CS 251: Intermediate Programming Spring 2019

Matthew R. Lakin

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Instructor

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Course description

CS251 is an introduction to the methods underlying modern program development. Specific topics will include object-oriented design and the development of graphical user interfaces. Programming assignments will emphasize the use of objects implemented in standard libraries. Students taking this course should already be familiar with basic concepts of computer programming such as variables, conditional control flow and loops.

Textbook

There is not a required textbook for this course. There is an **optional** textbook: Java, A Beginners Guide, by Herbert Schildt. The bookstore will have the most recent edition available. However, if you would prefer to use an older edition (if, say, you still have a copy from taking CS152 in a previous semester), that will be fine. There are also lots of other good resources available, and this particular one is not required for the course.

Topics (subject to change)

- Weeks 1–2: Objects and Classes
- Weeks 3–5: Inheritance and Interfaces
- Weeks 6–7: IO and Exceptions
- Weeks 8–9: Collections and Generic Types
- Weeks 10–11: Enums, Standard library packages
- Weeks 12–14: Threads and GUIs
- Week 15: Debugging and Profiling

Lectures

Day/time: Mondays, Wednesdays, and Fridays, 11:00-11:50am

Location: Centennial Engineering Center, room 1041

Labs

• Section 1 (CRN 36966)

Time: Wednesdays 14:00-14:50

Location: SMLC-B59

• Section 2 (CRN 32295)

Time: Fridays 13:00-13:50

Location: DSH-141

• Section 3 (CRN 32296)

Time: Mondays 14:00-14:50

Location: SMLC-B59

• Section 4 (CRN 34022)

Time: Wednesdays 13:00-13:50

Location: DSH-141

• Section 5 (CRN 38213)

Time: Fridays 09:00-09:50

Location: SMLC-B59

- Instructor information and office hours will be posted on UNM Learn.
- Feel free to go to any of the assistants for help. You aren't limited to the assistant for your own lab section.

Grading

You are expected to attend class regularly, read any assigned reading before class, and participate in class discussion. Grades will be determined as follows:

- 60% Programming Assignments (labs and projects)
- 30% Exams (midterm and final)
- 10% Quizzes and participation

Note that no requests for grade changes will be considered after the final day of classes.

Submitting Assignments

All assignments must be in UNM Learn in order to receive credit for them. If Learn is down, you may e-mail the assignment to the lab instructor in order to prove it was done on time. However, it must be inside Learn before you can receive credit for it.

It is your responsibility to make sure the correct file is submitted to Learn before the deadline. Always double-check your submissions. If you realize you accidentally attached the wrong file, immediately resubmit the correct file with a note explaining the error.

Assignments are 11:59PM on the deadline day. (The graders will accept submissions up to 12:15 or so to account for variations in clocks, network hiccups, etc.) You are permitted to submit multiple times and the most recent on time submission will be the one graded, so feel free to submit partial solutions as you complete milestones.

Pay attention to deadlines! Assignments are not always due on the same day of the week. You will generally have at least a week for each one, but some larger assignments may give you more time.

Late Assignments

Ideally, all assignments will be completed and submitted well before the deadline. However, I am well aware that sometimes this will not be possible due to illness, technical problems, other

classes, etc. For that reason, each student is given a pool of ten extension days they may use during the semester, limited to at most three days for any single assignment.

- Extension days may not be used for online quizzes or surveys, since they generally will be discussed in the next lecture.
- You may use a maximum of three extension days for a given assignment. I want to be able to discuss the solution to an assignment within a reasonable amount of time after the deadline.
- You have a total of ten extension days over the course of the semester. It is up to you if you want to turn in three assignments three days late, five assignments two days late, every assignment one day late, or some other variation. You do not have to use them at all.
- Weekends count as days, too, so if an assignment is due on Friday and you dont turn it in until Monday, that would use 3 extension days.
- Use your extension days wisely. If you use all of them on 20 point assignments early in the term, you wont have any left to spend on a difficult 100 point assignment later on.

Lab attendance

Lab class meets once per week in a computer lab. You are expected to attend. If for some reason you cannot attend your regularly scheduled lab class but are able to attend one of the other lab classes during the same week, then that other lab can count as your lab attendance.

NOTE: Before attending a different lab section, check with that sections lab instructor to make sure there is an open space for you.

NOTE: In order to receive credit for attending a different lab section, it is your responsibility to make sure the lab instructor of that section counts you as present while you are in the lab class (NOT after the fact). Your name will not be on that instructors roster. You must make sure to speak to the lab instructor during the lab class, telling him or her first and last name, and in what section you are registered.

If you feel you need extra help or would simply like to attend lab section in addition to your own, then you are encouraged to do so. First, however, please contact the lab instructor of the extra lab you want to attend to make sure that there is enough space.

Working together

Working together and helping one another on all projects (but not on exams and quizzes) is encouraged. This includes discussion of project specification, algorithms, data structures, and

test cases. It does not include code. Each person must author his or her own code.

When trying to track down a bug, it is sometimes helpful to have someone else have a look. It is acceptable to show someone else your code for this purpose. It is not acceptable to look at someone elses solution before submitting your own.

Cheating / academic integrity

Cheating will be dealt with very harshly, and includes, but is not limited to:

- Copying code from another person or having someone else write your code.
- Copying code from the Internet or another source. (If theres some code that you would really, really like to use, please check with us before you do it.)
- Attempting to disassemble, decompile, or otherwise reverse engineer compiled example programs.
- Allowing another person to copy your code.
- Leaving your code (paper or electronic copies) where others can find it. You are responsible for the security of your intellectual property.
- Use of external libraries other than those included with Java without documenting it.
 Note: If you do document usages of external libraries, it will not be considered cheating. However, you still might not receive full marks if the library covers too much of the assignment. It is best to check with one of the instructors before using an external library.
- Violation of copyright or license agreements on external libraries. If you use external library code, it is your responsibility to understand and comply with the appropriate copyright and license issues.
- Violation of the University policy on acceptable computer use.

Not being able to explain how some significant part of your code works will result in a zero for the assignment. It does not matter if the reason you do not understand your code is because you did not do the work or because you got your code working by trial and error. If I suspect someone of cheating, the first thing I do is ask that person to explain the code. This is not a quiz you ever want to fail. Too much code in the real world is built and maintained by trial and error. It makes for a house of cards. It is not a good way to produce code nor is it a good way to learn.

All students will be required to sign and submit a warning regarding issues of academic integrity and possible sanctions prior to any submissions being graded.

Communication

The Loboweb email list functionality will be used for administrative announcements. Lecture slides, assignments, and other course materials will be uploaded to the UNM Learn page for the class.

Computer Science advisement

Whether or not you have been officially admitted to the CS program yet, please consult the Department of Computer Science Undergraduate Advisor with any questions you may have. This is especially important when navigating the prerequisites for certain courses and resolving scheduling issues. More general university advisors are not always familiar with the details of the computer science program.

ADA accommodation statement

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 for additional information.

If you need an accommodation based on how course requirement interact with the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment we can discuss the course format and requirements, anticipate the need for adjustments and explore potential accommodations. I rely on the Disability Services Office for assistance in developing strategies and verifying accommodation needs. If you have not previously contacted them I encourage you to do so.

Title IX statement

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (http://oeo.unm.edu). For more

information on the campus policy regarding sexual misconduct, see: $\frac{https://policy.unm.}{edu/university-policies/2000/2740.html}$