# Syllabus COMP 240 Computer Applications

### Spring 2023

## 1 Logistics

• Where: Center for Science and Business, Room 303

When: TTh 8:00am-9:50amInstructor: Logan Mayfield

- Office: Center for Science and Business (CSB), Room 344

- Phone: 309-457-2200

Website: http://jlmayfield.github.io/
Email: lmayfield at monmouthcollege dot edu

- Office Hours: By appointment. MWF 1-2pm. Tu 10-11am.

• Website: http://jlmayfield.github.io/teaching/COMP240/

• Credits: 1 course credit

• Prerequisites: A C or better in COMP 151 and COMP 152.

Note: This Syllabus is subject to change based on specific class needs. Significant deviations from the syllabus will be discussed in class.

# 2 Description, Content, and Learning Goals

In this course, students will work in small groups to develop three different computer applications. Each application will expose them to a different computing platform along with the tools and computing concepts used in developing programs for that platform. The platform and purpose of each applications will vary from year to year and instructor to instructor, but common choices of platforms include: the command line interface, the web, mobile devices, and high-performance computing. Students will maintain and develop their projects using GitHub and Git version control software. Emphasis will be placed on building effective software development teams as well as building the software itself. Upon completing the course students will know how to apply basic software engineering practices in a small group setting, how to maintain software through the git version control system, and will have experience with tools and best-practices for developing modern software applications for three different computing platforms.

#### 2.1 Textbook

Books and reference materials will be based on projects assigned but are likely to be a combination of online resources and instructor provided handouts. Students should consult the course website for project-by-project materials.

### 3 Workload

The course workload is as follows:

You can expect to spend most class meetings checking in with your current development team and the course instructor. Accompanying each project will be two or more presentations: several checkpoint presentations and one final presentation. Presentations will take place during the class meeting time.

### **Presentations**

Generally speaking, presentations will cover three things:

- 1. Where We Are: A demonstration of the current state of the project.
- 2. How We Got Here: A presentation of technical details as well as how the group worked together to get the project to its current state.
- 3. Group SWOT Analysis: In terms of the work presented, what were your group strengths and weaknesses? What opportunities do you have to move things forward for the next push? What threatens your progress?
- 4. What's Next?: What do you plan to accomplish by the next presentation and how will you achieve that goal given items identified by your SWOT analysis?

A clear-headed analysis of your group's effectiveness is equally as important as progress on the code. Your group should be clearly working together to pursue a shared goal, helping one another, and generally exploring the ways in which how you work as a group impacts your progress.

### **Projects**

Projects are a group effort. You'll be called on both individually and as a group to evaluate your projects in two ways:

- Technical: Does it have a clear set of program features? Are they relatively bug free or at least free of unknown and undocumented bugs? Is the code well-reasoned and technically sound or more like spray-and-pray logic?
- Group Effectiveness: Did the group collaborate and work together or were individuals working largely in a vacuum? Is there clear evidence of efforts to improve group cohesion and effectiveness? Is there a solid sense of shared ownership and understanding for all parts of the project?

### 3.1 Course Engagement Expectations

The weekly workload for this course will vary by student but on average should be about 12 to 13 hours per week. The follow tables provides a rough estimate of the distribution of this time over different course components.

Assignment Type	Time/week
Class Meetings	4 hours/week
Project Work	5-6 hours/week
Presentations	2 hours/week
Self-Evaluation and Reflection	1 hour/week

12.5 hours/week

## 4 Ungrading & Final Grades

This class is largely ungraded. That means your projects are not graded for points and your final grade is not determined by a point-based, numerical grading system. You will get feedback on your work but you will see points on nothing. You don't earn points for doing work or getting something correct nor do you lose points for getting something wrong. We're here to learn. Doing the work is how we do that and getting things wrong some or most of the time is part of learning.

### 4.1 Self-Evaluation & Final Course Grades

Throughout the semester, usually after completing a project, you'll be asked to engage in regular self-evaluation. This process is described in detail in additional documentation. Part of the process includes you self-assigning a course grade based on your self-evaluation. Your self-evaluation and self-assigned grade are then discussed with me in a one-on-one meeting during which we'll agree upon your current grade. The key here is that your self-evaluation and self-assigned grade begins the conversation, not my assigned points.

Below are some general rules of thumb we'll try to stick to when talking about grades. They relate grades to course competency expectations and Monmouth College policy.

- A Exceeding course expectations.
- B Meeting and occasionally exceeding course expectations.
- C Meeting course expectations.
- C- Mostly meeting course expectations. This is the minium grade that counts towards the major.
- **D** Occasionally meeting course expectations, but mostly not. Grades in the D range earn credit towards graduation but fall below GPA requirements.
- **F** Did not meet course expectations.

My hope is that the self-evaluation and self-directed grading process provides a lot of flexibility in terms of how you can achieve success in this course and meet your grade goals. If you ever have questions or concerns about self-evaluations and grades, then I'm more more than willing to discuss them with you at any time.

#### 4.1.1 Participation, Attendance, & Timely Work

I do not have strict attendance and deadline policies, but I do have clear expectations. These expectations that are baked into the disposition attribute of the course competencies. This attribute includes things like being professional, responsible, responsive, and self-directed.

As far as I'm concerned, signing up for this class means you agree to coming to class and lab, being on time for class and lab, doing assigned work in a timely manner, and generally participating in all the class has to offer. That being said, life happens and people have different priorities. You might need to miss class or extend a deadline. So long as you communicate with me about it, as a professional would with a co-worker, then we won't have a problem. If you simply skip class without warning, always show up late, or fail to do assigned work in a timely manner, then I expect that those failures to meet dispositional expectations to be reflected in your self-evaluation.

There is one exception to my "no grade-based policy" on assignments and deadlines and that is the self-evaluations and reflections. The self-evaluation process is critical to this class and in no way optional. If you fail to submit a required self-evaluation and reflection or attend the post-submission meeting, then I reserve to give you a final grade of D or lower for the course. You'll find I can be pretty relaxed about a lot of other assignments and deadlines, but I draw the line at the self-evaluation process.

#### Academic Honesty

You don't learn by trying to pass off someone's work as your own. In an ungraded class it makes even less sense to cheat and steal work from somewhere else. There are no points, you gain nothing from it and you certainly will learn nothing from it. In this ungraded class, academic dishonesty is still not tolerated.

From the Monmouth College Academic Honesty Policy:

"We view academic dishonesty as a threat to the integrity and intellectual mission of our institution. Any breach of the academic honesty policy - either intentionally or unintentionally - will be taken seriously and may result not only in failure in the course, but in suspension or expulsion from the college. It is each student's responsibility to read, understand and comply with the general academic honesty policy at Monmouth College, as defined here in the Scots Guide, and to the specific guidelines for each course, as elaborated on the professor's syllabus."

"The following areas are examples of violations of the academic honesty policy:

- 1. Cheating on tests, labs, etc;
- 2. Plagiarism, i.e., using the words, ideas, writing, or work of another without giving appropriate credit;
- 3. Improper collaboration between students, i.e., not doing one's own work on outside assignments specified as group projects by the instructor;
- 4. Submitting work previously submitted in another course, without previous authorization by the instructor."

"Please note that this list is not intended to be exhaustive."

The complete Monmouth College Academic Honesty Policy can be found on the College web page by clicking on "Student Life" then on "Scot's Guide" in the navigation bar to the left, then "Academic Regulations" in the navigation bar at the left. Or you can visit the web page directly by typing in this URL: https://ou.monmouthcollege.edu/life/residence-life/scots-guide/academic-regulations.aspx

In this course, any violation of the academic honesty policy will have varying consequences depending on the severity of the infraction as judged by the instructor. Expect violations to be reported to the appropriate Dean and to weaken your case for higher grades at the end of the course. Severe violations can result in an F for the course and expulsion from the course. Do your own work. If you even think something you're doing could be construed as academically dishonest, then ask for guidance and clarification first.

# 5 Academic Support & Accessibility

### **Support Services**

The Academic Support and Accessibility Services Office offers free resources to assist Monmouth College students with their academic success. Programs include Supplemental Instruction for difficult classes, Drop-In and appointment tutoring, and individual Academic Coaching. Our office is here to help all students excel academically, since every student can work toward better grades, practice stronger study skills, and manage their time better. Please email academicsupport@monmouthcollege.edu for assistance.

### Accessibility Services

If you have a disability and/or medical/mental health condition or had academic accommodations in high school or another college, you may be eligible for academic accommodations at Monmouth College under the Americans with Disabilities Act (ADA). Monmouth College is committed to equal educational access. To discuss any of the services offered, please call or meet with Jennifer Sanberg, Associate Director of Academic Support and Accessibility Services. The ASAS office is located on the first floor of the Hewes Library, opposite Einstein's Bros Bagel. They can be reached at 309-457-2257 or via email at: academicsupport@monmouthcollege.edu

# 6 Calendar

This calendar is subject to change based on the circumstances of the course.

$\underline{\text{Week}}$	$\underline{\text{Dates}}$	Notes	Assignments Due
1	1/9 - 1/13		
2	1/16 - 1/20		Reflection 1
3	1/23 - 1/27		Project 1 Checkpoint
4	1/30 - 2/3		Reflection 2.
5	2/6 - 2/10		Project 1 Final.
6	2/13 - 2/17		Reflection 3
7	2/20 - 2/24		
8	2/27 - 3/2	SPRING BREAK (F)	Project 2 Checkpoint.
	3/6 - 3/10	SPRING BREAK	
9	3/13 - 3/17		Project 2 Final.
10	3/20 - 3/24		Reflection 4.
11	3/27 - 3/31		
12	4/3 - 4/6	EASTER (F)	Project 3 Checkpoint
13	4/11 - 4/14	EASTER (M)	
14	4/17 - 4/21		
15	4/24 - 4/28	SCHOLAR'S DAY (Tu).	
16	5/1 - 5/5	READING DAY (Th)	Project 3 Final. Reflection 5.