



Course Specification

SCC3311 English for Science Teachers

General Science Major Program, Faculty of Education,

Suan Sunandha Rajabhat University

Semester 2, Academic Year 2024

Section One: General Information

1. Code and Course Title:

Course code	SCC3311
Course Name	English for Science Teachers

2. Credits: 3(2-2-5)

3. Curriculum and Course Category:

3.1 Curriculum: Bachelor of Education, General Science Major

3.2 Course Category: Major Elective

4. Lecturer: Yu Mon Kyaw

5. Contact Location:

○ Faculty of Education, Suan Sunandha Rajabhat University, 1 U-Thong Nok Road, Dusit,

Bangkok, 10300

○ E-Mail yumon.ky@ssru.ac.th

6. Year / Semester:

Semester: 2/2024

Section 1: 29 Students

Section 2: 28 Students

7. Pre-requisite: None

8. Co-requisites: None

9. Learning Location: Faculty of Education Building

Building 11, Room 1126, Group 1: 09:00 – 12:00

Group 2: 13:00 -16:00

10. Date of Revising this Course: 25th November 2024

Section 2 Course Objectives and Purposes

1. Objectives and Purposes

1.1 **Course Objectives:** After the course, students will have English language skills in listening, speaking, reading, and writing, focusing on scientific terms and the structure of English commonly used in science and technology from related print materials and others,

Degree Bachelor's Master's Doctoral

and scientific terms and structure of English commonly used in instruction; applying knowledge in science instruction.

1.2 Purpose of Course Development and Improvement: To develop and improve students'

English language skills in listening, speaking, reading, and writing, focusing on scientific terms and the structure of English commonly used in science and technology from related print materials and others, and scientific terms and structure of English commonly used in instruction; applying knowledge in science instruction.

Section 3 Course Structure

1. Course Description:

English language skills including listening, speaking, reading, and writing, focusing on scientific terms and the structure of English commonly used in science and technology from related print-materials and others, and scientific terms and structure of English commonly used in instruction; applying knowledge in science instruction.

2. Time Length per Semester (Lecture-hours/Practice-hours/Self-Study –hours)

Lecture (Hours)	Supplementary Classes (Hours)	Practice/ Field Work (Hours)	Self-Study hours (Hours)

Degree Bachelor's Master's Doctoral

30	Supplementary teaching will be arranged based on students' needs.	30	60
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3. Time length per week for Individual Academic Consulting and Guidance

(The Lecturer provides one hour for individual consultation per week.)

3.1 Individual Academic Consulting and Guidance: Room 1145, Faculty of Education

3.2 Consultation via Mobile phone: 0631926890 Line: Yu Mon

3.3 Consultation via email: yumon.ky@ssru.ac.th

3.4 Consultation via Line group for the subject (open 24 hours)

3.5 Consultation via Online classroom

3.6 Consultation via Google classroom for students: <https://classroom.google.com>

Section 4 Development of Students' Learning Outcomes

1. Ethics and Morals

1.1. Ethics and Morals students need to develop

- (1) Have discipline, punctuality, respect for rules, and understand the impact of discipline on life.
- (2) Have a sense of discipline, responsibility, honesty, sacrifice and patience.
- (3) Live the life according to the sufficiency Economy philosophy

- (4) Have a sense of pride in being Thai.

1.2. Method of Teaching

- (1) The lecturer and the students set up the rules, regulations, and evaluation criteria together.
- (2) Assign students to participate in learning activities, inspections, and have discipline.
- (3) From practicing responsibility in learning activities and group work.
- (4) From assignments that are given and not copied from others, with honesty and integrity.

1.3. Method of Evaluation

- (1) Observation of students' learning behavior.
- (2) From assignments that are given and not copied from others, with honesty and integrity.
- (3) From practicing responsibility in learning activities and group work.

2. Knowledge

2.1. Knowledge students need to be developed

- (1) Have a broad and deep understanding of the subject and can apply it to real life, related to the subject.

- (2) In-depth understanding of English for science teaching, with skills to analyze content, stay updated on scientific advancements, and enhance learner development.
- (3) Be proficient in using English for communication according to standards.
- (4) Have knowledge and understanding of the subject, current changes and situations.

2.2. Method of Teaching

- (1) Emphasis on active learning and problem-based learning.
- (2) Activities that emphasize collaborative learning. Students discuss and engage in activities.
- (3) Students review and investigate the science research article.
- (4) Assign students to study important knowledge on their own.

2.3. Method of Evaluation

- (1) From participating in learning activities, answering questions, and discussion
- (2) From observing in teaching and learning activities and the participation in the discussion.
- (3) From group work and presentation of discussion results
- (4) From mid-term and final-term academic achievement test

3. Cognitive Skills

3.1. Cognitive skills students need to develop

- (1) Think, search, analyze facts and evaluate information, media and data from various sources competently. Be an informed citizen with international awareness, able to face and keep up with changes in the digital world and the future.
- (2) Be an intellectual leader having a logical approach, able to think critically and creatively, and apply theoretical knowledge to professional and ethical decision-making.
- (3) Constructing knowledge and applying knowledge from research; for learning development; teaching students to be innovators and enabling them to share knowledge to a community and society.

3.2. Method of Teaching

- (1) Interactive lecture
- (2) Group discussions and collaborative teaching

3.3. Method of Evaluation

- (1) From observing participation in the classroom, including asking and answering questions in discussion
- (2) From participating in learning activities, inspections, and having discipline.
- (3) From group work and presentation of discussion results

- (4) From the assessment of English communication skills

4. Interpersonal Skills and Responsibilities

4.1. Interpersonal Skills and Responsibilities students need to develop

○ (1) Knowledge and understanding about roles and self-responsibility as well as responsibility in group work and continuing self-development

○ (2) Awareness of being a valuable citizen of Thai society and global society.

● (3) Being able to create good relationship, having leadership qualities and able to work as a team effectively.

4.2. Method of Teaching

(1) Group work

(2) Presentation of discussions and activities

4.3. Method of Evaluation

(1) Observation in group discussion, presentations, and participation in class discussions and activities

(2) From the assessment of self-evaluation and peer-feedback

5. Numeral Analysis, Communication, and Information Technology Skills

5.1. Numeral Analysis, Communication, and Information Technology Skills students need to develop

- (1) Able to analyze information data to understand knowledge and issues quickly and correctly.
- (2) Able to use English to communicate effectively through speaking, writing, presenting.
- (3) Using an appropriate information technology and necessary programs for problem-solving and learning

5.2. Method of Teaching

- (1) Lecture on research articles
- (2) Group Discussion and hands-on activities

5.3. Method of Evaluation

- (1) Evaluation of the assigned tasks according to the criteria.
- (2) Observation of students' analytical, communicative, and technological skills.
- (3) From the assessment of final exam.

6. Learning Management Skills

6.1 Learning Management Skills students need to develop

- (1) Possessing expertise in learning management through a variety of student-centered methods;
- (2) Applying psychological knowledge to analyze learners in order to design content, subject matter and organize learning activities.
- (3) Organize activities, design learning management so that learners learn from experiences and through practical action.
- (4) Creating a good learning atmosphere and using effective learning media and materials
- (5) Use 21st century skills and technology in teaching management to develop learning and personality.

6.2. Method of Teaching

- (1) Analyze what learners learned from lecture and from the educational institution.
- (2) Design activities and learning media to develop learners' high-level thinking skills.
- (3) Demonstrate teaching using developed activities and media.

6.3. Method of Evaluation

- (1) Measure and evaluate from the results of learning management design and media development.

Degree Bachelor's Master's Doctoral

(2) Measure and evaluate from participation in class discussion and activities.

(3) From the assessment of English Language skills and final exam

Note

Symbol means main responsibility

Symbol means secondary responsibility

Blank means no responsibility

which will appear in the map showing the distribution of responsibility for learning outcomes standards from curriculum to subjects (Curriculum mapping)

Section 5 Lesson Plan and Assessment

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
1 4 th Dec 2024	-Course orientation Introduction to the course. Getting to know the purposes of the course. -Setting up the rules together. -Ethics, Morality, and Discipline -Importance of Using English for Science	Onsite	Google classroom -Power point Slide -PDF file -Teaching and Learning Resources for Week 1	-Lecture -Discussing the rules of the course together. -Group discussions on the importance of English for science -Introduce important key terms in English Language Learning	1. From attendance 2.From responding 3. Observation notes 4.From introducing themselves 5.Pre-Test
#2 11 th Dec 2024	Unit2: a. Developing English Communication Skills b. Enhancing English Skills for Science c. Scientific Reading Skills (science terminology)	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 2	1. Lecture and discussion 2. Active learning activities: Group discussions on scientific topics in English	1. From responding to the lecture 2. From attendance 3.From participating in the discussion 4.Observation notes and feedback 5.Pair work

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
#3 18 th Dec, 2024	a. Listening and Reading Skills in English b. Developing reading skills in reading science articles in English	Onsite	1. Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 3	1. Discuss on English Article 2. Teaching Materials 3. Summary of activities and discuss	1. From responding to the lecture. 2. From attendance 3. From participating in the discussion 4. From presentation 5. Observation notes and feedback
#4 (25 th Dec, 2024)	Present an English article about current science issues as a group e.g., Climate, water, ecology	Onsite	1. Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 4	1. English reading comprehension 2. Brainstorming learning activities. 3. Discussion on different situation	1. From assignment. 2. From attendance 3. From participating in the discussion 4. From presentation 5. Observation notes and feedback

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
#5 (8 th Jan, 2025)	1. Development of English Media for Science Teaching	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 5 Worksheet	1.Discuss on English articles 2. Podcasts / English lectures 3.Summary of activities and discussion	1.From responding to the lecture. 2.From attendance 3.From participating in the discussion 4. From presentation 5.Observation notes and feedback
#6 (15 th Jan, 2025)	Group Presentation of development of English Media for science teaching	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 6	1. Active learning activities 2. Group presentation in English	1.From attendance 3.From discussion and showing their opinion 4. From presentation 5.Observation notes and feedback
#7 (22 nd Jan, 2025)	Revision Week	onsite	1.Google classroom 2. Google form	-Going over the content of the previous 3 units Mock test	Evaluation notes and feedback
#8 (29 th Jan,	Midterm Test	Onsite	1.MCQ	1.Google form 2.Reading Comprehension	1.Assignment 2. From Google Form

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
2025)					
#9 (5 th Feb, 2025)	-English Writing Skills -International Science Curriculum -Kindergarten science curriculum -Primary Science curriculum -Secondary Science curriculum	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 9 5. Examples of English lesson plans Teaching materials, Worksheet	1.Activity: Analysis of International Science Curriculum 2. Activity: Designing English Lesson Plans 3.Summary of activities and discussion	1. From responding to the lecture. 2.From attendance 3.From participating in the discussion 4. From presentation 5.Observation notes and feedback
#10 (19 th Feb, 2025)	Skills in Writing Learning Management Plans (continued)	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 10	-Activities for designing learning management plans - Online learning format -Examples of learning management plans	1.From responding to the lecture. 2.From attendance 3.From participating in the discussion 4. From presentation 5.Observation notes and feedback opinion

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
#11 (26 th Feb, 2025)	Skills in Writing Learning Management Plans (continued)	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 11	1.Discuss on designing learning management plans 2. Examples of using English in writing	1. From assignment. 2.From attendance 3.From participating in the discussion 4. From presentation 5.Observation notes and feedback opinion
#12 (5 th March, 2025)	Learning Management Skills (Group Work)	Onsite	1.Google classroom 2. Power Point 3. PDF file 4. Teaching and Learning Resources for Week 12	1. Discuss on how to keep your class in good order. 2.Lecture on “Lesson Planning” 3.Summary of activities and discussion	1. From assignment 2. From attendance 3.From participating in the discussion 4. From presentation 5.Observation notes and feedback opinion
#13 (12 th March ,2025)	Study and Plan for Group Discussions in English	Onsite	1.Google classroom 2. Power Point 3. PDF file	1.Discuss on study and Plan for Group Discussions in English	1.From responding to the lecture 2.From attendance 3.From participating in the discussion

Week	Topic/Content	Teaching Mode	Program	Teaching Activities	Assessment
			4. Teaching and Learning Resources for Week 13	2. Discuss on Planning, designing, and presenting activities	4. From presentation 5. Observation notes and feedback opinion 6. Assignment planning lesson on teaching vocabulary
#14 19 th March 2025)	Group Discussion Management Revision	Onsite	1. Google classroom 2. Power Point 3. PDF file	Review: Reading, Listening, Writing	-English communication skills assessment form -Group work skills assessment form -Behavioral observation form
(26 th March, 2025)	Final test	Onsite	1. Google Form 2. Exam Questions	1. MCQ 2. Written	1. Assignment 2. From Google Form 3. Marked

The Social engineer characteristics

✓/ 1. Logical thinking skill

✓/ 2. Communication skill

✓/ 3. Collaborative teamwork skill

✓/ 4. Innovation creating skill

The 17 Competencies of Rajabhat graduates

- ✓/ 1. Professional Teacher
 - 2. Leadership & Community Engagement
 - 3. Classroom Management
- ✓/ 4. Teamwork & Collaboration
- ✓/ 5. Digital Capability
- ✓/ 6. Strategic Communication
 - 7. Personality & Mindset: Adaptability
 - 8. Volunteer spirit & Public mind
- ✓/ 9. Instructional media mastery
 - 10. Facilitating & Coaching
 - 11. Assessment and Evaluation
 - 12. Sufficiency Economy Philosophy application
 - 13. Curriculum design & development
 - 14. Good Citizen
- ✓/ 15. Integrated science for teaching

✓ 16. Educational innovator

17. Teacher's spirit

Learning Outcome	Assessment Activities	Week	Proportion for Assessment (%)
1. Ethics and Morals	From observing behavior in group activities, time management, punctuality, responsibility, and participation in class	1-17	10%
2. Knowledge 3. Cognitive Skills	Assignment Presentation End of term exams	3-7	30%
4 Interpersonal Skills	Group activities Presentation End of term exams	1-15	30%
5 Numeral Analysis	Assignment from research paper Use of information and technology	13-14	10%
6 learning management skill	End of term exams Assessed from completed tasks at home	1-17	20%

Section Six: Learning and teaching resources

1. Textbooks and Main Documents

-Physical Geography and Natural Disaster by R.Adam Dastrup, Ma, Gisp

-Environmental Science Lecture Notes by Dureasilakshmi Hari

-Cambridge primary, secondary Science textbook

-National Geographic Learning

-General Science by B. Singh

file:///C:/Users/Windows/Downloads/RPSC%20General%20Science_2018.pdf

2. Important Documents for Extra Study

Science Glossary

<https://elmiridge.bright-futures.co.uk/wp-content/uploads/2018/03/Science-glossary.pdf>

3. Suggestion Information (Printing Materials/Website/CD/Others)

-English Language Proficiency of Science and Mathematics Teachers: A Basis for English Enhancement Program

https://www.researchgate.net/publication/371698783_English_Language_Proficiency_of_Science_and_Mathematics_Teachers_A_Basis_for_English_Enhancement_Program

<https://dictionary.cambridge.org/>

<http://www.google.com>

[ResearchGate](#)

[GoogleScholar](#)

[ERIC](#)

Section 7 Course Evaluation and Revising

1. Strategies for Course Evaluation by Students

Students evaluate the effectiveness of the course, the appropriateness of teaching and learning activities, learning content, and the lecturer's learning management of the course.

2. Strategies for Course Evaluation by Lecturers

The students' feedback is considered for teaching adaptation and development.

3. Teaching Improvement

A meeting in the department is made for further discussion or a teacher keeps updating content and activity arrangement.

4. Feedback for Achievement Standards

The teacher announce score results to the students before sending their grades and hold a meeting with all the department members and a verification committee to double check the grade results.

5. Methodology and Planning for Course Review and Improvement

The teacher analyzes the students' feedback and verification committee' advice and apply them to course planning, teaching, and assessment.

6. Curriculum Mapping

Plan showing the distribution of learning outcomes according to the course curriculum based on the details in the program specification.

Graduate Attributes Course	1. Ethics and Morality				2. Knowledge				3. Cognitive Skills			4. Interpersonal Skills and Responsibility			5. Numerical Analysis, Communication, and Information Technology Skills			6. Learning Management Skills							
	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	1	2	3	4	5			
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