CS 251: Intermediate Programming Spring 2026

Matthew R. Lakin

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1 Instructor

Matthew Lakin

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Office hours location: Farris Engineering Center room 3240

2 Lectures

Day/time: Mondays, Wednesdays, and Fridays, 1:00-1:50pm

Location: T.B.A.

3 Course Description

CS 251 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.

4 Textbook

There is not a required textbook for this course. There is an **optional** textbook: Java, A Beginner's Guide, by Herbert Schildt (ISBN: 9781265054632). 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.

You can also access this textbook, free of charge, as part of UNM library's subscription to Mc-Graw Hill's AccessEngineering at the following link: https://www.accessengineeringlibrary.com/content/book/9781265054632. Please note that you must be logged into the university network to have access to this content. When off campus, you can use https://libproxy.unm.edu/login?url=https://www.accessengineeringlibrary.com/content/book/9781265054632 or connect to the university network using the UNM VPN service at https://unmvpn.unm.edu/and entering the URL you want to visit using "Go to URL" at the top of the page.

5 Topics (subject to change)

- Week 1: Java Review, Objects and Classes
- Week 2: Interfaces, Enums
- Weeks 3–4: Inheritance
- Week 5: Exceptions
- Weeks 6–7: Collections and Generic Types
- Weeks 8–9: I/O
- Weeks 10–12: GUIs (and Threads)
- Weeks 13–15: Debugging, Profiling, Project development

6 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 their 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, preferably one of the instructors or a tutor. It is *not* acceptable to look at someone else's solution before submitting your own.

7 Cheating

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 there's some code that you would really, really like to use, please check with us before you do it.)
- Using generative AI to create your code.
- 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 may lose 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.

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.

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.

8 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:

- 40% Programming Assignments
- 50% Exams (midterm and final)
- 10% Quizzes

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

9 Submitting Assignments

All assignments must be in UNM Canvas in order to receive credit for them. If Canvas is down, and only in this case, you may e-mail the assignment to the instructor in order to prove it was done on time. However, it must be received in 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 due at 11:59PM on the deadline day. (Submissions will typically be accepted 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.

10 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 don't 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 won't have any left to spend on a difficult 100 point assignment later on.
- Please contact me if you will need additional time (a fourth day on an assignment, more
 than ten days total for the term) to complete your work, before you have run out. The
 extension day policy is so I don't have to individually approve minor delays, but if something larger is going on, such as being incapacitated with illness for over a week, let me
 know as soon as you reasonably can and we can work something out.
- Even if you are sure I'll allow it (I verbally said it was fine when chatting to me after class, you already have ARC accomodations granting you additional deadline flexibility, etc.), you still need to email me to let me know if you will be taking more than three days on a given assignment. I need to know when to expect the last submissions so I know when I can safely discuss the solution in lecture. Late submissions will *not* be accepted after the solution has been discussed in class.

11 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.

12 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.

13 Accommodations

UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive class-room setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or 505-277-3506.

14 UAP 2720 and 2740

Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek support and report incidents. Find confidential services at LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must communicate reports of sexual harassment, sexual misconduct and sexual violence to Compliance, Ethics and Equal Opportunity. For more information, please see UAP 2720 and UAP 2740.

15 Credit Hour Statement

This is a three credit-hour course. Please plan for a minimum of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week.

16 Course Materials Access (for Albuquerque undergraduate students only)

Your digital course materials are directly available now on the My Shelf link in Canvas. Your physical course materials, such as books and required lab/studio course kits, are available at the UNM Bookstore, and you will receive an email about how to pick them up. To simplify your course materials access, you are automatically enrolled in a Complete option at a flat rate of \$279 per semester. This will show up on your bursar bill. The Complete option covers all your required course materials for all your Albuquerque campus courses, including any graduate courses you may be taking (branch campus course materials are billed and available separately). If you are interested in course materials access for only selected courses, or if you want to opt out entirely, you will need to select the option you want in the My Shelf link in

Canvas. You can change your selected option in the My Shelf link in Canvas until the registrar's "Last Day to Drop Without a 'W' Grade and 100% Tuition Refund." Make sure that you review the video and information here to understand cost and the options for Complete (automatic enrollment), Select (take action), and Opt-out (take action).

17 Responsible Learning and Academic Honesty

Cheating and plagiarism (academic dishonesty) are often driven by lack of time, desperation, or lack of knowledge about how to identify a source. Communicate with me and ask for help, even at the last minute, rather than risking your academic career by committing academic dishonesty. Academic dishonesty involves claiming that work created by another source is your own original work. It is a Student Code of Conduct violation that can lead to a disciplinary procedure. When you use a resource in work submitted for this class, document how you used it and distinguish clearly between your original work and the material taken from the resource. As outlined in Section 7, you may lose marks if external sources account for too much of your submission for an assignment.

17.1 Generative AI Use

We treat AI-based assistance, such as ChatGPT and Github Copilot, the same way we treat collaboration with other people: you are welcome to talk about your ideas and work with other people, both inside and outside the class, as well as with AI-based assistants. However, all work you submit must be your own. You should never include in your assignment anything that was not written directly by you without proper citation (including quotation marks and in-line citation for direct quotes). Including anything you did not write in your assignment without proper citation will be treated as an academic misconduct case.

If you are unsure where the line is between collaborating with AI and copying from AI, we recommend the following heuristics:

- Never hit "Copy" within your conversation with an AI assistant. You can copy your
 own work into your conversation, but do not copy anything from the conversation back
 into your assignment. Instead, use your interaction with the AI assistant as a learning
 experience, then let your assignment reflect your improved understanding.
- Do not have your assignment and the AI agent itself open on your device at the same time. Similar to above, use your conversation with the AI as a learning experience, then close the interaction down, open your assignment, and let your assignment reflect your revised knowledge. This heuristic includes avoiding using AI assistants that are directly integrated into your composition environment: just as you should not let a classmate write content or code directly into your submission, so also you should avoid using tools that directly add content to your submission.

Deviating from these heuristics does not automatically qualify as academic misconduct; however, following these heuristics will mean that your interactions with AI tools will not cross the line into misconduct. Note, however, that, as outlined in Section 7, that you will still need to be able to explain the functioning of your code and the design choices made, if required. Note also that the responses produced by AI tools may not always be correct.

18 Thriving and Finding Support

Students are especially successful at UNM when they take advantage of support and get involved in campus and academic life. Your MyUNM login page provides direct links to well-being resources, including financial capability, mental health, food, jobs, and resource centers. MyUNM will help you identify academic resources like peer tutoring and opportunities like study abroad. You can contact academic advisors and resource advisors for information and guidance via Student Hub on MyUNM. I look forward to providing you with information about academic opportunities related to our class and to helping you find support resources.