

204362 – Object-Oriented Design

(การออกแบบเชิงวัตถุ)

Course Syllabus 2/2562

Department of Computer Science

Credit: 3 (3-0-6)

Prerequisite: 204361 or 204363

Lecture: TuF 9.30 – 11.00

Instructors:

Section 001 (CSB209): Asst. Prof. Dr. Areerat Trongratsameethong **E-mail:** areerat.t@cmu.ac.th

Section 002 (CSB210): Dr. Wijak Srisujjalertwaja **E-mail:** wijak.s@cmu.ac.th

Course Description:

Introduction, object-oriented project life cycle, object-oriented analysis, object-oriented design, object-oriented languages, object-oriented testing, object-oriented computer aided software engineering tools, application in object-oriented.

Tools:

- UML Tools: Edraw Max, SmartDraw, Draw.io

Grading:

Attendance	5%
Quiz	10%
Midterm Exam	25%
Final	25%
Project	35%
Total	100%

Grading Scale:

A, B+, B, C+, C, D+, D, and F

Textbook:

- Simon Bennett, Steve McRobb, and Ray Farmer, “Object-Oriented Systems Analysis and Design Using UML -- 4th Edition”, McGrawHill, 2010.
- Grady Booch, Robert A. Maksimchuk, Michael W. Engle and Bobbi J. Young, “Object-Oriented Analysis and Design with Applications – 3rd Edition”, Addison-Wesley Professional, 2007.

Supplementary readings:

- <http://www.uml.org>
- http://www.icodeguru.com/design/UML-for-Database-Design/0201721635_snode34.html
- <https://realpython.com/python-web-applications/#dynamic-web-app>
- <https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/concepts/object-oriented-programming>

▪ **Tentative schedule:**

Week	Topics		Room
	Tuesday	Friday	
1	- Course Syllabus - Midterm Exam Appointment - Assign Project	1) Requirement Captures	CSB210
2	2) Introduction to Systems Analysis and Design		CSB210
3	วันหยุด		
4	3) Object-Oriented Concept	4) Project: Proposal	CSB210
5	5) Modelling Concepts		CSB210
6	6) Use Case Modelling	7) Project: Business Flow Diagram	CSB210
7	8) Project: Use Case Diagram	9) Project: Use Case Specification	CSB210
8	10) Quiz#1	11) Project: Project Discussion	CSB210
9	Project Progress Report #1		CSB210
Midterm Period: 17 - 23 February 2020 (Tuesday 18 February 2020, 08:00 – 11:00)			
10	12) Object Interaction I: Sequence Diagram	13) Project: Sequence Diagram	CSB209
11	14) Object Interaction II: Other Interaction Diagrams	15) Project: Sequence Diagram	CSB209
12	16) Detailed Design	17) Project: Class Extraction	CSB209
13	18) Database Design	19) Project: Database Design	CSB209
14	20) Software Testing	21) Project: Software Testing	CSB209
15	22) Quiz#2	23) Project: Documentation Discussion	CSB209
16	Project Presentation and Submit Final Report		CSB209
17	วันสงกรานต์	Wrap up	CSB209
Final Period: 20 April - 3 May 2020 (Thursday 30 April 2020, 15:30 – 18:30)			