



## TQF.5 Course Report

**Course Code:** BMA3301

**Course Title:** Blended Learning in Secondary Mathematics

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

**Semester /Academic Year:** 3/2021

**Students:** Bachelor of Education (Mathematics) (Bilingual Program)

**Lecturers:** Asst. Prof. Dr. Krongthong Khairiree & Mr. Luechai Tiplungsri

College of Hospitality Industry Management

Suan Sunandha Rajabhat University

## Course Report

**Institution:** Suan Sunandha Rajabhat University

**Campus/Faculty/Department:** College of Hospitality Industry Management

### Section1: General Information

**1. Course Code and Title:** BMA3301 Blended Learning in Secondary Mathematics

**2. Pre-requisite (if any):** None

**3. Faculty Members Teaching the Course and Sections**

Asst. Prof. Dr. Krongthong Khairiree & Mr. Luechai Tiprungsri  
Monday 09.00 – 12.00, Tuesday 09.00-12.00 (Online/On-site/On-Demand)

**Semester and Academic Year**

Semester 3, Academic Year 2021

**4. Venue**

College of Hospitality Industry Management, Suan Sunandha Rajabhat University  
(Salaya Campus)

### Section 2: Actual Teaching Hours Compared with Teaching Hours Specified in the Teaching Plan

**1. Number of actual teaching hours compared with the teaching plan**

Topics	No. of teaching hours in the plan	No. of actual teaching hours	Reason(s) (in case the discrepancy is more than 25%)
<b>Course Introduction</b> <ul style="list-style-type: none"> <li>• Course Outline</li> <li>• Pretest</li> <li>• Learning styles</li> </ul>	3	3	-
<ul style="list-style-type: none"> <li>• Learning difficulties and misconception;</li> <li>• Methods of teaching secondary mathematics</li> </ul>	3	3	-

<b>Topics</b>	<b>No. of teaching hours in the plan</b>	<b>No. of actual teaching hours</b>	<b>Reason(s) (in case the discrepancy is more than 25%)</b>
<ul style="list-style-type: none"> <li>• Cooperative learning</li> <li>• Collaborative learning</li> </ul>	6	6	-
<ul style="list-style-type: none"> <li>• Higher order thinking skills in 21st Century;</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Flipped classroom;</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Massive Open Online Course )MOOC (in mathematics</li> <li>• <b>Project Work Assignments &amp; Activities</b></li> </ul>	6	6	
<b>Midterm</b>			
<ul style="list-style-type: none"> <li>• Advanced level of using The Geometer's Sketchpad;</li> <li>• Handheld technology;</li> </ul>	6	6	-
<ul style="list-style-type: none"> <li>• Augmented Reality )AR ( and blended learning through smartphone</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Problem based learning</li> <li>• Project based learning;</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Assessment and action research in secondary mathematics classroom.</li> </ul>	3	3	
<ul style="list-style-type: none"> <li>• Students' Project Work Assignments &amp; Activities</li> </ul>	3	3	
<b>Final Examination</b>			
<b>Total</b>	<b>45</b>	<b>45</b>	

## 2. Topics that couldn't be taught as planned

Topics that couldn't be taught (if any)	Significance of the topics that couldn't be taught	Compensation
None	None	None

## 3. Effectiveness of the teaching methods specified in the Course Specification

Learning Outcomes	Teaching methods specified in the course specification	Effectiveness (Use ✓)		Problems of the teaching method(s) (if any) and suggestions
		Yes	No	
1. Morals and Ethics	Demonstration and Group Work	✓	-	-
2. Knowledge	Problem-Based and Technology-Based Learning	✓	-	-
3. Cognitive Skills	Problem-Based and Technology-Based Learning	✓	-	-
4. Interpersonal Skills and Responsibilities	Interpersonal Communication and Interaction	✓	-	-
5. Numerical Analysis, Communication and Information Technology Skills	Inquiry-based and Internet-Based Learning	✓	-	-
6. Learning Management Skills	Problem-Based and Application Tools in Mathematics	✓	-	-

## 4. Suggestions for Improving Teaching Methods

Using problem solving and ICT-based approach as teaching strategies.

### Section 3: Course Outcomes

1. Number of registered students: 19 students
2. Number of students at the end of semester: 19 students
3. Number of students who withdrew (W): none
4. Grade distribution

Grade	No. of students	Percentage
A	8	42.11
A-	6	31.58
B+	4	21.05
B	1	5.26
B-	-	-
C <sup>+</sup>	-	-
C	-	-
C-	-	-
D <sup>+</sup>	-	-
D	-	-
D-	-	-
F	-	-
Incomplete (I)	-	-
Total	19	100

5. Factors causing unusual distribution of grades (If any)

None

#### Discrepancies in the evaluation plan specified in the Course Specification

##### 6.1 Discrepancy in evaluation time frame

Details of Discrepancy	Reasons
Using online test / take home test for three hours according to academic announcement.	COVID 19 pandemic

##### 6.2 Discrepancy in evaluation methods

Details of Discrepancy	Reasons
Using online test / take home test	COVID 19 pandemic

#### 7. Verification of students' achievements

Verification Method(s)	Verification Result(s)
Program Committee Approval	Approved

## Section 4: Problems and Impacts

### 1. Teaching and learning resources

<b>Problem:</b> Due to students were limited to use computer or mobile devices.	<b>Impacts on students' learning:</b> Some students could not connect the program, but the students can download lessons from lecturer's website.
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### 2. Administration and organization

Problems from administration None	Impacts on students' learning None
Problems from organization None	Impacts on students' learning None

## Section 5: Course Evaluation

### 1. Results of course evaluation by students

#### 1.1 Important comments from evaluation by students

Students had weaknesses in learning mathematics using English communication in writing steps of problem solving.

#### 1.2 Faculty members' opinions on the comments in 1.1

The lecturers should engage students in learning activities by using English-Thai for understanding.

### 2. Results of course evaluation by other evaluation methods

#### 2.1 Important comments from evaluation by other evaluation methods

The lecturers must prepare alternative assessment to evaluate students' progression involving learning outcomes of the course.

#### 2.2 Faculty members' opinions on the comments in 2.1

Considerations of methods of teaching and evaluation for students' improvement.

## Section 6: Improvement Plan

### 1. Progress of teaching and learning improvement recommended in the previous Course Report

Improvement plan proposed in previous Academic year 2021.  -None-	Results of the plan implementation  -None-
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### 2. Other improvements

Searching information for practicing English communication and more teaching and learning strategies using technology from online database

### 3. Suggestions for improvement for Semester 2 Academic year 2022

Suggestions	Time Frame	Responsible person
Collecting more materials and activities	May 2023	Asst. Prof. Dr. Krongthong Khairiree

**4. Suggestions of faculty member(s) responsible for the course**

Integrating TPACK model for improving mathematical innovation and technology.

**Responsible Faculty Member/Coordinator:**

Signature.....Submission Date.....

**Chairperson/Program Director:**

Signature.....Receipt Date .....