

Scientific English Class (SEC)

1. Description

The Scientific English Class (SEC) is designed to enhance students' English proficiency in scientific contexts, equipping them with the necessary language skills to comprehend, discuss, and engage in scientific topics effectively. This course provides international students with the opportunity to attend English for Specific Purposes (ESP) classes, specifically related to scientific fields. The classes allow the students to immerse themselves in the Thai academic environment.

2. Expected Learning Outcomes

By participating in these classes, students will:

1. Develop their ability to understand scientific concepts presented in English.
2. Improve their listening and note-taking skills in scientific lessons.
3. Engage in discussions and collaborative activities with Thai peers to deepen their scientific understanding.
4. Learn to present scientific ideas clearly and accurately in English.
5. Enhance cross-cultural communication skills through academic collaboration.

3. Study Time Allocation

- Total Study Time: 12 hours (4 classes)
- Class Duration: Each class lasts 3 hours.

4. Learning Activities

4.1 Lecture-Based Learning – 30%

- Instructor-led explanations and discussions on key scientific topics.
- Introduction to scientific terminology and concepts in English.

4.2 Active Learning – 70%

- Interactive group discussions and problem-solving activities.
- Hands-on exercises, peer collaboration, and scientific debates.

Project/Task-Based Learning

- Engaging students in tasks, presentations, and written assignments related to science and technology.

Experiential Learning

- Immersive activities that simulate real-world scientific communication and collaboration.

5. Example of Topics in the Scientific English Class (SEC)

Topic	Key Focus Areas
Controversial Issues in Science and Technology	Debating ethical dilemmas (e.g., genetic engineering, AI in medicine); Evaluating the societal and environmental impact of emerging technologies.
Experimental Tasks in Science and Technology	Conducting and reporting scientific experiments in English; Understanding lab procedures, safety guidelines, and data analysis.
Writing Opinion Paragraphs in Science	Structuring and expressing viewpoints on scientific topics; Supporting arguments with evidence and logical reasoning.
Communication in Daily Science and Technology	Explaining scientific phenomena in everyday life (e.g., climate change, renewable energy); Discussing science-related news and innovations in accessible language.
Roles of AI and Innovation	Exploring AI's impact on scientific fields; Discussing the benefits and challenges of technological advancements.

Note: These topics are subject to change in accordance with the specific scientific classes students will be attending.

6. Contact Persons

1. Assistant Professor Sompatu Vungthong, Ph.D.
(Associate Dean for Academic Affairs and Quality Assurance)
Email: sompatu.vun@kmutt.ac.th
2. Mr. Woravit Seneechai
(Course Coordinator)
Email: woravit.sene@kmutt.ac.th