

Syllabus

COMP 240

Computer Applications

Spring 2022

1 Logistics

- **Where:** Center for Science and Business, Room 303
- **When:** TTh 11:00am–12:15pm
- **Instructor:** 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:* MW 2-3pm, Th 9:30-10:30am. By appointment.
- **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:

<u>Category</u>	<u>Number of Assignments</u>
Presentations	6–10
Projects	3

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 and will be evaluated for their technical merit as well as the effectiveness of the group.

- *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.

<u>Assignment Type</u>	<u>Time/week</u>
Class Meetings	3.3 hours/week
Project Work	6-7 hours/week
Presentations	2 hours/week
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	12.5 hours/week

4 Grades

This course uses a standard grading scale where percentage grades translate to letter grades as follows:

<u>Score</u>	<u>Grade</u>
94–100	A
90–93	A-
88–89	B+
82–87	B
80–81	B-
78–79	C+
72–77	C
70–71	C-
68–69	D+
62–67	D
60–61	D-
0–59	F

You are always welcome to challenge a grade that you feel is unfair or calculated incorrectly. Mistakes made in your favor will never be corrected to lower your grade. Mistakes made not in your favor will be corrected. *Basically, after the initial grading, your score can only go up as the result of a challenge.*

4.1 Grade Weights

Your final grade is based on a weighted average of presentation scores, projects, and overall participation in the course.

<u>Category</u>	<u>Weight</u>
Presentations	55%
Projects	40%
Participation	5%

4.2 Attendance & Participation

Unexcused absences will have a detrimental effect on the participation component of your grade. Having regular face-to-face time with your group is vital to the success of the project. If you must miss class, then make every possible effort to notify the instructor and your development group members of your absence before it occurs.

4.3 Academic Honesty

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. Minimally, a violation will result in an “F” or 0 points on the assignment in question. Additionally, the student’s course grade may be lowered by one letter grade. In severe cases, the student will be assigned a course grade of “F” and dismissed from the class. All cases of academic dishonesty will be reported to the Associate Dean who may decide to recommend further action to the Admissions and Academic Status Committee, including suspension or dismissal. It is assumed that students will educate themselves regarding what is considered to be academic dishonesty, so excuses or claims of ignorance will not mitigate the consequences of any violations.

5 Accessibility

Student Success & Accessibility Services offers FREE resources to assist Monmouth College students with their academic success. Programs include Supplemental Instruction for select classes, Drop-In and appointment tutoring, and individual Academic Coaching. Our office is here to help all students excel academically, since all students can work toward better grades, practice stronger study skills, and manage their time better.

If you have a disability 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 Robert Crawley, Interim Director of Student Success & Accessibility Services. SSAS is located in the new ACE space on the first floor of the Hewes Library, opposite Einstein’s Bros Bagels. They can be reached at 309-457-2257 or via email at: ssas@monmouthcollege.edu.

6 Calendar

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

<u>Week</u>	<u>Dates</u>	<u>Notes</u>	<u>Assignments Due</u>
1	1/11 — 1/14		
2	1/17 — 1/21		
3	1/24 — 1/28		Project 1 Checkpoint
4	1/31 — 2/4		
5	2/7 — 2/11		Project 1 Final
6	2/14 — 2/18		
7	2/21 — 2/25		
8	2/28 — 3/4	SPRING BREAK (F)	Project 2 Checkpoint.
	3/7 — 3/11	SPRING BREAK	
9	3/14 — 3/18		Project 2 Final
10	3/21 — 3/25		
11	3/28 — 4/1		
12	4/4 — 4/8		Project 3 Checkpoint
13	4/11 — 4/15	EASTER (F)	
14	4/18 — 4/22	EASTER (M)	
15	4/25 — 4/29	SCHOLAR’S DAY (Tu).	
16	5/2 — 5/6	READING DAY (Th)	Project 3 Final