

TQF.5 Course Report

Course Code: MMA1303

Course Title: Linear Algebra

Credits: 3(3-0-6)

Semester /Academic Year: 1/2021

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: MMA1303 Linear Algebra
- 2. Pre-requisite (if any): None

3. Faculty Member(s) Teaching the Course and Sections

Mr.Luechai Tiprungsri

Friday 13.00-16.00 (Online and on demand)

Semester and Academic Year

Semester 1, 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%) |
|----------------------------|--|---------------------------------------|--|
| Course Introduction | 3 | 3 | - |
| - Course outlines | | | |
| - Grading criteria | | | |
| Pre-Test | | | |
| Chapter 1: Introduction to | | | |
| linear algebra | | | |
| | | | |

| Topics | No. of teaching hours in the plan | No. of actual teaching hours | Reason(s) (in case the discrepancy is more than 25%) |
|-------------------------|--|---------------------------------------|--|
| | | 0 | |
| Chapter 2: Matrices | 9 | 9 | - |
| Chapter 3: Determinants | 9 | 9 | - |
| | Mid | term | |
| Chapter 4: Linear | 3 | 3 | - |
| Equation | | | |
| Chapter 5: System of | 9 | 9 | - |
| Linear Equation Using | | | |
| Matrices | | | |
| Chapter 6: | 6 | 6 | Integrated innovation and |
| Vector-1 | | | technology for |
| | | | mathematics |
| Chapter 7: Examplar of | 6 | 6 | Integrated innovation and |
| learning instruction in | | | technology for |
| Linear Algebra | | | mathematics |
| incorporate with the | | | |
| Geometer's Sketchpad, | | | |
| Mathlab. | | | |
| 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 |

| Learning Outcomes | Teaching methods specified in the | | tiveness se √) | Problems of the teaching method(s) |
|---|--|--------------|-------------------|------------------------------------|
| | course specification | Yes | No | (if any) and suggestions |
| 1. Morals and Ethics | Problem and Practice Based Learning | \checkmark | - | - |
| 2. Knowledge | Problem-Based and Computer-Based Learning | \checkmark | - | _ |
| 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: 20 students
- **2. Number of students at the end of semester**: 20 students

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

4. Grade distribution

| Grade | No. of students | Percentage |
|----------------|-----------------|------------|
| А | 13 | 65.00 |
| A- | 2 | 10.00 |
| B+ | 5 | 25.00 |
| В | - | - |
| B- | - | - |
| \mathbf{C}^+ | - | - |
| С | - | - |
| C- | - | - |
| D+ | - | - |
| D | - | - |
| D- | - | - |
| F | - | - |
| Incomplete (I) | - | - |
| Total | 20 | 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 online test / take home test for | COVID 19 pandemic |
| three hours according to academic | |
| announcement. | |

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

| Problem: | Impacts on students' learning: |
|-------------------------------------|-----------------------------------|
| Due to students were limited to use | Some students could not connect |
| computer or mobile devices. | 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

Section 6: Improvement Plan

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

| Improvement plan proposed in previous | Results of the plan |
|---------------------------------------|---------------------|
| Academic year 2020. | 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 2 Academic year 2021

| Suggestions | Time Frame | Responsible person |
|---|---------------|--|
| Collecting more materials and activities | December 2021 | Assoc. Prof. Chaweewan Kaewsaiha |

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.....Submission Date.....

Chairperson/Program Director:

Signature.....Receipt Date