

CSc 210 – Software Development

Description of Course

An introduction to the development of large-scale software. Topics include modularization, design patterns, documentation, unit testing, source code control, build systems, debugging, and performance tuning. – all of the tools necessary for developing software as opposed to writing small programs.

Course Prerequisites

CSC 120

Locations and Times

Lectures:

Mon, Wed, Fri 3:00 – 3:50 in Aero & Mech Engr, Rm S202

Sections: (All sections meet in Gould-Simpson 930, except section E which meets in G-S 228)

A	Mon	8:00 – 9:15AM
B	Mon	9:30 – 10:45AM
C	Mon	11:00 – 12:15PM
D	Mon	12:30 – 1:45PM
E	Mon	4:30 – 5:45PM
F	Mon	5:30 – 6:45PM
G	Mon	7:00 – 8:15PM

Instructor and Contact Information

Eric Anson

Office: Gould/Simpson 823

Tel: 520 621-2675

Email: anson@cs.arizona.edu

(But note the **Course Communications** section below!)

TA:

Daniel Dicken dpdicken@gmail.com

SLs:

Kyle Block: blockie@email.arizona.edu

Stephen Connolly: sjc2@email.arizona.edu

Max Faridian: maxwellfaridian@email.arizona.edu

Kyle Grady: kjames5269@gmail.com

Katie Pan: katiepan@email.arizona.edu

Artyom Perov: aperov@email.arizona.edu

Tim Root: timothy@email.arizona.edu
Jordan Siaha: jordansiaha@email.arizona.edu

Office Hours

(Exact office hours subject to change, consult the class webpage for up-to-date information.)
Additional hours may be available by appointment.

Eric Anson

MWF 4:00-5:00

SLs

Mon 10:30-12:30	Katie	GS 903
Tue 12:00-2:00	Stephen	GS 942
Tue 3:00-5:00	Tim	GS 903
Wed 10:30-12:30	Jordan	GS 942
Wed 12:30-2:30	Max	GX 942
Thu 11:00-1:00	Kyle B	GS 903
Thu 1:00-3:00	Kyle G	GS 903
Thu 2:00-4:00	Artyom	GS 903

Websites

Class Homepage: <http://www.cs.arizona.edu/classes/cs210/fall17/>

Piazza: <https://piazza.com/arizona/fall2017/csc210/home>

Course Format and Teaching Methods

Three lectures a week which the students are expected to attend. In addition each student must attend a section once a week. Each section is led by an undergraduate section leader (SL). Attendance will be taken at the sections and will be part of determining the section grade.

Out-of-class activities will include studying the textbook and a significant number of programming projects.

Course Objectives and Expected Learning Outcomes

This course is the third in the introductory course sequence and introduces students to the process of software development. Students who successfully complete this course should be able to:

- Write 1000-line programs in Java.

- Decompose a problem.
- Compose a program from multiple modules.
- Apply design patterns to software development.
- Debug and test a program.
- Document and comment a program properly.
- Use source code control.

Absence and Class Participation Policy

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable: <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences pre-approved by the UA Dean of Students (or dean's designee) will be honored. See <https://deanofstudents.arizona.edu/absences>

Participating in the course and attending lectures, sections and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings. Students who miss class due to illness or emergency are required to bring documentation from their healthcare provider or other relevant, professional third parties. Failure to submit third-party documentation will result in unexcused absences. Further attendance will be taken in all sections and will be part of your sections grade.

Makeup Policy for Students Who Register Late

Students who register for class late will be allowed to make up missed assignments; all missed assignments will be due two weeks after the student registers. Students will not be allowed to register for the class more than two weeks after it begins, save in truly exceptional circumstances.

Course Communications

The primary path for outside-lecture communications will be Piazza. If a student has an issue which cannot reasonably be resolved through Piazza (inappropriate to discuss privately, private issue, etc.), then the student may email the instructors.

All email should be sent to cs210f17@cs.arizona.edu, and should include "210: " at the beginning of the subject line. This email alias will forward the email to both instructors **and** the TAs. Direct email to the instructors should only be used for confidential matters which would be inappropriate to share with the TAs.

Required Texts or Readings

- [Optional] Cay Horstmann, *Core Java Vol. 1*
- [Optional] David Flanagan, *Java in a Nutshell*, 5th Edition. O'Reilly Media

Required or Special Materials (if any)

None

Required Extracurricular Activities (if any)

None

Assignments and Examinations

Assignments

This class will include a number of assignments, most of which will involve large programming problems. These assignments will generally be given and collected weekly. Late work will not be accepted. This is a class about programming, so expect to be doing a lot of it this semester. A large part of your grade is based on these assignments.

Quizzes

Short quizzes will be given throughout the semester. They will generally be given once a week, but maybe more or less frequent. The dates for quizzes will not be announced prior to when they are given. Quizzes will be given at the beginning of class (or section) so don't be late. Makeups for missed quizzes will not be given, but the lowest two quiz scores will be dropped to allow for cases where a student misses a quiz due to an excused absence.

Midterms

We will have a two midterm exams. They will be given on the following days:

Wed, 20, Sept

Wed, 25, Oct

Final

The class final is scheduled for:

Wed, 13 Dec, 3:30-5:30 pm

Final Examination or Project

A final exam will be given (see times listed above); the times are set by the University. Location of the Final is TBD.

University Policies and Schedule

<https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information>, and Final Exam Schedule, <http://www.registrar.arizona.edu/schedules/finals.htm>

Grading Scale and Policies

Grading Scale

We will use a simple grade cutoff scheme. This means that if you earn the number of points listed for a given grade, you are guaranteed that grade. At the end of the semester, we reserve the right to **lower** these cutoffs (meaning that it might be easier to earn a good grade); but we do not guarantee that we will do so. However, we guarantee that we will not raise these cutoffs (making it harder to earn a good grade).

- 90% A
- 80% B
- 70% C
- 60% D

Point Distribution

Points will be distributed as follows:

- 5% Sections
- 5% Quizzes
- 40% Assignments
- 15% Midterm 1
- 15% Midterm 2
- 20% Final Exam

Grading Schedule

Assignments will be graded, typically, within 6 days of the due date. If exceptions have to be made occasionally, staff will inform the students about the delay and the reason for it. Quizzes and exams will be graded within 10 days (usually sooner).

Dispute of Grade Policy

If you have an issue with how a quiz, assignment, or exam was graded, you must submit a request for a regrade (through email) within 14 days of when the item was returned to the class.

University Policies

University policy regarding grades and grading systems is available at

<http://catalog.arizona.edu/policy/grades-and-grading-system>

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at <http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete> and <http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal>, respectively.

Honors Credit

Unfortunately, we are not able to offer Honors Credit for this course this semester.

Scheduled Topics/Activities

Due to this being a new course the exact schedule of topics covered will have to be flexible.

However roughly we will cover:

1. Command line and some UNIX tools.
2. Using a Source Control Tool
3. The Java Programming Language.
4. Program Design
5. Program Testing
6. Program Debugging

Department of Computer Science Code of Conduct

The Department of Computer Science is committed to providing and maintaining a supportive educational environment for all. We strive to be welcoming and inclusive, respect privacy and confidentiality, behave respectfully and courteously, and practice intellectual honesty. Disruptive behaviors (such as physical or emotional harassment, dismissive attitudes, and abuse of department resources) will not be tolerated. The complete Code of Conduct is available on our department web site. We expect that you will adhere to this code, as well as the UA Student Code of Conduct, while you are a member of this class.

Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Some learning styles are best served by using personal electronics, such as laptops and iPads. These devices can be distracting to other learners. Therefore, students who prefer to use electronic devices for note-taking during lecture should use one side of the classroom.

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Elective Name and Pronoun Usage

This course supports elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request. As the course includes group work and in-class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect.

Accessibility and Accommodations

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://www.library.arizona.edu/help/tutorials/plagiarism/index.html>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

UA Nondiscrimination and Anti-harassment Policy

The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

Additional Resources for Students

UA Academic policies and procedures are available at <http://catalog.arizona.edu/policies>

Student Assistance and Advocacy information is available at <http://deanofstudents.arizona.edu/student-assistance/students/student-assistance>

Confidentiality of Student Records

<http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa>

Subject to Change Statement

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.