CSE 4214 / 6214 – Introduction to Software Engineering
Fall 2016

GENERAL INFORMATION

Course dates:	August 16, 2016 through December 12, 2016 *(Final examination: Friday, December 9, 12:00pm – 3:00pm)*
Lecture:	Butler 104; Tuesday & Thursday 2:00pm – 3:15pm
Laboratory:	Butler 101; Wednesday 12:00pm – 1:50pm (section 03) Butler 101; Thursday 6:30pm – 8:20pm (section 02)
Prerequisite(s):	CSE 2383 (*Data Structure and Analysis of Algorithms*) with a grade of C or better
Instructor:	Dr. Tanmay Bhowmik
Email:	tbhowmik@cse.msstate.edu / tb394@msstate.edu
Phone:	(662) 325-8437
Office:	Butler 328
Office hours:	Tuesday & Thursday 3:30pm – 4:30pm (other times by appointment)
Website:	In myCourses: "**CSE-4214-01** Intro to Software Eng 201330" (*new Blackboard system*)
Lab Instructor (TA):	Kristen Massey km1035@msstate.edu *More contact information will be provided in the lab.*

COURSE GOALS

- Provide an introduction to the software engineering (SE) discipline.
- Describe the SE process and select the correct process for a given software development scenario.
- The student will be placed in a project environment and required to work as part of a software development team.
- The student will be able to perform (object-oriented) software analysis, design, implementation, testing, integration, software reuse, reverse engineering and reengineering.
- The student will be able to apply standard, accepted software engineering techniques to system development and to apply appropriate metrics.
- The student will demonstrate proficiency in eliciting requirements from a customer and refining the high level requirements to an end product.
- The student will demonstrate the ability to document their work to an acceptable standard.
- The graduate and honors students will examine some state-of-the-art research areas in SE and be prepared to conduct research in SE.

TEXT BOOKS

Roger S. Pressman, *Software Engineering: A Practitioner's Approach*, 7th edition, McGraw-Hill, 2010.

Other readings: IEEE standards for software engineering and assigned articles.

COURSE REQUIREMENTS

- Each student is required to study selected sections from the textbook and actively

participate in the class. The required text will be supplemented with materials from other sources. All supplementary materials will be made available through the course website.

- In the labs, the concepts from the lecture will be applied through a team project by developing a software product for a customer. Various documents and working software will be the lab deliverables.
- Submission of a paper on an assigned topic is required for graduate and honors credit in this course.

GRADING

Grading Scale	
90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
0% - 59%	F

Grading Activities

Midterm I: 20%
Midterm II: 20%
Final Exam: 15%
Laboratory & Assignments: 30%
Quizzes: 10%
Class Participation: 5%

Note: *Please see the course calendar for the tentative exam dates and other details.*

The mandatory final examination will be comprehensive, and will be given during the scheduled final exam time.

There will be four quizzes (2.5% each) Please see the course calendar for tentative dates.

There will <u>not</u> be any make up quiz.

Make-up exams will be considered only for excused absences (cf. Section: ATTENDANCE), and for that you will need to provide valid documentations.

Honors & graduate students will have to write and present a paper.

- ***Laboratory deliverables*** will be announced by the TA. Lab officially starts the second week of the class – that is, Wednesday (August 24) or Thursday (August 25), depending on your own lab session.
- Individual grade for laboratory will be decided by weighting team grade with the input from the lab instructor and from the peer evaluations.

Lab policies and more details about the TA will be given in the lab.

- All submissions shall be done electronically through myCourses, unless otherwise notified.
- **<u>Late submission</u>.** Students (student groups) can turn in their assignments and laboratory deliverables **up to 2 calendar dates late**. The penalty for lateness is that, for being late by each calendar date, a **20%** of the actually obtained grade will be deducted. For example, let a laboratory deliverable is due on Sep 15 by 11:59pm. If the submission is late by one calendar date (i.e., submitted between 12am and 11:59pm of Sep 16), a grade of 80% will end up being 64%. If the submission is late by two calendar dates (i.e., submitted between 12am and 11:59pm of Sep 17), a grade of 80% will end up being 48%. No assignment or laboratory deliverable will be accepted after 2 calendar dates, and will be given a grade of 0. If the students have trouble finishing their assignments and laboratory deliverables, talk to the instructor and TA for help at least one week before the deadline. Weekends and holidays count when calculating late days.
- **<u>Re-grading</u>.** Students (student groups) have up to **3 days** from the time the graded

assignment or laboratory deliverable is available to request a re-grading, if there is a disagreement with a grade. Weekends and holidays count when calculating re-grading request days. **No assignment or laboratory deliverable will be re-graded after this period.** Re-grading requests shall be made to the instructor directly.

- **Class participation.** Grade will be calculated as $g = 5*(n - a)/n$, where g is the class participation grade, n is the number of days on which attendance is taken (both in lab and lecture classes), and a is the number of absences (labs and lectures combined). At the end of the semester, if a student's final grade falls on the border line, (i.e., >89 & <90, >79 & <80, >69 & <70, or >59 & <60) the instructor will take the celling of the final grade, ***if and only if***, the student has attended more than 90% of the classes (labs and lectures combined). For example, if a student's final grade is 89.3 and he/she has attended more than 90% of the classes, the final letter grade will be an A. It will be a B if the student has >=10% **unexcused absences** (cf. Section "ATTENDANCE").

ATTENDANCE

- Students must attend all the lectures and laboratory classes for this course. An exception (i.e., excused absence) could be made only when the student provides valid documentation for a University Approved absence as defined at Academic Policy 12.09 (http://www.policies.msstate.edu/policypdfs/1209.pdf).
- **If the attendance tracking system is available**, be sure to scan your student ID card as soon as you enter the classroom. If you swipe and leave without attending the class, or scan one or more ID cards that are not your own, it will be considered a violation of the Honor Code and will be reported as such. You may learn more about how to use the scanner by watching the video at this link: http://mymedia.msstate.edu/viewer.php?mid=53008.
- Students who are auditing this course must attend at least 75% of the classes to avoid a grade of F.

HONORS CREDIT

An honors student will need to write and present a paper that will comprise 10% of the final grade and the distribution mentioned in the Section "GRADING" will be 90% of the final grade. The course instructor must approve the paper topic before further work commences. Therefore, please talk to the instructor before finalizing your topic. Term paper grade distribution is as follows:

Term paper topic: 2%
Term paper presentation: 2%
Final term paper: 6%

GRADUAUTE CREDIT

A graduate student will need to write and present a paper that will comprise 25% of the final grade and the distribution mentioned in the Section "GRADING" will be 75% of the final grade. The course instructor must approve the paper topic before further work commences. Therefore, please talk to the instructor before finalizing your topic. Term paper grade distribution is as follows:

Term paper topic: 5%
Term paper presentation: 5%
Final term paper: 15%

COMMUNICATION POLICY

- Official announcement will be made on the course website or through email

- Email the instructor and the TA by only using the NetID account, i.e., from the "msstate.edu" domain. Please make sure to include "CSE4214" or "CSE6214" and your name in the subject of the email.
- Student is encouraged to use myCourses to share files or participate in discussion with other members when working in a team.

CLASS CONDUCT

- **Interaction with a Professional Manner:** All students are expected to conduct themselves in a professional manner. This includes, but not limited to, avoiding the use of language, dress, electronics that may pose a distraction to fellow students.
- **Personal Electronic Devices:** Laptops and other electronic devices are allowed but should be used in a responsible manner that does not interfere with the lecture or other students' ability to learn. Cellular phones and other electronic devices that produce auditory stimuli should be turned off or silenced during the classes and exams.
- Take active roles in the classroom. Be out loud when presenting, asking questions, or answering questions.
- MSU classroom policy is at http://www.msstate.edu/dept/audit/1008.html.

ACADEMIC HONESTY

Students are expected to follow MSU as well as the CSE Department's policies on academic misconduct and on academic honesty with respect to assignments, projects, labs, presentations, quizzes, and exams. These policies can be found at Ethics in Research and Other Scholarly Activities (http://www.msstate.edu/dept/audit/8002.html) and Academic Operating Policy and Procedure (http://www.msstate.edu/dept/audit/1207.html). Also, as of fall semester 2007, MSU has an approved Honor Code that applies to all students. It reads as follows:

"As a Mississippi State University student I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do."

Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, and accepts responsibility for learning and following the philosophy and rules of the Honor Code. Every instance of violation of honor code in connection with this course will be reported to the Honor Code Council. For additional information, please refer to MSU's Honor Code at http://www.msstate.edu/dept/audit/PDF/1207.pdf.

ADD/DROP POLICIES

The ADD/DROP policy is at http://www.msstate.edu/dept/audit/1201.html. Students are responsible for reviewing this policy and complying.
All MSU policies can be found at
http://www.msstate.edu/dept/audit/mainindex.html#VOLUME_II.

RIGHT TO CHANGE

The course instructor reserves the right to adjust this syllabus upon subsequent consideration of student performance, schedule constraints, unexpected semester events, and other such situations. If changes are required, they will be posted on course web site.

Tentative Course Calendar

All dates are tentative except the final exam date. **The instructor may adjust the schedule as the semester progresses.**

Week	Class Date	Events
1	T, Aug 16	
	R, Aug 18	
2	T, Aug 23	
	R, Aug 25	
3	T, Aug 30	
	R, Sep 1	
4	T, Sep 6	
	R, Sep 8	**Quiz 1**
5	T, Sep 13	
	R, Sep 15	
6	T, Sep 20	
	R, Sep 22	**Midterm I**
7	T, Sep 27	
	R, Sep 29	**Term paper topic due by 11:59pm**
8	T, Oct 4	
	R, Oct 6	**Quiz 2**
9	T, Oct 11	
	R, Oct 13	*No class – Fall break holiday*
10	T, Oct 18	
	R, Oct 20	**Quiz 3**
11	T, Oct 25	
	R, Oct 27	
12	T, Nov 1	
	R, Nov 3	**Midterm II**
13	T, Nov 8	
	R, Nov 10	
14	T, Nov 15	
	R, Nov 17	
15	T, Nov 22	**Quiz 4**
	R, Nov 24	*No class – Thanksgiving holiday*
16	T, Nov 29	**Term paper presentation** **Final term paper due by 11:59pm**
	R, Dec 1	Reading Days (No mandatory class assignments, requirements, meetings)
	Fri, Dec 9 12:00 pm - 3:00 pm	**Final Exam** in Butler 104

Some Other Important Dates
Mon, Aug 22: Last day to drop a course without a grade (5th class day) 5:00pm

MSU Academic Calendar
http://www.registrar.msstate.edu/calendars/academic-calendar/

Fall 2016 Examination Schedule
http://www.registrar.msstate.edu/students/schedules/exam-schedule/