

## CIS 405 Software Engineering / Midterm Exam, Spring 2023

- This is a take-home exam. That means that you have as much time as you wish to do it, between the time it is released and when it is due. It is technically *open-book* and *open-computer*; the questions were formulated with this in mind.
- Make sure to answer essay questions with good paragraph structure, complete sentences, and arguments that have a beginning (with a thesis statement), a middle (supporting the thesis) and a conclusion. When asked to cite specifics, *cite specifics*. All of these play into the grade.
- If using sources to support your responses, you must cite the sources, including the course textbook. You must use ACM/IEEE or APA style. Sources are not included in word count. Citations must include paraphrased information as well as quoted material.
- **Your uploaded file must include your name in the file name AND in the finished document that you submit.** Please submit only PDF format. You must use L<sup>A</sup>T<sub>E</sub>X to generate your paper.

**IMPORTANT NOTE: THIS IS AN EXAM. THERE IS NO LATE SUBMISSION FOR THE EXAM AND NO GRACE PERIOD WILL BE GIVEN.**

1. (30 points) How has your changing ability to use Version Control contributed to the group software development process? Use one specific instance of your use of `git` to illustrate what you have learned.  
400 words.
2. (35 points) Scrum (and other agile methodologies) assume that members of a development team are motivated and invested in the process. List and discuss how the failure of team members to "buy in" to the organization's processes manifests in both the team's work and the software product.  
500 words
3. (35 points) Identify and discuss 3-5 links between the skills/theories you have developed in your Computer Science courses (up to and including this one) and the *practice* of software development. Provide concrete examples for each item.  
500 words