density. (p.70-73) | |
| 3 | 日 | How to burn matter. Oxygen. | How to burn matter. Oxygen. Carbon dioxyde.(p.74-p.79) |
| | | Carbon dioxyde.(p.74-p.79) | |
| | 英 | How to burn matter. Oxygen. | How to burn matter. Oxygen. Carbon dioxyde.(p.74-p.79) |
| | | Carbon dioxyde.(p.74-p.79) | |
| 4 | 日 | How to dissolve matter. | How to dissolve matter. Strength of water solutions. Change of states and |
| | | Strength of water solution. | temperatures.(p.80-85) |
| | | Etc. (p.80-85) | |
| | 英 | How to dissolve matter. Etc. | How to dissolve matter. Strength of water solutions. Change of states and |
| | | (p.80-85) | temperatures.(p.80-85) |
| 5 | 日 | Distillation. Decomposition. | Distillation. Decomposition. Oxidation and deoxidation. (p.86-91) |
| | | Oxidation and deoxidation. | |
| | | (p.86-91) | |
| | 英 | Distillation. Decomposition. | Distillation. Decomposition. Oxidation and deoxidation. (p.86-91) |
| | | Oxidation and deoxidation. | |
| | | (p.86-91) | |
| 6 | B | Atoms and molecules. | Atoms and molecules. Law of conservation of mass. Atomic structure and ions. (p.92- |
| | | Etc.(p.92-97) | 97) |
| | 英 | Atoma and molecules. Etc. | Atoms and molecules. Law of conservation of mass. Atomic structure and ions. (p.92- |
| 7 | | (p.92-97) | 97) Electrolites and non-electrolites. Mechanism of chemical cells. Acid and alkali. |
| 1 | 日 | Electrolites and non- | |
| | 英 | electrolites. Etc.(p/98-106) Electrolites and non- | Neutralization. (p.98-106) Electrolites and non-electrolites. Mechanism of chemical cells. Acid and alkali. |
| | 火 | Electrolites and non- electrolites. Etc. (p.98-106) | Neutralization. (p.98-106) |
| 8 | B | Review of the course and | Review of the course and preparation for mid-term exam |
| O | П | preparation for mid-term | Neview of the course and preparation for initiation exam |
| | | exam | |
| | 苹 | Review of the course and | Review of the course and preparation for mid-term exam |
| | | preparation for mid-term | The view of the course and proparation for this term oxam |
| | | exam | |
| 9 | 日 | Mid-term exam | Mid-term exam |
| | 英 | Mid-term exam | Mid-term exam |
| 10 | B | Project step 1 : Theme setting | Project step 1 : Theme setting and Plannning |
| | | and Plannning | |
| | 英 | Project step 1 : Theme setting | Project step 1 : Theme setting and Plannning |
| | | and Plannning | - |
| 11 | 日 | Project step 2 : Gathering | Project step 2 : Gathering materials and discussion |
| | | L | L |

| | | materials and discussion | |
|----|---|--------------------------------|---|
| | 英 | Project step 2 : Gathering | Project step 2: Gathering materials and discussion |
| | | materials and discussion | |
| 12 | 日 | Project step 3 : Gathering | Project step 3: Gathering materials and discussion |
| | | materials and discussion | |
| | 英 | Project step 3 : Gathering | Project step 3: Gathering materials and discussion |
| | | materials and discussion | |
| 13 | 日 | Project step 4: Interim report | Project step 4: Interim report |
| | 英 | Project step 4: Interim report | Project step 4: Interim report |
| 14 | 日 | Project step 5 : Modifying | Project step 5: Modifying slides and posters, final adjustments |
| | | slides and posters, final | |
| | | adjustments | |
| | 英 | Project step 5 : Modifying | Project step 5: Modifying slides and posters, final adjustments |
| | | slides and posters, final | |
| | | adjustments | |
| 15 | 日 | Final presentation | Final presentation |
| | 英 | Final presentation | Final presentation |

| 履修 | 条件 Prerequisite(s) |
|----|--------------------|
| H | |
| 英 | |

授業時間外学習(予習·復習等)

Required study time, Preparation and review

- 日 本学では1単位当たりの学修時間を45時間としています。毎回の授業にあわせて事前学修・事後学修を行ってください。 参考:本科目は2単位です。
- 英 Please note that KIT requires 45 hours of study from students to award one credit, including both in-class instructions as well as study outside classes. Students are required for each class and complete the review after each class.

教科書/参考書 Textbooks/Reference Books日 ①松森靖夫監修、James Miller 執筆 『科学のキホンがこれならわかる! 新版 英語対訳で読む「理科」入門』(実業之日本社、2020年) ISBN:978-4-408-33952-8 1000円英 ①松森靖夫監修、James Miller 執筆 『科学のキホンがこれならわかる! 新版 英語対訳で読む「理科」入門』(実業之日本社、2020年) ISBN:978-4-408-33952-8 1000円

| 成績 | 成績評価の方法及び基準 Grading Policy | | |
|----|----------------------------|--|--|
| B | E-learning: 20% | | |
| | Midterm test: 30% | | |
| | Project preparation: 20% | | |
| | Final presentation: 30% | | |
| | | | |
| | | | |
| | | | |
| 英 | E-learning: 20% | | |
| | Midterm test: 30% | | |
| | Project preparation: 20% | | |
| | Final presentation: 30% | | |

| 留 | 留意事項等 Point to consider | | |
|---|--|--|--|
| 日 | 原則として、欠席が3回を超えた場合は不合格とする。 | | |
| 英 | Those who miss more than three classes are disqualified. | | |