213 - Software Methodology

Jump to Today

Instructor: Lily Chang

Office: Hill Center 264

Office Hour:

Tuesdays and Thursdays 5:00pm - 6:00pm through Webex

Webex personal meeting room: https://rutgers.webex.com/meet/lc1064 (Links to an external site.)

Email: lily.chang1@rutgers.edu

Meeting Time:

- Tuesdays and Thursdays 3:20pm 4:40pm through Webex
- Meeting Link:
 - https://rutgers.webex.com/rutgers/j.php?MTID=m14560bc301b7753fadd6e2f23e
 2ff71d (Links to an external site.) (Links to an external site.)
 - o OR click **Cisco Webex** on the navigation bar
 - Meeting Number: 120 836 5074; Password: BqV6XZF0uHJKRQ
- Online Recitations and TA office hours
 - Section 10: Fridays, 12:15pm 1:10pm; TA: Vahid Azizi,
 email: vahid.azizi@cs.rutgers.edu, Office Hour: Fridays, 1:10 to 3:10 pm
 - Meeting
 Link: https://rutgers.webex.com/rutgers/j.php?MTID=m8c1f8ae7f76e0d48e73
 750f1c013bf03 (Links to an external site.)
 - Meeting number: 120 970 1651; Password: 3PCmfxAUD24
 - Section 11: Fridays, 10:35am 11:30am; TA: Jindong Jiang, email: jindong.jiang@rutgers.edu, Office Hour: Fridays, 8:30 to 9:30am
 - Section 12: Thursdays, 12:15pm 1:10pm; TA: Kun Wang,
 email: kun.wang2012@rutgers.edu, Office Hour: Mondays,10:00 11:00am
 - Section 13: Mondays, 12:15pm 1:10pm; TA: Xun Zhang,
 email: xz348@scarletmail.rutgers.edu, Office Hour: Mondays, 1:30 2:30pm
- Graders Contact
 - o Group #1 #47, Ashwini Gore, ag1676@scarletmail.rutgers.edu
 - o Group #48 #95, Naina Jain, nj286@scarletmail.rutgers.edu

Textbook: not required.

Course Description:

This course teaches essential principles, techniques, tools, and methods used to develop large software programs in Java. These include object-oriented programming and design, Unified Modeling Language (UML), testing and debugging, using and documenting APIs, asynchronous (event-driven) programming in a Graphical Use Interface (GUI) framework, code maintenance and version management, software development using IDE, and introduction to building software on mobile platforms.

Prerequisite:

01:198:112

Grading:

Component	Percentage
Midterm Exam	25%
Final Exam	25%
5 Projects	50%
Total	100%

Grade:

A: 90% | B+: 85% | B: 80% | C+: 75% | C: 70% | D: 64% | F: less than 64%

Topic Outline:

- Object-Oriented programming
- Inheritance, interfaces, abstract classes, polymorphism
- Unified Modeling Language (UML)
- Design Patterns
- Black-Box Unit Testing; JUnit test framework
- Object persistence, serialization
- Version control systems

- Designing and implementing GUIs using JavaFX
- Mobile apps development with Android

Additional Notes:

- 1. Lectures and recitations will be held online at the scheduled meeting times. You are required to have a personal computer equipped with a webcam to take this course. You can find the University's Tech Guide here: https://it.rutgers.edu/technology-quide/students/#new-brunswick (Links to an external site.)
- 2. Lecture notes and announcements will be posted on <u>Canvas</u>. (<u>Links to an external site</u>.)You MUST check the course page on a regular basis. You are required to turn on the notification to receive the class announcements.
- 3. Textbook is not required. However, you are expected to read and study the supplementary materials provided on <u>Canvas (Links to an external site.)</u>, including the lecture notes, videos and recorded lectures.
- 4. The lecture notes and videos are created by the instructor specifically for the use in this class, <u>all rights reserved</u>. You CANNOT redistribute or repost the lecture notes and videos without the consent of the instructor.
- 5. All the projects are group assignments. Students must work in pairs and meet the requirements of the assignments.
- 6. Projects must be turned in by the due dates. **Late submissions are worth 0 points!** The ONLY exception to this rule is a Doctor's Excuse for an illness lasting more than 3 days.
- 7. **ALL projects must be turned in to pass this course!** You are required to submit the projects through Canvas. You can submit multiple times for a given assignment before it is due. Canvas keeps all submissions. However, the graders/TAs will only grade the last submission for a given assignment.
- 8. There are 2 online exams with Proctortrack, midterm and final. You are required to have a Proctortrack profile on Canvas in order to take the online exams. <u>You need a webcam in order to create a Proctortrack profile.</u>
- 9. The midterm is tentatively scheduled on Tuesday, October 20. Please note that the date is subject to change if necessary. The final exam is scheduled by the University, and the date will be announced during the semester on the University's website.
- 10. An exam missed because of an excused absence such as illness verified by physician or participation in an authorized university activity can be made up, **provided the instructor is notified in advance**.
- 11. Academic Integrity: You are responsible for honestly completing and representing your work, for appropriately citing sources, and for respecting the academic endeavors of others. Please refer to the Academic Integrity Policy and Procedures

here: https://academicaffairs.rutgers.edu/academic-integrity-policy-and-procedures (Links to an external site.)

Course Summary:

Date	Details	
Wed Sep 9	Assignment Sign up for pairs	due by 3pm
Thu Sep 24	Assignment Project 1 (group submission)	due by 11:59pm
	Assignment Project 1 - Personal Time Logs (individual submission)	due by 11:59pm
Wed Oct 7	Assignment Quiz 1 - Onboarding	due by 11:59pm
Thu Oct 8	Assignment Project 2 (group submission)	due by 11:59pm
	Assignment Project 2 - Personal Time Logs (individual submission)	due by 11:59pm
Tue Oct 20	Assignment Midterm Exam	due by 4:40pm
Mon Nov 2	Assignment database.txt	due by 11:59pm
	Assignment Project 3 (group submission)	due by 11:59pm
	Assignment Project 3 - Personal Time Log (individual submission)	due by 11:59pm
Mon Nov 16	Assignment Project 4 (group submission)	due by 11:59pm
	Assignment Project 4 - Personal Time Logs (individual submission)	due by 11:59pm

Date	Details	
Fri Dec 4	Assignment Project 5	due by 1pm
Wed Dec 9	Assignment Project 5 (Group Submission)	due by 11:59pm
Thu Dec 17	Assignment Final Exam (cumulative)	due by 11am