



TQF.5 Course Report

Course Code: BMA2304

Course Title: Probability and Statistics

Credits: 3(2-2-5)

Semester /Academic Year: 1/2022

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

Lecturers: Asst. Prof. Dr. Krongthong Khairiree & 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:** BMA2304 Probability and Statistics

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

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

Asst. Prof. Dr. Krongthong Khairiree & Mr. Luechai Tiprungsri

Tuesday 13.00 – 16.00 (Online/On-site/On-Demand)

Semester and Academic Year

Semester 1, Academic Year 2022

4. **Venue**

College of Hospitality Industry Management, Suan Sunandha Rajabhat University
(Nakon Pathom 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%)
<ul style="list-style-type: none">• Course Outline• Pretest• Statistics methods• Population and Sample	3	3	-
<ul style="list-style-type: none">• Introduction to Descriptive Statistics• Measure of Central Tendency• Stem and leaf Plot, Box Plot	6	6	-

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"> • Data presentation using computer software program 			
<ul style="list-style-type: none"> • Measurement of dispersions: • Variance • Summation notation 	3	3	-
<ul style="list-style-type: none"> • Combinatorics: permutation and combination; randomness • Data analysis using computer software program 	3	3	
<ul style="list-style-type: none"> • Probability and rules; • Probability tree diagrams; • Bayes's Rule; 	3	3	
Measurement of dispersions: <ul style="list-style-type: none"> • Scatter diagram • Coefficient of correlation • Project Work Assignment • Data analysis using computer software program 	6	6	
<ul style="list-style-type: none"> • Linear Regression • Data collection • Using smartphone/ software program for Regression 	3	3	
<ul style="list-style-type: none"> • Random variables; • Probability distributions; • Normal Distribution • The Standard Normal Distribution • Data analysis using software program 	6	6	
<ul style="list-style-type: none"> • Project Work assignment: • Statistics and Data Collection • Data analysis using software 	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%)
program			
Midterm 2 Hours			
<ul style="list-style-type: none"> • Introduction to Inferential Statistics • Sample size • Sampling methods 	3	3	-
<ul style="list-style-type: none"> • Confidence Interval • Estimation • Data analysis using software program 	6	6	-
<ul style="list-style-type: none"> • Hypothesis Testing • Students' Project Work Assignments & Activities 	3	3	
<ul style="list-style-type: none"> • Non-parametric • Students' Project Work Assignments & Activities 	3	3	
<ul style="list-style-type: none"> • Mark up classes • Students' Project Work Assignments & Activities 	3	3	
Final Examination 2 Hours			
Total	54⁺	54⁺	Extra Hours for Independence Study

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	-	-
A-	4	21.05
B+	10	52.63
B	3	15.79
B-	2	10.53
C ⁺	-	-
C	-	-
C-	-	-
D ⁺	-	-
D	-	-
D-	-	-
F	-	-
Incomplete (I)	-	-
Total	19	100

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

One student got Grade I, because she had foot abscess surgery and did not take the final exam. However, she will take the final exam as soon as possible.

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

6.1 Discrepancy in evaluation time frame

Details of Discrepancy	Reasons
Using online midterm 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 midterm 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 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 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 2023

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 application of the related subjects.

Responsible Faculty Member/Coordinator:

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

Chairperson/Program Director:

Signature.....Receipt Date