University of Detroit Mercy
College of Engineering and Science
Department of Mathematics, Computer Science and Software Engineering

CSSE-5250 Software Design Techniques
Summer 2015

DESCRIPTION OF COURSE: Large-scale Software Systems Design methods, Fundamental Design Concepts, Design Notations, Design Methods Comparison, Structure Design, State-Based Design, Object-Oriented Design, Engineering Principles of Software Design, Software Design Case Studies, Projects.

REQUIRED TEXT: Introduction to Software Engineering Design: Processes, Principles and Patterns with UML2, Christopher Fox, Addison-Wesley, ISBN: 9780321410139, 2006.

RECOMMENDED TEXTS: The Unified Modeling Language Reference Manual (2nd Edition) by James Rumbaugh, Ivar Jacobson, Grady Booch. ISBN: 9780321718952.

INSTRUCTOR: Dr. Shadi Banitaan – (313) 993-1060
Email: banitash@udmercy.edu.

OFFICE HOURS: Thursday 2:00pm – 3:00pm or by appointment.

LECTURE: TR 3:00 pm - 5:51 pm, Room E372.

COURSE OUTCOMES: Upon completion of the course, students will be able to*:

1. Develop an advanced understanding of object oriented concepts (a, b, c, e)
2. Develop skills in analysis and design of object-oriented systems (a, b, c, d, e, g)
3. Understand and be able to develop basic models of the Unified Modeling Language (a, b, c, e)

*_Letters refer to Software Engineering Program Outcomes_

GRADING: Assignments   50%
                     Project   20%
                     Exam I   15%
                     Exam II   15%

GRADING SCALE:

93-100% A	87-89% B+	77-79% C+	69-67% D+
90-92% A-	83-86% B	73-76% C	60-66% D
	80-82% B-	70-72% C-	0-59% F

IMPORTANT DATES:

Classes Begin   May 4
Memorial Day (UNIV CLOSED)   May 25
Official End of Summer I   June 20
Grades Due for Summer I   June 22

LATE ASSIGNMENTS:

Due dates will be provided for each assignment when it is posted. Late assignments will be accepted with a penalty of 10% per day late.

ACADEMIC INTEGRITY:

Students are expected to conform to a high standard of honesty and integrity in this course. Copying the work of someone else and other forms of cheating are strictly prohibited. Permitting or tolerating such behavior is also prohibited. The minimum penalty for any offense is a 0 on that assignment. The culprits may be subject to additional sanctions, up to and including expulsion from school for serious offenses, as prescribed by the University Catalog and the Engineering and Science Student Handbook.

STUDENTS WITH DISABILITIES

UDM is committed to all students achieving their potential. If a student has a disability or believes that s/he may have a disability (including a physical, mental, or emotional disability) that may require an accommodation, students should contact Emilie Gallegos in the University Academic Services (UAS) office for further discussion. The UAS office is located on third floor of the Library. Because accommodations often require adequate time to implement, students should make arrangements to contact the UAS as soon as possible.

As protected personal information, all information regarding a student's disability is confidential and must be maintained in a confidential manner in compliance with state and federal laws, including but not limited to information regarding the fact that a student may be experiencing a disability and the nature of the disability.