



TQF.5 Course Report

Course Code: BMA3301

Course Title: Blended Learning in Secondary Mathematics

Credits: 3(2-2-5)

Semester /Academic Year: 3/2023

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

Lecturers: Mr. Luechai Tiprungsri

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

Mr. Luechai Tiprungsri

Tuesday 09.00-17.00 (Online/On-site/On-Demand)

Semester and Academic Year

Semester 3, Academic Year 2023

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%) |
|---|-----------------------------------|------------------------------|--|
| Course Introduction <ul style="list-style-type: none"> • Course Outline • Pretest • Learning styles | 3 | 3 | - |
| <ul style="list-style-type: none"> • Learning difficulties and misconception; • Methods of teaching secondary mathematics | 3 | 3 | - |

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

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 | 10 | 52.63 |
| A- | 3 | 15.79 |
| B+ | - | - |
| B | 4 | 21.05 |
| B- | - | - |
| C+ | 2 | 10.53 |
| C | - | - |
| C- | - | - |
| D+ | - | - |
| 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 onsite test for three hours according to academic announcement. | - |

6.2 Discrepancy in evaluation methods

| Details of Discrepancy | Reasons |
|------------------------|---------|
| Using onsite test | - |

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

| | |
|---|---|
| <p>Problem:</p> <p>Due to students were limited to use computer or mobile devices.</p> | <p>Impacts on students' learning:</p> <p>Some students could not connect the program, but the students can download lessons from lecturer's website.</p> |
|---|---|

2. Administration and organization

| | |
|---|--|
| <p>Problems from administration</p> <p>None</p> | <p>Impacts on students' learning</p> <p>None</p> |
| <p>Problems from organization</p> <p>None</p> | <p>Impacts on students' learning</p> <p>None</p> |

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 2023. -None- | Results of the plan implementation -None- |
|---|--|

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 3 Academic year 2023

| Suggestions | Time Frame | Responsible person |
|--|------------|-----------------------|
| Collecting more materials and activities | June 2024 | Mr.Luechai Tiprungsri |

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