SOFTWARE ENGINEERING, Fall 2019, CRNs: 84355/84356, CSC 4350/6350

TIME: 12:45pm-2:30pm, **Days**: TR, **Location**: Aderhold Learning Center: Room 31 **OFFICE HRS**: TR (3:00pm-4:00pm) Or by appt.

INSTRUCTOR: William Gregory Johnson, **Email**: <u>wjohnson6@gsu.edu</u>, **Office**: 25 Park Place, Rm648 **TA**: Yang Li; **Email**: yli48@student.gsu.edu

MOBILE: 404-348-6923, Google HANGOUTS: William.johnson.gsu@gmail.com

PREREQUISITES: CSC2720 (Data Structures) is enforced with grade 'C' or higher.

TEXTBOOK: Software Engineering, Tenth Edition, Ian Sommerville, **ISBN**-13: 978-0-13-394-303-0

OTHER: This course requires you have a Gmail account (<u>http://gmail.google.com</u>) for course work **CLASS**: This is considered to be the CTW (Critical Thinking Through Writing) class in the computer science department. It means therefore, that the you will be evaluated on performance, based upon the following

with regards to both assignments and exams:

- 1. Analysis
- 2. Description
- 3. Understanding
- 4. Preparation
- 5. Completeness
- 6. Writing composition and correctness: English Grammar, punctuation, content.

Class Date	Topic / Event	Chapter	Activity
2019.08.27	Introduction, Syllabus, Course Structure, Grading Schema		
2019.08.29	Project Management, Database Basics, Team Formation Assessments	22	dB basics NOT on exam
2019.09.03	Database Basics, Team Formation Assessments, Project Topics Announced	22	
2019.09.05	Teams Announced, Project Planning, Conceptual Model	23	
2019.09.10	AGILE and SCRUM, Initial Backlog	3	
2019.09.12	AGILE and SCRUM, Backlog	3	
2019.09.17	TEAM Presentation: Backlog and Conceptual Model		SPRINT 1 Begins
2019.09.19	Introduction to Software Engineering, Software Processes	1, 2	
2019.09.24	Software Processes, Requirements Engineering	2, 4	
2019.09.26	Requirements Engineering, System Modeling	4, 5	
2019.10.01	Service-oriented Software Engineering	18	
2019.10.03	TEAM Presentation: SPRINT 1		SPRINT 2 Begins
2019.10.08	Midterm Exam: Chapters 22,23,1,2,3,4,5,18		
2019.10.10	Architectural Design	6	
2019.10.15	Design and Implementation: UML Semester Withdraw Ends at 5pm. http://registrar.gsu.edu/ registration/withdrawals/	7	
2019.10.17	Design and Implementation: UML	7	
2019.10.22	TEAM Presentation: SPRINT 2		SPRINT 3 Begins
2019.10.24	Design Patterns		
2019.10.29	Design Patterns, Software Testing	8	
2019.10.31	Software Evolution	9	
2019.11.05	TEAM Presentation: SPRINT 3		SPRINT 4 Begins
2019.11.07	Change management	25	
2019.11.12	Advanced Topics: DevOps & Big data		
2019.11.14	Graduate Student Presentations (ALL ATTENDANCE REQUIRED.)		
2019.11.19	TEAM Presentation: SPRINT 4		SPRINT 5 Begins
2019.11.21	TBD: Poster Teams Workshop		
2019.11.26	THANKSGIVING WEEK – NO CLASS		
2019.11.28	THANKSGIVING WEEK – NO CLASS		
2019.12.03	Review for Final Exam		
2019.12.05	TEAM Presentation: SPRINT 5		LAST CLASS
2019.12.10	Final Exam: (undergraduate students only)		10:45 - 13:15
2019.12.14	Product Video Due: 9:30pm in iCollege Dropbox – NO LATE EXCEPTIONS, i.e., zero grade		

Additional Course Information:

Student Computer Access Requirement: Each student enrolled at Georgia State University must have access to a computer, and any course offered at the university may require computer-based work. It is the responsibility of each student to ensure his or her access to a computer. For more information, see page 104 in the Student Computer Access Requirement section in the 2016-2017 GSU undergraduate catalog on-line https://enrollment.gsu.edu/files/2016/08/Georgia State University 2016-2017 Undergraduate Bachelor-level Course Catalog.pdf

Academic Honesty: Georgia State University has a policy on Academic Honesty. You are expected to read and observe this policy. A copy can be found at <u>http://education.gsu.edu/student-services/academic-honesty/</u>.

Students with Disabilities: Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which an accommodation is sought.

Student Evaluation of Instruction: Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take the time to fill out the online course evaluation.

Connectivity Expectations: As GSU students, you are provided with a GSU Internet (E-mail and WWW space) account. It is your responsibility to immediately make sure your account (UserID and password) is active and up to date. All of your course materials will appear in iCollege. I will use iCollege to make announcements pertaining to the course. It is your responsibility to check your iCollege e-mail on a regular basis (at least three times each week) to make sure you keep current with the course and are prepared when you come to class each week.

Project Grading for Software Engineering, Fall 2019

Undergraduate Students (CSC4350):

- 1) Project: 50% (Sum of these two things)
 - 1) Team Presentations = 65 points
 - 2) Individual Video demonstration = 35 points

Graduate Students (CSC6350):

- 2) Project: 40% (Sum of these two things)
 - 1) Team Presentations = 75 points
 - 2) Individual Video demonstration = 25 points

Project Grading Scale for Rotating SCRUM Roles

Project Manager: 45% Scrum Master: 25% (Developer 1, Developer 2, QA/Tester): 10% each

Undergraduate Students (CSC4350):

- Project 50%
- Mid-Term 20%
- Final Exam 20%
- Attendance 10%

Graduate Students (CSC6350):

- Project 40%
- Mid-Term 20%
- Paper/Presentation 30%
- Attendance 10%
- No Final Exam

** Note that attendance points will be zero if recordings < 70%

Project technical requirements:

- a. OOP language (Java, JavaScript, Python)
- b. GUI UX
- c. Web Service
- d. Data Base
- e. GitHub
- f. Zenhub
- g. Slack Channels
- h. Include ME on all:
 - i. GitHub (user: williamgregoryjohnson)
 - ii. Zenhub (user: williamgregoryjohnson)
 - iii. Slack Channels (invite email: william.johnson.gsu@gmail.com)