

**CSci 435/535: Software Engineering**  
**The College of William and Mary**

**Spring 2012**

**Time:** MWF 1:00pm-1:50pm

**Location:** Blow Memorial Hall 332

<b>Instructor:</b>	Denys Poshyvanyk	<b>Grader:</b>	Qing Yang
<b>Office Hours:</b>	M,W: 12-1pm; F: 2-4pm	<b>Office Hours:</b>	
<b>Office:</b>	McGlothlin-Street, Hall 006	<b>Office:</b>	
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<b>URL:</b>	<a href="http://www.cs.wm.edu/~denys">http://www.cs.wm.edu/~denys</a>	<b>URL:</b>	

**Course URL:** All course materials will be posted on the blackboard (<https://blackboard.wm.edu/>)

**Course objective:** The Course will cover topics in software engineering such as: software life cycle, software requirement analysis, software system design, software implementation and testing, software maintenance, team programming, etc. Check the class schedule for more details.

**Course format:** This course is about learning "book knowledge" along with "hands-on experience". Students are required to read assigned material before class and ask questions and/or comments about the material. The course will consist of daily lectures on Mondays, Wednesdays, and Fridays. Some Friday class meetings will be related to the particular software project which we will be working on. Friday meetings may involve short informational presentations, inter-group communication and status reports, and elevation of issues.

**Project and assignments:** A team projects will be undertaken by the students. Details will be given out in the second week of the course. This project will provide an environment where the concepts learned and discussed during the lectures can be applied. The project will be multi part and a number of work products are to be produced and graded. A complete schedule of deadlines will be given within the two weeks of classes. Students will work on the project in groups of two or three students.

**Programming environments:** Departmental programming environments consist of Java used within Linux operating system (the students are also allowed to use Java or C++ based programming environments on their personal laptops). If you do not have departmental computing account, apply immediately. All programming, documentation, and project demos are done in this environment and it is the responsibility of students to acquire accounts and all necessary skills.

**Description:**

- It is assumed that students already have programming experience. **This knowledge will be tested in a quiz on Friday January 20<sup>th</sup> during the class.** This course will not devote much time to coding, debugging, or other basic software knowledge which the student should have acquired earlier in the curriculum. Instead, it will focus on the problems, design, techniques, and tools which are involved with the development of large software systems by groups of people;
- A significant portion of this course will be devoted to a project which students will complete outside of class. Note that students may need to devote significant time to the project during "crunch time" prior to a deadline;
- This course is cross-listed as CSsi 535. If you are a graduate student with significant software development experience, you are advised to take CSsi 635 or CSci 780 instead.

**Prerequisites:**

- CSsi 301 - Software Development
- CSsi 312 - Principles of Programming Languages
- Strong individual programming skills (Java, C++, and/or Python)
- Initiative: I expect that students of your caliber to not need hand-holding
- *If you do not have any of the above mentioned pre-requisites you need to talk to the instructor*

**Reading materials:**

- Required: Reading materials (papers, lecture slides, links in the schedule) on the BlackBoard
- Suggested: Software Engineering (8<sup>th</sup> Edition) by Ian Sommerville (ISBN: 9780321313799)
- Suggested: Code Complete (2<sup>nd</sup> Edition) by Steve McConnell (ISBN: 0735619670)
  - Online version: <http://proquest.safaribooksonline.com/0735619670>

**Important dates:**

- 1/20                 In-class skills assessment quiz
- 1/25                 Project proposals are due
- 2/27                 Midterm exam
- 3/3 – 3/11           Spring break, no classes
- 4/20-4/25           New technology student presentations
- 4/27                 Final project presentations
- 5/1                  Final exam
- 5/3                  Projects are due

**Point distribution:**

- Skills assessment quiz:                     5%
- Midterm exam:                                10%
- Final exam:                                    20%
- Home-works:                                 15%
- Random quizzes (a set of five):         5%
- Class project:                                30%
- New technology overview presentation 5%
- Final project presentation:                10%
- *Extra points (projects, home-works):*   10%

**Final grades:**

- 95% - 110%   A
- 90% - 94%    A-
- 85% - 89%    B+
- 80% - 84%    B
- 75% - 79%    B-
- 70% - 74%    C+
- 65% - 69%    C
- etc

**Late policy:** All written assignments must be handed in before each class. If you have a compelling and documented reason for not being able to meet the deadline, you must make the alternative arrangements *before* the due date.

**Collaboration Policy on Group Projects:**

- Unless specifically noted, you are not permitted to discuss the assignments in CSci-435/535 with anyone except your team mate.
- All work handed in by a team must have been done exclusively by the members of that team.
- Collaboration outside one's team can only take the form of a discussion on the CSci-435/535 discussion group, visible to the entire class. In this setting, it is permissible to answer questions when such answers do not provide solutions to questions posed in the assignment statement. For example, if someone gets a strange error when compiling their Java program and you know how to fix it, we encourage you to share that insight on the discussion group.
- Cheating, plagiarism, and any form of dishonesty will be handled with the maximum severity permitted under W&M rules. If you are ever in doubt about whether an action on your part is considered unacceptable collaboration, do ask the instructor or the GTA before proceeding.

**Other Notes:**

- Any modifications to the syllabus and announcements will be posted on the blackboard.
- Please turn off all wireless phones, the sound on all laptops and any other noise making devices.
- Copying or plagiarism of any type will not be tolerated and will be dealt with in accordance to the College's policy on cheating and plagiarism described in the student handbook.
- Special accommodations for students with disabilities: In accordance with the College's policy, if you have a documented disability and require accommodations to obtain equal access in this course, please contact the instructor at the beginning of the semester or when given an assignment for which an accommodation is required.
- A separate schedule of classes will be posted on the blackboard system and updated during the semester. The schedule will contain information on the topics presented in class, assignments, and due dates.
- I support sustainability initiatives on the WM campus. To reduce paper use, most of your course documents (including the syllabus, readings, and most assignments) will be provided on the course Blackboard page. Please try to save paper by reading these documents online, if possible. If you must print out documents, please consider printing double-sided and/or with two sheets per page. I also encourage you to turn in your assignments electronically. For more information, please see the Sustainability at W&M website: [www.wm.edu/sustainability](http://www.wm.edu/sustainability)