

Course Specification

Name of Institution: Buriram Rajabhat University

Faculty / Programme: Faculty of Sciences / Biology Programme

Section 1

Overview

1. **Subject :** English for Biology

Subject code: 4034113

2. Credit: 2 (2-0-4)

3. Course

Program of the course: Bachelor degree

Course Category: Required subject

4. **Instructor**: Miss Sirinee Jirajessada

5. Semester / Year of study

Semester: 1/2021

Student: Bachelor Degree in Biology (61/M.1)

6. **Pre-requisite** None

7. **Co-requisite** None

8. **Teaching venue:** Faculty Sciences

9. Date of course preparation: May 5, 2021

Aims and Objectives

1. Aim of Course

Students are able to

- 1.1 Correctly acquire skill in using English for Biology.
- 1.2 Apply both knowledge and skills to read and understand international scientific articles.
- 1.3 Efficiently search for current topics and issues with the search keywords in English.
- 1.4 Can correlate the use of English to other topics in related field of study in Biology.

2. The purpose of developing / updating the course

For teaching and learning by using English as the instructional medium language.

Section 3

Nature and Operation

1. Course Description

This course is designed to assist students to correctly acquire skill in using English for Biological Science, reading, translating scientific articles, preparing the presentation, abstract and manuscript writing for publish.

2. Hours per semester

Lecture	Remedial Teaching	Practice / Field / internship	Self-study
30 Hours	-	-	4 Hours/week

3. Hours per week for individual consultation and technical advice to students

- Every Wednesday 1 PM – 4 PM in the afternoon (Appointment is needed).

Development & Students' Learning Performance

1. Ethics

1.1. The expected learning outcomes of TQF framework: morality

- 1.1.1. Honest.
- 1.1.2. Discipline and self-responsibility.
- 1.1.3. Respect and corporate the professional ethics.
- 1.1.4. Respect and listen to the opinions of others.
- 1.1.5. Having public mind.

1.2. Teaching methods

- 1.2.1. Lecturer being a good role model to students.
- 1.2.2. Assign group topic of discussion.
- 1.2.3. Discussion on the students' value & morality, such as, punctuality, discipline, honesty, responsibility for their own professional and social, tolerance, realistic, positive attitude towards the profession, and respect the rights and opinions of others.
- 1.2.4. Make an agreement with students about the rules and practices in teaching.
- 1.2.5. Student center teaching approach.

1.3. Evaluation methods

- 1.3.1. Observe the ethical behavior of students, both in and outside the classroom
- 1.3.2. Observe the punctuality and discipline.
- 1.3.3. Observe the cheating habits during all examination.
- 1.3.4. Self-responsibility and assignment.

2. Knowledge

2.1. The expected learning outcome of TQF framework: knowledge

- 2.1.1 Correctly acquire concept and theories in Biology.
- 2.1.2 Analyze problems, apply both knowledge and skills, and properly use equipment to solve problems in Biology.
- 2.1.3 Efficiently search for current topics.
- 2.1.4 Can correlate the use of Biology to other topics in related field of study.

2.2. Teaching methods

2.2.1. Lecture

- 2.2.2. Assignment
- 2.2.3. Discussion

2.3. Evaluation methods

- 2.3.1. Observe students' behavior and activity in the classroom
- 2.3.2. Homework, presentation, and discussion
- 2.3.3. Test, examination

3. Cognitive skills

3.1. The expected learning outcome of TQF framework: Cognitive skills

- 3.1.1. Students are able to develop the ability to think systematically.
- 3.1.2. Students are able to solve problems by rational thinking.
- 3.1.3. Search, interpret and evaluate information technology to solve problem creatively and making decision effectively.

3.2 Teaching methods

- 3.2.1 Discussion
- 3.2.2 Classroom activities
- 3.2.3 Assignment

3.3 Evaluation methods

- 3.3.1 Results of the activities assigned
- 3.3.2 Observe the expressions of the students' intellectual skills in all activities
- 3.3.3 Test/Quiz

4. Interpersonal skills and responsibility

4.1 The expected learning outcome of TQF framework: Interpersonal skills and responsibility

- 4.1.1 Students are able to collaborate well with others and have leadership skill.
- 4.1.2 Students are able to have a responsible for the assignment.
- 4.1.3 Students are able to adapt to different situations by planning and take the responsibility themselves.

4.2 Teaching methods (Learner - Centered)

- 4.2.1 Activities
- 4.2.2 Assignment
- 4.2.3 Problem solving

4.3 Evaluation methods

4.3.1 Observe the students' behavior and the atmosphere of group work/activities History, the way of life and sufficiency economy

5. Numerical analysis skills, communication and information technology

- 5.1 The expected learning outcome of TQF framework: Numerical analysis skills, communication and information technology
 - 5.1.1 Students are able to improve skills in data collection, presentation by using appropriate information.
 - 5.1.2 Students are able to improve skills in communication technology in both spoken and written.
 - 5.1.3 Students are able to improve skills in using English or other language to search for information.
 - 5.1.4 Students are able to information technology to search efficiently.

5.2 Teaching methods

- 5.2.1 Use the computer to search information and present the obtained information in class.
- 5.2.2 Communication and send homework via e-mail

5.3 Evaluation methods

- 5.3.1 Homework
- 5.3.3 Class presentations or activities

Section 5

Lesson Plans and Assessments

1. Lesson plans (100% online)

Week	Tonic	Hours/	The purpose	Activities	Instruction	Learning Outcomes						
week	Topic	Instructor	of teaching	Activities	media	1	2	3	4	5		
1	- Classroom	2 hours/ Miss	- Make an	- Make an	Course	• 1.3	• 2.1	• 3.1	• 4.3	• 5.1		
	commitment	Sirinee	agreement in learning.	agreement and	Syllabus, handouts	1.5	2.1	5.1	4.5	J.1		
	- Introduction: Who speaks English?	Jirajessada	- Understand	commitment								
	3661.6 2.13.13.11		new vocabulary.	with students.								
			- Be able to									
			read in									
			English and understand									
			the idea.									
2	Listening	2 hours/	Know new	Lecture,	Handouts,							
	comprehension	Miss	vocabulary	assignment,	worksheet,							
	and speaking	Sirinee	and	Exercise	homework,							
	- 5. 5 - 553	Jirajessada	grammars.		video clip							

Mode	Topic	Hours/ Instructor	The purpose	The purpose Activities	Instruction	Learning Outcor			come	nes	
Week			of teaching		media	1	2	3	4	5	
3-4	Reading	4 hours/	- Be able to	Lecture,	Handouts,	•	•	•	•	•	
	comprehension	Miss	read in	assignment,	worksheet,	1.3	2.1	3.1	4.3	5.1	
	·	Sirinee	English and	Exercise	homework						
		Jirajessada	understand								
			the context.								
5	Sentences	2 hours/	- Understand	Lecture, class	Handouts,	•	•	•	•	•	
		Miss	English	activities,	worksheet,	1.3	2.1	3.1	4.3	5.1	
		Sirinee	sentences	assignment ,	homework						
		Jirajessada	English	Exercise							
			grammars.								
			- Know								
			new								
			vocabulary								
			and								
			grammars								
			and								
			understand								
			the context.								
6	- How to read	2 hours/	- Know	Lecture, class	Handouts,	•	•	•	•	•	
	scientific articles?	Miss	new	activities,	worksheet,	1.3	2.1	3.1	4.3	5.1	
	- Anatomy of	Sirinee	vocabulary	assignment,	homework						
	Scientific articles	Jirajessada	and	Exercise							
	Scientific articles		grammars								
			and								
			understand								
			the context.								
	T	1	/eek 7 Mid-term	T	T	1	П	1	П		
8-9	- Anatomy of	4 hours/	- know new	Lecture, class	Handouts,	•	•	•	•	•	
	Scientific articles	Miss	vocabulary	activities,	worksheet,	1.3	2.1	3.1	4.3	5.1	
	(cont.)	Sirinee	and	assignment,	homework						
		Jirajessada	grammars	Exercise							
			and								
			understand								
			the context.								
10-11	Writing manuscript	4 hours/	- know	Lecture, class	Handouts,	•	•	•	•	•	
	- the objective(s) of	Miss	new	activities,	worksheet,	1.3	2.1	3.1	4.3	5.1	
	the research.	Sirinee	vocabulary	assignment,	homework						
		Jirajessada	and	Exercise							
			grammars								
			and								
			understand								
			the context.								

\\\\-\al_{-}	Tanis	Hours/	The purpose	Activities	Learning Outcomes					
Week	Topic	Instructor	of teaching		media	1	2	3	4	5
12-13	Writing manuscript (cont.) - The topic of the research Etc.	4 hours/ Miss Sirinee Jirajessada	- know new vocabulary and grammars and understand the context.	Lecture, class activities, assignment, Exercise	Handouts, worksheet, homework	1.3	2.1	3.1	4.3	5.1
14-15	Presentation Slide preparationPresentation	4 hours/ Miss Sirinee Jirajessada	- know new vocabulary and grammars and understand the context. Final Examir	Lecture, class activities, assignment, Exercise	Handouts, worksheet, homework, Presentatio n	1.3	2.1	3.1	4.3	5.1

Note: Learning Outcomes

1 = Ethics

2 = Knowledge

3 = Cognitive skills

4 = Interpersonal skills and responsibility

5 = Numerical analysis skills, communication and information technology

2. Assessment									
Learning outcomes	Assessment methods	Week	Percentile						
1.3 , 2.1	Assessment from homework and presentation	1 - 15	30%						
1.3 , 2.1	Mid-term examination	Midterm	30%						
1.3 , 2.1	Final examination	Final	30%						
1.3 , 2.1, 3.1, 4.3, 5.1	Class participation	1 - 15	10%						
		Total	100%						

Teaching Resources

1. Handouts

Handouts : English for Biology by Miss Sirinee Jirajessada, Faculty of Sciences. Buriram Rajabhat University.

2. Text books

- กันยารัตน์ เกตุขำ. 2562. **ภาษาอังกฤษเพื่อการเขียนงานวิจัย**. โรงพิมพ์แห่งจุฬาลงกรณ์ มหาวิทยาลัย: กรุงเทพมหานคร.
- วิทย์ เที่ยงบูรณธรรม. 2016. พจนานุกรมอังกฤษ-ไทย ฉบับทันสมัยและสมบูรณ์ที่สุด : SE-ED's Modern English-Thai Dictionary (Complete & Updated) Super-Mini Edition. Se-Ed: กรุงเทพมหานคร.
- Amy McCullough, Molly A. Jenkins, Ashleigh Ruehrdanz, Mary Jo Gilmer, Janice Olson, Anjali Pawar, Leslie Holley, Shirley Sierra-Rivera, Deborah E. Linder, Danielle Pichette, Neil J. Grossman, Cynthia Hellman, Noémie A. Guérin, Marguerite E. O'Haire. 2018. Physiological and behavioral effects of animal-assisted interventions on therapy dogs in pediatric oncology settings.

 Applied Animal Behaviour Science, 200: 86-95.
 - Buckley, Don. 2011. Interactive Science: Cell and Heredity (Teacher's edition).

 Pearson. USA.
 - Caroline Banks and Tom Rowe. 1990. Reading in English 1 The day in mountain moved. New Jersey: Prentice Hall Regents.
 - Moi Ho, Tan, 2017. **Biologi: Module & More**. Penerbitan Pelangi Sdn. Selangor, Malaysia.
 - Ling, You Li, SK, Chia, and GS, Yu. 2017. **Biologi: Hots Mastery**. Cemerlang Publications. Selangor, Malaysia.
 - Raymond Murphy. 1998. **Essential Grammar In Use**. (2nd Edition). United Kingdom: Cambridge University Press.
 - Reece, J. B., Urry, L. A., and Cain M. L. 2011. **Cambell Biology.** (9th Edition). San Francisco: Pearson Education.
 - Thanu Teauratanagul. 2007. **English for Science and Technology**. Chulalongkorn University Press: Bangkok.
- 2. Documents, resources and data suggested

- 2.1. BRU Library
- 2.2. Journal: International Journal of Selection and Assessment
- 2.3. Website: http://www.sciencedirect.com
- 2.4. Website: http://www.pubmed.com
- 2.5. Website: http://www.masteringbiology.com

Evaluation of Improvement & Course Operation

1. Strategic course evaluation by students

Student's opinions on activities and course

2. Strategic assessment of teaching

Evaluate teaching performance and students' achievement by using an assessment form.

3. Teaching improvement

To be updated next semester.

(Miss Sirinee Jirajessada)

Lecturer

Report: May 5th, 2023