

MAEJO UNIVERSITY

TQF 3. Course Syllabus

Faculty	Science
Program	Bachelor of Science in Information Technology
Campus	Chiang Mai Campus
Semester /Academic Year	2 nd semester, 2023

Section 1: Course Details

Section 2: Course Aims and Description

(Thai) ทบทวนแนวคิดเชิงวัตถุและความสัมพันธ์ระหว่างคลาส การจัดการไฟล์และ Exception การค้นหาคلاس Coupling และ Cohesion การสืบทอดและ Composition หลักการออกแบบคลาสเพื่อรองรับการแก้ไขปัญหาระดับที่สามารถนำไปประยุกต์กับการแก้ไขปัญหเพื่อการโปรแกรม ตลอดจนความรู้เบื้องต้นเกี่ยวกับการออกแบบรูปแบบมาตรฐานเชิงวัตถุ (Design Pattern) รวมถึงการทดสอบระดับหน่วย

(English) Review Object oriented concepts and class relationship, file manipulation and exception handling, designing technique such as CRC, coupling and cohesion, inheritance and composition, apply class designing for problem solving with programming, introduction to design pattern, unit test.

Section 3: Modifications to Course Related to Assessment Feedback

For students to learn the object oriented programming that is becoming popular and widely used in industry.

Section 4: Course Regulations

1. This course requires a minimum of 80% class attendance in order for the student to be eligible to sit for the final examination.
2. Students began the course with 5 points for attendance. For each marked absence, a student lost 1 point.

- All assignments must be submitted by the advertised deadline. Assignments received after the deadline will have mark deductions, 10% per day from the giving point. Extensions will only be granted in extenuating circumstances.

Section 5: Contribution to Student Achievement of Program Learning Outcomes and Lifelong Learning Skills

The relationship between Course-Level Learning Outcomes and Program-Level Learning Outcomes.

Course	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
10306214 Object Oriented Programming				A		

1. Specific Learning Outcomes

PLO 4 The learners can analyze and design in both web applications and mobile applications.

2. Generic Learning Outcomes

None

3. Development of Lifelong Learning Skills

Students can learn a new topic of interest to design and develop application by creating their own application project using object oriented programming language.

Section 6: Course Learning Outcomes and their connection to Program Learning Outcomes

PLO	CLO	Chapters related to CLO
PLO 4	CLO 1: The learners have the ability to analyze and design application by using object oriented programming techniques.	1 – 5
	CLO 2: The learners have the ability to develop application by using object oriented programming that can work with database system.	6 - 8

Section 7: Teaching and Assessment Plan

1. Teaching Plan

Week	Chapters	Number of hours	Lecturer
1	Introduction to IT214	5	Sayan
2	Ch1: Review Object oriented concepts and Class Relationship	5	Sayan
3	Ch2: Exception	5	Sayan
4	Ch3: Collection	5	Sayan
5	Ch3: Collection [Cont.]	5	Sayan
6	Ch4: Java Date Time	5	Sayan
7	Ch5: Design Pattern	5	Sayan
8	Midterm Exam		Sayan
9 – 10	Ch6: Introduction to Hibernate	10	Watcharin
11 – 13	Ch7: Hibernate Class Relationship	15	Watcharin

14 - 15	Ch8: Hibernate Query Language	10	Watcharin
16	Conclusion and Feedbacks	5	Watcharin
17 - 18	Final Exam		Watcharin

2. Constructive alignment between assessment, teaching method and CLOs

Assessment	Teaching method	CLOs
Group Project	Project-based learning, case study	CLO 2
Class Participants	Class brainstorm and discussion	CLO 1
Ability to plan and teamwork	Project-based learning	CLO 2

3. Assessment Strategy

Assessment Strategy	Point
Class Participants	10%
Midterm Exam	25%
Final Exam	25%
Group Assignments and Project	40%
Total	100 %

Section 8: Teaching and Learning Materials

1. Textbook and reading materials

รศ. รังสิต ศิริรังษี. 2555 การออกแบบคลาสและดีไซน์แพตเทิร์น เอกสารประกอบการสอน

สาขาเทคโนโลยีสารสนเทศ คณะวิทยาศาสตร์ มหาวิทยาลัยแม่โจ้

รศ. รังสิต ศิริรังษี. 2559 ความรู้เบื้องต้นเกี่ยวกับ Hibernate เอกสารประกอบการสอน

สาขาเทคโนโลยีสารสนเทศ คณะวิทยาศาสตร์ มหาวิทยาลัยแม่โจ้

2. Inclusion of research and academic services

None

Section 9: Grading Policy

Grade	Criteria
A	80% up
B+	75-79%
B	70-74%
C+	65-69%
C	60-64%
D+	55-59%
D	50-54%
F	Lower than 50%

Section 10: Description of course assessment

10.1. Details

- Midterm Exam (25%) – Students will be tested by creating application with different class relationships.
- Final Exam (25%) – Students will be tested by creating application with hibernate.

- Class Participants (10%) – Students will be asked to express their opinions and discuss in classroom. Lecturer will observe student participants and give a score.
- Group Assignments and Project (40%) – Lecturer will give a score according to overall performance. Student will be evaluated by team members. All members in a team will not have the same score.

10.2 Course learning outcomes attached to this assessment

- CLO 1: The learners have the ability to analyze and design application by using object-oriented programming techniques.
- CLO 2: The learners have the ability to develop application by using object-oriented programming that can work with database system.

10.3 Assessment criteria (Rubric)

Component	Sophisticated (70 - 100%)	Competent (41 - 69%)	Not Yet Complete (0 – 40%)
Group Assignments and Project (40%)	All requirements and objectives are identified, evaluated and completed. The team worked well together to achieve objectives. Each member contributed in a valuable way to the project. All data sources indicated a high level of mutual respect and collaboration.	All requirements are identified and evaluated but some objectives are not completed. The team worked well together most of the time, with only a few occurrences of communication breakdown or failure to collaborate when necessary. Members were mostly respectful of each other.	Many requirements and objectives are not identified, evaluated and/or completed. The team did not collaborate or communication well. Some members would work independently, without regard to objectives or priorities. A lack of respect and regard was frequently noted.
Class Participants (10%)	Attend the classes and well participate and critical discussion.	Attend the classes and pay attention.	Lack attend the classes and not well participate.

10.4 Deadline and feedback mechanism

- The deadline of the assignment will be announced by lecturer in the lab section.
- Feedback of each assignment will be given to students after 1 week.

Section 11: Appeal Procedure

1. Students will be informed the scores within one week after the last teaching day of semester 2/2023.
2. Students have a right to ask for a revision of their assignment and/or exam score until 2 weeks after the announcement of the score.

Revised by Asst.Prof.Dr. Sayan Unankard

Date 15/11/2022