Instructor: Dr. Boris Kerkez

> Office: 206 Patterson Technology Center

Phone: 289-5833

Email: bkerkez@ashland.edu

www: www.ashland.edu/~bkerkez

Office Hours: Mon 11-12, 2-3, Tue 10:30-12:30, Wed 11-12, Thu 12-1, Fri 11-12, and by appointment

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Software Development is project-oriented. During the first week of classes, arrangements have been made for representatives from 2 local companies and an AU professor to come and present a real-world project to class. We will then evaluate the projects and decide whether to work on them or look for another project. After that, we will meet in class on regular bases to discuss issues related to the project. Students will be expected to continue working on the project outside class time.

Attendance Policy:

Attendance in this course is required. Students are expected to attend each lecture and to be in class on time. In case of an absence, the student must provide a *documented* excuse of his or her absence. Two or more unexcused absences will result in a reduction of the student's overall course grade by a half letter grade. Four or more unexcused absences will result in a reduction of the student's overall course grade by an additional full letter grade. Six or more unexcused absences will automatically result in a grade of "F" for the course. You are permitted one tardy. Each tardy after the first tardy will result in one unexcused absence and a reduction of the student's overall course grade as described above.

Classroom Support:

Week	Topic
1	Project presentations and deciding on a project
2	Seeking clarifications from the company through Q & A session
3	Progress report on formal description of the project and work plan
4, 5, 6, 7, 8	Software Development
9	Spring Break
10	Progress report and Q & A session
11, 12, 13	Software Development
14 & 15	Submission of completed project and final report

Instructor: Dr. Boris Kerkez

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Office Hours: Mon 11-12, 2-3, Tue 10:30-12:30, Wed 11-12, Thu 12-1, Fri 11-12, and by appointment

Course **Objectives:**

Students will be introduced to application of product engineering methods to the design and development of real-world software. The methods utilized include, but are not limited to: verification and validation, quality assurance, project management, requirements analysis, specifications, design, development, testing, production and maintenance.

Student Software Development introduces students to the discipline of developing useful and high-Outcomes: quality real-world software-based systems. Students will learn and utilize techniques needed for effective software engineering, as well as acquire the skills required to succeed as a software professional. Upon a successful completion of the course, students should be able to perform the following tasks:

- Software Creation. Understand, negotiate, clarify and document customer requirements. Analyze, design, implement, test and debug high-quality software programs to meet customer requirements. Evaluate alternatives to develop a prudent development process for a particular project.
- Project Management. Plan and monitor the progress of your project to ensure the delivery of a high-quality system on time.
- Teamwork. Work as an effective team member by meeting your commitments and by being helpful to and supportive of your teammates. Approach team tasks, even the less enjoyable ones, with a positive attitude. Understand the value of each team member's contributions.
- 4. Communication. Communicate effectively with your team as you work together to complete assignments -- discuss justifications for your proposed solution and listen intently to the proposals of others. Effectively negotiate with your team on the best solution of all proposed solutions. In your class presentation, extract and present the most cogent point of assigned material to optimize presentation effectiveness. Communicate effectively with your audience in order to educate them about your material.

Reading **Assignments:**

There is no required textbook for this course. Reading assignments will come from online sources and handouts. Note that the reading assignments should be read before the class in which it will be covered. This will allow you to follow the lectures much easier and to ask questions to clarify the reading material.

Grading:

- Homework Assignments. Software Development is a capstone, project-oriented course. It is designed for learning through doing as part of a software engineering team. The main focus of the course is a semester-long programming project. The project will be divided into three (3) phases and each team will deliver a set of deliverables for each phase. Each set of deliverables will consist of a brief presentation and a written progress report. There are no other assignments.
- Final Examination. There is no final examination. As there will be no final examination

The main focus of the course is a semester-long programming project. The project will be divided into phases and each team will deliver a set of deliverables for each phase. There will be a point system for work accomplished each phase. Student evaluation is based upon

- Oral reports Students are assessed on their presentation effectiveness and oral communication skills.
- Deliverables Progress made on the programming project is assessed.
- Finished Team Programming Project.

Grades will be assigned using the following scale:

92% and above	Α	71% - 74%	С
88% - 91%	A-	68% - 70%	C-
85% - 87%	B+	65% - 67%	D+
81% - 84%	В	61% - 64%	D
78% - 80%	B-	58% - 60%	D-
75% - 77%	C+	57% and below	F

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