College of Hospitality Industry Management
Suan Sunandha Rajabhat University

TQF.5 Course Report

Course Code: BMA3303

Course Title: Digital for STEM Learning

Credits: 3(2-2-5)

Semester /Academic Year: 1/2025

Students: Bachelor of Education Program in Mathematics Education (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**: BMA3303 Digital for STEM Learning
2. **Pre-requisite (if any):** None
3. **Faculty Member(s) Teaching the Course and Sections**

   Mr.Luechai Tiprungsri

   Thursday 01.00-04.00 PM

   Semester and Academic Year

   Semester 1, Academic Year 2025
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 - Course outlines - Grading criteria Pretest **Chapter 1**: Introduction to Digital for STEM Learning and Introduction to STEM Education	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%)
Chapter 2 STEM and STEM Education	6	6	-
Chapter 3: Interdisciplinary approach to integrating STEM into practice	9	9	-
Chapter 4: Tools for creating multimedia presentations and games	6	6	-
Mid-Term Examination, **Project Works assignment**	3	3	-
Chapter 5: Python basics for data science	9	9	Integrated innovation and technology for mathematics
Chapter 6: Dynamic geometry software; Simulations; Virtual/augmented reality software	6	6	Integrated innovation and technology for mathematics
Chapter 7: Learning management systems and other teaching software	6	6	-
Final Examination	3	3	-
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	Problem and Practice Based Learning	✓	-	-
2. Knowledge	Problem-Based and Computer-Based Learning	✓	-	-
3. Cognitive Skills	Problem-Based and Computer-Based Learning	✓	-	-
4. Interpersonal Skills and Responsibilities	Cooperative Learning: Think-Pair-Share	✓	-	-
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: 8 students

2. Number of students at the end of semester: 8 students

3. Number of students who withdrew (W): none

4. Grade distribution

Grade	No. of students	Percentage
A	4	50.00
A-	3	37.50
B+	1	12.50
B	-	-
B-	-	-
C^+	-	-
C	-	-
C-	-	-
D+	-	-
D	-	-
D-	-	-
F	-	-
Incomplete (I)	-	-
Total	8	100.00

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

None

6. Discrepancies in the evaluation plan specified in the Course Specification

6.1 Discrepancy in evaluation time frame

Details of Discrepancy	Reasons
Using onsite test	-

6.2 Discrepancy in evaluation methods

Details of Discrepancy	Reasons
Using onsite	-

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

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

2. Administration and organization

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

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 have to 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 2025.	Results of the plan implementation
-None-	-None-

2. Other improvements

Searching information for practicing English communication and designing concepts of learning mathematics with technology from online database

3. Suggestions for improvement for Semester 1 Academic year 2025

Suggestions	Time Frame	Responsible person
Collecting more materials and activities	June 2025	Mr.Luechai Tiprungsri

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

Integrating real-world problem solving for improving mathematical processes and skills.

Responsible Faculty Member/Coordinator:

Signature.....L.Rungsri....Submission Date.....12 April 2025.....

Chairperson/Program Director:

Signature..... …Receipt Date .....