Course Syllabus

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CS 251, Programming with Java

Instructor:

Dr. Bhanuka Mahanama
Office: Dragas Hall, room #1100H
Email: bhanuka@cs.odu.edu (mailto:bhanuka@cs.odu.edu)
Office hours, posted on Canvas
TAs & Graders (TBA)

Course Description:

This course covers intermediate-level Java programming, and the design issues arising in software systems and programming techniques aiding in their solution. The course provides the conceptual basis for programming techniques and program design with object and classes. Topics include Java syntax and semantics, the software life cycle, methods of functional decomposition, abstract data types and classes, interfaces, inheritance, polymorphism, references, packages, common data structures, generics, exceptions, JAR, recursion, sorting, searching, algorithmic patterns, and testing and debugging techniques. Laboratory work is required.

Prerequisites MATH 163 and a grade of C or better in any one of: CS 150, CS 151, CS 153, ENGN 150.

Course Goals and Objectives (CLOs):

Upon completion of this course students will be able to:

- CLO1: locate, install, and use the selected IDE and JDK from trusted sources.
- CLO2: identify Java language components and examine the key aspects of java API library.
- CLO3: read and write files in Java.
- CLO4: validate inputs to Java programs.
- CLO5: demonstrate strong skills in using the programming fundamentals including variables, conditions, loops, methods, arrays, recursion, and write/read from the standard in/out streams.
- CLO6: implement object-oriented designs with Java.
- CLO7: implement Iterators
- CLO8: apply inheritance and polymorphism.

- CLO9: design stand-alone Java applications and create JAR files.
- CLO10: integrate the Java APIs in the program development.
- CLO11: implement sorting and searching algorithms.
- CLO12: implement exception handling techniques.
- CLO13: incorporate external JAR files in a Java project.
- CLO14: apply the principles of software development.
- CLO15: implement Java generics and how to use the Java Collections API.
- CLO16: write programs to solve real-world applications, determine suitable logic, and proceed to write a solution in Java.
- CLO17: adapt existing code.
- CLO18: propose and create packages upon the project demand and best practice of code organization.
- CLO19: debug, fix defects, unit-test Java programs, and develop test procedures.
- CLO20: locate the latest additions to the Java language specifications.

Course Topics:

Topics include JAVA methods, overloading, classes, interfaces, arrays, lists, exception handling, files, JAR, inheritance, polymorphism, overriding, searching, sorting, recursion, packages, nested classes, evolving interfaces, abstract classes and methods, iterators, generics, testing, and debugging.

General Organization of the Course:

The course is divided into several topics. Each topic is addressed by lectures readings and accompanied by a variety of activities including:

- Labs - introduce weekly graded practice programming activities.
- Homework– weekly graded programming activities
- Exams - there will be a midterm exam and final exam.
- Projects - there will also be a 3 graded programming project in which you will apply the techniques of design, coding, testing, and debugging to a larger problem than is tacked in the homework assignments.

Textbook and References:

There will be no textbook for this class, students instead will read from the lecture and these references:

- Introduction to Java Programming and Data Structures, Comprehensive Version by Y. Daniel Liang, ISBN-13: 9780136520238
- Core Java Volume I - Fundamentals 11th edition by Cay S Horstmann and Cay Horstmann,

ISBN-13: 9780135166307

- https://docs.oracle.com/javase/tutorial/ (https://docs.oracle.com/javase/tutorial/)
- https://www.w3schools.com/java/ (https://www.w3schools.com/java/)

Not all material could be found in the references - Attending labs & recitations are highly encouraged

JAVA compiler and IDE:

The “official” compiler for this course is the free JDK software which you can download from the Oracle website. This is the compiler that the instructor and/or graders will use in evaluating and grading homework, labs, and programming projects. Eclipse is the IDE which we will use during the semester. We will provide detailed information in the first week lab about how to download the JDK and Eclipse. You can also do your work on one of the computers in the CS open labs at the CS department at ODU, or you can use the online resources which will explained in the lab of the first week.

Computer Access:

Students will need an account on the CS Dept. Unix network to participate in this class. This account is unrelated to any University-wide account you may have from the ODU’s computing services (OCCS). If you have had a CS Unix account in the recent past, you should find it still active with your login name, password, and files unchanged. If you have had an account and it has not been restored, contact the CS Dept systems staff in the lab in Dragas Hall, Room 1111K or email root@cs.odu.edu requesting that it be restored. If you do not yet have such an account, follow the directions provided in the pdf file (Account Setup) to get set up.
Please note that, new account creation for students enrolled in a future semester becomes available about one week before the start of that semester.

Grading Criteria:

The grade distribution is 15% for the weekly labs, 35% for the weekly programming homework, 20% for the programming projects (project-1, project-2, and project-3), and 30% for the exams. There will be two exams midterm is 12% and final exam is 18%. The schedule of the exams (***midterm*** and ***final***) is posted in the course schedule section.

Course Assignments & Percentages Toward Final Grade

Assignments	**Points Possible**
Weekly programming labs	15%
Total	100%

Assignments	Points Possible
Weekly programming homework	35%
Programming Project #1	8%
Programming Project #2	8%
Programming Project #3	4%
Midterm Exam	12%
Final Exam	18%
Total	100%

The following is the grading scale used in tabulating assignment and final grades for this course:

Grading Scale

Final Percentage Grade	Letter Grade
93 – 100	A
90 – 92.9	A-
88 – 89.9	B+
82 – 87.9	B
80 – 81.9	B-
78 – 79.9	C+
70 – 77.9	C
68 – 69.9	C-
60 – 67.9	D
Below 60	F

Assignments Submission Policy:

Assignments (labs, homework, and projects) will be turned in through the Canvas. Late submissions of assignments or projects and make-up exams will not normally be permitted. Exceptions will be made only in situations of unusual and unforeseeable circumstances beyond the student's control, and such arrangements must be made prior to the due date in any situations where the conflict is foreseeable.

"I've fallen behind and can't catch up", "I'm having a busier semester than I expected", or "I registered for too many classes this semester" are not grounds for an extension. Extensions to due dates will not be granted simply to allow "porting" from one system to another. "But I had it working on my home PC!" is not an acceptable excuse also.

Assignments Re-grading Policy:

Grades will be posted online on Canvas. It is the student's responsibility to verify that the posted grade corresponds to the grade actually received and to notify the grader and instructor of any error ASAP. Re-grading request should be submitted to the Grader within 7 days after the marks are posted on Canvas and during Grader's office hours. All assignments have hard deadline - no late submission will be accepted for marking. For unforeseen events (family emergency, sickness), contact the class instructor before the due date. Prove is required, i.e., a doctor note.

Notes:

- The grader might not be the same person who is teaching your lab and or recitation. You need to know your grader, lab instructor, and recitation instructor.
- TAs can answer questions about labs, homework assignments, projects, and exams. You can meet with any of the CS251 TAs for that reason. If you want to discuss your grades, you must meet with your grader (the person who marks your assignment/project). Only the person who marks your assignment and project can answer questions about your grades. The office hours of the Instructor, TAs, and graders will be posted on Canvas under "Teaching Staff". The list of graders will be posted on Canvas. You will find a pdf file including three columns (Student name, Grader name, and Grader email).

Exams:

- Midterm exam will be available on Canvas. Further information about the midterm exam will be provided during the semester.
- Final exam will be available on Canvas during the final examination week. You will write the final exam as indicated in the "final exam dates" file, which will be posted on Canvas. Please note that the final exam is cumulative.

Details about the exams will be announced in class during the lecture time, and it will be posted on Canvas.

Rules for emails:

- Please try to ask your questions about the assignments during the office hours.
- The instructor, TAs, and graders offer office hours.
- Instructor office hours are posted in the Syllabus on Canvas
- TAs & Graders office hours will be posted on Canvas.
- Communications by email is possible - when needed.
- Please read the rules about emails
- email to bhanuka@cs.odu.edu
    - Please make sure to include the class name "CS-251" in the subject of your email, otherwise, I

will not be able to know which class you are talking about
    - Use your university or CS Dept. e-mail account to send emails
    - Sign with your full name, lecture CRN
    - Address the instructor properly (*Either Dr. Mahanama/Bhanuka, Sir, or Professor is fine*)
    - At least say hello!
    - Typically replied within 48 hours

Student Responsibilities:

Students are expected to

- check Canvas regularly
- read the lectures and read from the provided references
- read supporting material and watch supporting videos
- complete and submit the labs, homework, and projects before the due date
- attend all exams
- use time wisely and be organized
- participate actively in the class discussion
- have the motivation to work independently
- follow the rules of sending email
- follow the course polices and guidelines

Attendance:

Students are responsible for all the material that is presented in the class; therefore, students should attend lectures, labs, and recitations regularly. Important lecture information and announcements are usually given during class time, so failure to attend class may negatively affect your grade.

Course Policies:

Online Classroom Conduct (Netiquette)

Students are expected to follow good Netiquette rules. Netiquette is the accepted behavior for online participation. The following is a list of general guidelines for this course:

- Check your grammar and spelling
- Keep your comments focused on the topic
- Strive to write succinctly and clearly
- Share your knowledge and include supportive evidence for your comments
- Do not use all capital letters as that is viewed as shouting
- Avoid flaming—disrespectful language is unacceptable

Course Academic Honesty

- Everything turned in for grading in this course must be your own work. The instructor reserves the right to question a student orally or in writing and to use his evaluation of the student's understanding of the assignment and of the submitted solution as evidence of cheating. Violations will be reported to the Office of Student Conduct & Academic Integrity for consideration for possible punitive action.
- This policy is not intended to prevent students from providing legitimate assistance to one another. Students are encouraged to seek/provide one another aid in learning to use the operating system, in issues pertaining to the programming language, or to general issues relating to the course subject matter.
- Students should avoid, however, explicit discussion of approaches to solving a particular programming assignment, and under no circumstances should students show one another their code for an ongoing assignment, nor discuss such code in detail.
- You should not ask the Tutor(s) questions about assignments. These types of questions should be asked to the TAs.
- Please note that the use of ChatGPT and such tools may be used to get some ideas, but the work and the code submitted must be students' own. The students must properly cite the sources of that, and any other code found on the Internet, according to the guidelines provided below.
    - You must include the link to the sources in the code comments at begging of each Java source file
    - Explain how you used the sources as guide to help you implement the corresponding portions of your code

University Policies:

Academic Integrity

Old Dominion University is committed to students' personal and academic success. In order to achieve this vision, students, faculty, and staff work together to create an environment that provides the best opportunity for academic inquiry and learning. All students must be honest and forthright in their academic studies. Your work in this course and classroom behavior must align with the expectations outlined in the Code of Student Conduct, which can be found at **www.odu.edu/oscai (https://www.odu.edu/oscai)** . The following behaviors along with classroom disruptions violate this policy, corrupt the educational process, and will not be tolerated.

- **Cheating:** Using unauthorized assistance, materials, study aids, or other information in any academic exercise.
- **Plagiarism:** Using someone else's language, ideas, or other original material without acknowledging its source in any academic exercise.
- **Fabrication:** Inventing, altering or falsifying any data, citation or information in any academic exercise.
- **Facilitation:** Helping another student commit, or attempt to commit, any Academic Integrity

violation, or failure to report suspected Academic Integrity violations to a faculty member.

Academic dishonesty will be reported to the Office of Student Conduct & Academic Integrity and may result in sanctions up to and including expulsion from the University.

Plagiarism

No plagiarism will be tolerated under any circumstances. As faculty, I am bound to report any instances of plagiarism. All cases are heard before the honor council. If found guilty, the student automatically receives a failing grade in the course, and a notice is entered into the permanent record for a period of time.

College Class Conduct

The following standards are intended to define acceptable classroom behavior that preserves academic integrity and ensures that students have optimum environmental conditions for effective learning.

1. Students must turn off cell phones and pagers during class or have them set to vibrate mode.
2. Classes are expected to begin on time, and students will respect the time boundaries established by the professor. If classroom doors are locked, students may not knock or seek entrance in other ways.
3. Students should notify instructors in advance when a class will be missed. In the event of an emergency that causes a class to be missed, instructors must be notified as soon as possible.
4. Instructors may require that cell phones and other electronic devices be left on their desks during tests or examinations.
5. Students must not engage in extraneous conversations during classes. Such acts are considered to be violations of the Code of Student Conduct.
6. Students will activate their Old Dominion e-mail accounts and check them before each class. If the student chooses to have his/her messages forwarded to another account, it is the student's responsibility to take the necessary steps to have them forwarded.
7. Consumption of food and drink during class is prohibited, except when the professor has specifically approved of such acts.
8. Offensive language, gestures and the like are disrespectful and disruptive to the teaching-learning process.

Honor Code

The Old Dominion University Honor Code will be strictly enforced. By attending Old Dominion University, you have signed a pledge accepting the responsibility to abide by the following Honor Code found at **Office of Student Conduct and Academic Integrity (http://www.odu.edu/oscai)** .

> We, the students of Old Dominion University, aspire to be honest and forthright in our academic endeavors. Therefore, we will practice honesty and integrity and be guided by the tenets of the

> Monarch Creed. We will meet the challenge to be beyond reproach in our actions and our words. We will conduct ourselves in a manner that commands the dignity and respect that we also give to others. ODU Honor Code

This is an institutional policy approved by the Board of Visitors. The University Honor Code applies to all assignments.

Honor Pledge

> I pledge to support the honor system of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor system. I will report to Honor Council hearings if summoned. ODU Honor Pledge

By attending Old Dominion University you have accepted the responsibility to abide by this code. This is an institutional policy approved by the Board of Visitors. For more information, please visit **Policies and Student Responsibilities (https://online.odu.edu/admissions/policies-and-student-responsibilities)** .

Educational Accessibility

In compliance with PL94-142 and more recent federal legislation affirming the rights of disabled individuals, provisions will be made for students with special needs on an individual basis. The student must be identified by the university and provide a letter from the Office of Educational Accessibility (OEA), located at 1021 Student Success Center. Any accommodations will be based upon written guidelines from the Office of Educational Accessibility (OEA). All students are expected to fulfill all course requirements.

Old Dominion University is committed to ensuring equal access to all qualified students with disabilities in accordance with the Americans with Disabilities Act. The Office of Educational Accessibility (OEA) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you experience a disability which will impact your ability to access any aspect of my class, please present me with an accommodation letter from OEA so that we can work together to ensure that appropriate accommodations are available to you.
- If you feel that you will experience barriers to your ability to learn and/or testing in my class but do not have an accommodation letter, please consider scheduling an appointment with OEA to determine if academic accommodations are necessary.

The Office of Educational Accessibility is located at 1021 Student Success Center and their phone number is (757)683-4655. Additional information is available at the **OEA Website (http://www.odu.edu/educationalaccessibility/)** .

University Email & Electronic Messaging Systems Policies

Electronic messaging systems and communication services are provided by Old Dominion University for the purpose of enhancing productivity and maintaining effective communication.

Old Dominion University employees, students, employees of affiliated organizations, and guests, volunteers, and researchers who are provided official email accounts must activate and maintain regular access to these accounts. These accounts must be used to send and receive electronic communications related to official University business.

Failure to access the email account will not exempt individuals from their responsibility of being aware of and meeting requirements and responsibilities included in electronic communications.

Message content is the sole responsibility of the individual sending the message and users must adhere to **University Policy 3500, Use of Computing Resources (https://www.odu.edu/about/policiesandprocedures/university/3000/3500)** , and **Information Technology Standard 09.1.0, Acceptable Use Standard (http://www.odu.edu/about/policiesandprocedures/computing/standards/09/01)** . Users are also encouraged to practice generally accepted online etiquette.

Instructors retain the discretion of establishing class expectations for email and other electronic messaging communication as a part of the course requirements.

Alternative messaging services should be arranged in cases where users' access to information technology resources is limited or unavailable.

Incomplete

Documented illnesses, deaths in family, car accidents, or other traumatic occurrences call for flexibility and good judgment on the part of the student and instructor. These situations are rare and are handled individually. Should such a situation occur, students **MUST** contact **Student Outreach & Support (https://www.odu.edu/life/dean-students/student-outreach)** . Email **oducares@odu.edu (mailto:oducares@odu.edu)** or by phone 757-683-3442 to acquire the necessary documentation. An incomplete grade will only be given under the following circumstances

1. The student has completed ½ or more of the course requirements with a C or better
2. There is legitimate deficiency due to the illness or emergencies deemed acceptable to the instructor
3. There is not neglect on the student's part.

Withdrawal

A syllabus constitutes an agreement between the student and the course instructor about course requirements. Participation in this course indicates your acceptance of its teaching focus, requirements, and policies. Please review the syllabus and the course requirements as soon as possible. If you believe that the nature of this course does not meet your interests, needs or

expectations, if you are not prepared for the amount of work involved - or if you anticipate that the class meetings, assignment deadlines or abiding by the course policies will constitute an unacceptable hardship for you - you should drop the class by the drop/add deadline, which is located in the ODU Schedule of Classes. For more information, please visit the Office of the Registrar.

Labs:

- Lab Web conf. (zoom) 10:00-12:30PM T Through Zoom TA (Nathan)
- Lab Web conf. (zoom) 10:00- 12:30PM W Through Zoom TA (Nathan)

Recitations:

- Rec Web conf. (zoom) 12:45- 1:35PM T Through Zoom TA (Nathan)
- Rec Web conf. (zoom) 12:45- 1:35PM W Through Zoom TA (Nathan)

Note: you can find the link for the lab/rec zoom meeting on Canvas. Please click on Modules. Next, scroll all the way down until you see "Online Meetings for Labs and Recitations, Office Hours and TA Contact Info".

Course Summary:

Date	Details	Due
Mon May 26, 2025	Memorial Day Holiday - no classes (https://canvas.odu.edu/calendar?event_id=117646&include_contexts=course_187780)	12am
Thu Jun 19, 2025	Juneteenth Holiday - no class (https://canvas.odu.edu/calendar?event_id=117648&include_contexts=course_187780)	12am
Fri Jul 4, 2025	Independence Day Holiday - no classes (https://canvas.odu.edu/calendar?event_id=117647&include_contexts=course_187780)	12am
Mon Sep 1, 2025	Labor Day Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117653&include_contexts=course_187780)	12am

Date	Details	Due
Sat Sep 6, 2025	(#1) Lab JDK and IDE (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851041)	due by 11pm
	(#2) Lab Classes (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851052)	due by 11pm
Sat Sep 13, 2025	(#3) Lab Methods (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851061)	due by 11pm
	(#4) Lab Exceptions (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851062)	due by 11pm
Sat Sep 20, 2025	(#5) Lab File Input/Output (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851063)	due by 11pm
	(#6) Lab Collections (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851064)	due by 11pm
Mon Sep 22, 2025	Assignment 1A (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851070)	due by 11pm
	Assignment 1B (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851071)	due by 11pm
Sat Sep 27, 2025	(#8) Lab Shadowing (Submission Link) (https://	due by 11pm

Date	Details	Due
	canvas.odu.edu/courses/187780/assignments/2851065)	
	(7) Lab Sorting and Searching (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851068)	due by 11pm
Mon Sep 29, 2025	Assignment 2A (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851072)	due by 11pm
	Assignment 2B (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851073)	due by 11pm
Sat Oct 4, 2025	(#10) Lab Static (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851042)	due by 11pm
	(#9) Lab Nested Classes (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851066)	due by 11pm
Mon Oct 6, 2025	Assignment 3 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851074)	due by 11pm
Sat Oct 11, 2025	(#11) Lab Access Modifiers (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851043)	due by 11pm
	(#12) Lab Write Once Run Anywhere (Please note, this is the only ungraded lab) (https://canvas.odu.edu/courses/187780/	due by 11pm

Date	Details	Due
	assignments/2851044)	
	(#13) Lab Interfaces (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851045)	due by 11pm
Sun Oct 12, 2025	Fall Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117649&include_contexts=course_187780)	12am
Mon Oct 13, 2025	Fall Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117650&include_contexts=course_187780)	12am
Tue Oct 14, 2025	Fall Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117651&include_contexts=course_187780)	12am
Wed Oct 15, 2025	Project 1 (https://canvas.odu.edu/courses/187780/assignments/2851082)	due by 11pm
Fri Oct 17, 2025	Midterm Exam (https://canvas.odu.edu/courses/187780/assignments/2851040)	due by 11pm
Mon Oct 20, 2025	Assignment 4 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851075)	due by 11pm
Sat Oct 25, 2025	(#14) Lab Inheritance (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851046)	due by 11pm
	(#15) Lab Polymorphism (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851047)	due by 11pm

Date	Details	Due
	(#16) Lab Overriding toString, equals, and hashCode (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851048)	due by 11pm
Mon Oct 27, 2025	Assignment 5A (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851076)	due by 11pm
	Assignment 5B (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851077)	due by 11pm
Sat Nov 1, 2025	(#17) Lab Abstract classes and methods (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851049)	due by 11pm
	(#18) Lab Generics pt1 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851050)	due by 11pm
	(#19) Lab Generics pt2 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851051)	due by 11pm
Tue Nov 4, 2025	Election Day Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117654&include_contexts=course_187780)	12am
Wed Nov 5, 2025	Project 2 (https://canvas.odu.edu/courses/187780/assignments/2851083)	due by 11pm

Date	Details	Due
	(#20) Lab Packages (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851053)	due by 11pm
Sat Nov 8, 2025	(#21) Lab Regular Expressions (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851054)	due by 11pm
	(#22) Lab Enums (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851055)	due by 11pm
Mon Nov 10, 2025	Assignment 6 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851078)	due by 11pm
Thu Nov 13, 2025	Football ODU televised on ESPN * All on-campus classes after 1:00pm are canceled * On-line classes are not canceled (https://canvas.odu.edu/calendar?event_id=117659&include_contexts=course_187780)	12am
Sat Nov 15, 2025	(#23) Evolving interfaces (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851056)	due by 11pm
	(#24) Lab Debugging (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851057)	due by 11pm
	(#25) Lab Unit Testing (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851058)	due by 11pm

Date	Details	Due
Mon Nov 17, 2025	Assignment 7 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851079)	due by 11pm
Sat Nov 22, 2025	(#26) Lab Black box testing (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851059)	due by 11pm
	(#28) Lab Big O (Please note this lab is not graded) (https://canvas.odu.edu/courses/187780/assignments/2851060)	due by 11pm
	(27) Lab Linked List (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851067)	due by 11pm
Tue Nov 25, 2025	Project 3 (https://canvas.odu.edu/courses/187780/assignments/2851084)	due by 11pm
Wed Nov 26, 2025	Thanksgiving Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117655&include_contexts=course_187780)	12am
Thu Nov 27, 2025	Thanksgiving Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117656&include_contexts=course_187780)	12am
Fri Nov 28, 2025	Thanksgiving Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117657&include_contexts=course_187780)	12am

Date	Details	Due
Sat Nov 29, 2025	Thanksgiving Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117652&include_contexts=course_187780)	12am
Sun Nov 30, 2025	Thanksgiving Holiday (no classes) (https://canvas.odu.edu/calendar?event_id=117658&include_contexts=course_187780)	12am
	Take the Student Opinion Survey - submission Link (https://canvas.odu.edu/courses/187780/assignments/2851085)	due by 11:59pm
Mon Dec 1, 2025	Assignment 8 (Submission Link) (https://canvas.odu.edu/courses/187780/assignments/2851080)	due by 11pm
Wed Dec 3, 2025	Assignment 9 (Submission Link - this Assignment is optional for extra marks) (https://canvas.odu.edu/courses/187780/assignments/2851081)	due by 11pm
Fri Dec 5, 2025	Assignment 10 (Submission Link - this Assignment is optional for extra marks) (https://canvas.odu.edu/courses/187780/assignments/2851069)	due by 11pm
Tue Dec 9, 2025	Final Exam (https://canvas.odu.edu/courses/187780/assignments/2851039)	due by 11pm
	0.6 | Complete Syllabus Quiz (https://canvas.odu.edu/courses/187780/assignments/2720397)	

Date	Details	Due
	Week 1 Assignment (https://canvas.odu.edu/courses/187780/assignments/2720412)	
	Week 1 | Discussion (https://canvas.odu.edu/courses/187780/assignments/2720401)	