University of Wyoming
College of Engineering
Department of Computer Science

Computer Science 3011 - Introduction to Software Design

SYLLABUS

Semester	Spring 2018
Meeting	•Time: M-W-F 10:00 - 10:50 AM
	•Place: EN 1045
Instructor	Dr. Kim Buckner
Office	EN 4089
Office Hours	•Monday, Wednesday, 1:00-2:00
	•Tuesday, Thursday, 9:00-10:00
	•Tuesday, Thursday, 1:00–2:00
	•Other times are available by appointment
Contact	•Email: kbuckner@uwyo.edu
	•Office Phone: 307-766-5182

Course Description: Introduces the principles and practice of software design, including UML and design patterns. Uses case studies to illustrate design in action.

Prerequisites: COSC 2030

Objectives: Students who complete this course should be able to:

- Understand designs rendered in UML and create UML models

- Understand different tradeoffs that affect design

- Understand and apply object-oriented design principles

- Understand and apply design patterns to new situations

- Have an introductory understanding of practical issues in software system development

Required Text: *Object-Oriented Design Using JAVA*, Dale Skrien, 2009, McGraw-Hill Higher Education. ISBN 978-0-07-2975416-4

Course Policies:

- Grading:
  - A 90% - 100%
  - B 80% - 89%
  - C 70% - 79%
  - D 60% - 69%
  - F Below 60%

- Percent of Grade:
  - Homework: 20%
  - Programming Assignments: 50%
  - Midterm Exam: 10%
  - Presetation: 10%
  - Final Exam: 10%

Groups: The class will be divided into groups. The instructor will determine group membership. Students will **not** be allowed to change groups once assigned. All students must participate in the group work. Besides the programming assignments, each group will be required to give a presentation on a topic assigned by the instructor. All group work will require a feedback document from each group member on that member's performance as well as the performance of the other group members.

Homework/programming assignments: Homework and programming assignments will be posted and managed through WyoCourses. Homework will be submitted as typed electronic documents (no scanned documents allowed). The allowed file formats are PDF (PDF/A compliant), Word (doc/docx), and OpenDocument (odt).

Each programming assignment will have its format, language, and method of submission specified in the assignment. Failure to comply with the assigned specifications will result in a 0 (zero) grade for the assignment.

Each homework or programming assignment will have a due date and time assigned. Any late submission will be assessed a 10% (ten percent) late penalty. It can be at most 24 hours late. WyoCourses will not accept any submission after that time.

Homework must be done individually. You must NOT copy anyone else's work, that includes anything you find online. Retyping what you have found and changing a couple of words is still plagiarism. The use of quotes and citations is not allowed. Anyone suspected of copying/using someone else's work will be subject to the University's policies on academic dishonesty, see below.

Programming assignments will be done as group projects. There will be <u>one</u> copy of the assignment materials submitted for each group. Scoring rubrics for each programming assignment will be part of the documentation provided to you.

Presentations: Each group will give a presentation to the class.

- A presentation by each group, during class, will count as one of the regular lectures. Each presentation will be accompanied by a separate bibliography that will be submitted to the instructor. Each presentation will be worth 40 points.

- Every student will be expected to attend every group presentation. Attendance will be taken by completion of a feedback form on the presentation. Attendance will be worth 5 points per presentation.

Academic Honesty: Assignments are intended to be completed independently unless otherwise specified by the instructor. UW Regulation 6-802 defines academic dishonesty and specifies the penalties (see Office of the General Counsel's webpage and select **Current Regulations and Presidential Directives** for the content of all the University regulations)

Collaboration and discussion are acceptable, but you MUST do your own work. The grade you receive must represent your effort and achievement not that of others. Anything else is unfair to you and to your fellow students.

Attendance: Attendance at the lecture is highly recommended as not all material will come from the texts (see further UW Regulation 6-713). Attendance of all members of each group is required for the presentations.

Students with disabilities: If you have a physical, sensory, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and possibly provide documentation of your disability to, Disability Support Services (DSS), room 109 Knight Hall. You may also contact DSS at (307) 766-3073 or udss@uwyo.edu. Visit their website for mmore informaion: www.uwyo.edu/udss.

Other Information: The use of cell phones, pagers, and other devices that beep, ring, etc. is prohibited in class. They must be turned off or set to "silent". Text messaging is extremely distracting to the instructor so please wait until after class to reply to or check your messages.

WyoCourses will be an integral part of the class. You are free to customize your notifications but please check whatever you use regularly. Course information **may** be distributed by email

and you will be held responsible for any such information. It may also be distributed by WyoCourses announcement.

The course site will maintain the most current copy of this syllabus, the homework, and programming assignments, and a gradebook. The online gradebook will only be used to show you the grades for assignments, and exams. The totals that may be part of the online gradebook are almost never accurate, do not rely on them for your course grade. I keep the official course grades offline. If you want to talk about your current standing, see me during office hours.

Basic Course Schedule: The academic calendar that can be accessed from WyoWeb, shows 'important' dates. The ones that most concern us are:

- January 22, First classe
- March 21, Midterm Grades due
- March 12-16, Spring Break
- May 4, Last day of classes
- May 09, Final Exam, 08:00 AM – 10:00 AM
- May 12, Commencement

Notes:

- The exams for this course will be "comprehensive" in that you will be responsible for all of the course material assigned, discussed, or covered in any way from the first day of the course up until the start of the exam. Any change in the schedule for an exam will be announced at least two (2) class periods in advance.

- Exam questions will normally be of the short answer or essay type. If you have any question about what that means in terms how you should answer, please ask me.

- Office hours are kept for the benefit of the students. They are intended to be set times when the instructor is known to be available in his office to answer questions, discuss course material and provide help. If I will not be available for office hours, you will be notified as much in advance as possible. There are times when this may be a sticky note on my door. I am normally here at the University from 0800 to 1430 Monday through Friday. I do have other classes. If you wish to come by outside of scheduled hours, please feel free. I will not guarantee that I can talk to you but we can make arrangements for some other time when I am available. You can also phone or email.

- I do not often read email in the evenings or on weekends. I do have my machine on all the time I am in the office and unless I get absorbed in something, I read and answer my email all day. But, do not plan on an immediate answer. I will read and answer as fast as I can but there are no guarantees I even remember what time it is let alone when the last time I checked my email was.

This Syllabus: This document is subject to change. Any changes will be communicated to the students in a timely manner. No changes involving grading will affect assignments already given at the time of the change. No changes in assignment due dates will affect current assignments if such change causes the assignment to be due earlier than originally indicated.

Last Update: January 11, 2018