# **Syllabus**

# **Course catalog information**

Semester: Spring 2023

Course name: Computer Science II

Course ID: CS 2440

Section number: 102,103

Credit hours: 4

Modality: face-to-face

Meeting days: Monday, Wednesday, Friday

Meeting time: 9:00am to 9:50am (Section 102), 10:00am to 10:50am (Section 103)

Meeting location: 309 Anne Belk Hall

**Course description:** The course introduces students to advanced programming concepts through the development of small to medium sized projects using software component libraries. Topics emphasize conceptual understanding and applications and include inheritance, polymorphism, recursion, interfaces, collections, stream I/O, exceptions, graphical interfaces, and threads. Lecture three hours, laboratory two hours.

Course prerequisites/co-requisites: Prerequisite: CS 1440 or CS 2435 with a minimum grade of "C" (2.0). Corequisite: CS 1100.

## Instructor information

Instructor name: Dr. Mark Hills

Instructor office: 312L Anne Belk Hall

Instructor phone: 828-262-7159

Instructor email: hillsma@appstate.edu (mailto:hillsma@appstate.edu)

Office hours: Monday 11:00am - 1:00pm Wednesday 11:00am - 1:00pm Thursday 2:00pm - 4:00pm

# **Course objectives**

By the end of this course, students will:

- · improve their programming skills
- · improve their problem-solving skills
- develop independence in learning new programming constructs and using library classes
- · learn to use new Java constructs
- understand recursion and be able to use it as an algorithmic tool
- be able to determine the big-oh complexity of small algorithms and programs
- be able to compare the efficiency of different approaches to solving a problem
- understand the design and implementation of List classes
- understand and know how to implement linked structures

# Required materials and resources

We will be using the textbook: Data Structures and Other Objects Using Java (4th Edition), Michael Main, Pearson, 2012. A digital version of this book is available.

# **Grades**

## Grading

Your final grade will be calculated as described below.

Category	Percentage
Lab	30%
Homework	22%
Quizzes	10%
Exam 1	11.5%
Exam 2	11.5%
Final Exam	15%

<sup>\*\*</sup> Among other requirements, you must earn a 55% or higher on the final exam to pass the course \*\*

AsULearn rounds your grade and that rounding will be final.

## CS 2440 as a Prerequisite

Per guidelines of the Department of Computer Science, you must earn an overall course grade of a C or higher in order to move on to courses beyond CS 2440. A C- is not sufficient to advance. This course has both a lecture and a lab component and summarized below are the minimum requirements to pass the CS 2440 course.

## **Minimum Passing Requirements Summarized**

- C (73%) or higher in CS 2440 Lecture
- D- (60%) or higher in CS 2440 Lab
- 55% or higher on CS 2440 Lecture Final Exam

## **Grading Scale**

Letter	Percentage Range
А	93 - 100
Α-	90 - 92.99
B+	87 - 89.99
В	83 - 86.99
B-	80 - 82.99
C+	77 - 79.99
С	73 - 76.99
C-	70 - 72.99
D+	67 - 69.99

Letter	Percentage Range
D	63 - 66.99
D-	60 - 62.99
F	< 60

# **Assignment details**

#### Labs

This course has a mandatory laboratory meeting each week. This weekly laboratory session provides hands-on experience with the concepts learned in lecture. Labs are an essential part of learning. There are teaching assistants available at the lab sessions that can help you and answer questions you may have about implementing Java code related to the lab assignments. There is a separate syllabus for the laboratory that covers information about lab sessions, policies, and grades. This syllabus can be found on the lab course AsULearn page. You must get at least a D- in the lab in order to pass the lecture course. Your overall lab grade is worth 30% of your lecture grade and is factored in at the end of the semester. Please pay close attention to due dates.

#### Homework

Homework assignments can be found at the end of the worksheets file and will be due on the date shown for that homework on the Agenda. Homework will be collected in class and cannot be turned in late. The intent of a homework assignment is sometimes to get you prepared for the next class activity and sometimes to put finishing touches on a particular activity. You may not collaborate with other students when doing the homework assignments. (See the section on Academic Integrity.)

### Quizzes

Online quizzes are to be taken according to the schedule on the agenda. They are based on the indicated reading assignments. The reading quizzes are intended to prepare you for lectures and should be completed on your own. (See the section on Academic Integrity.) These quizzes are posted on AsULearn and open and close at specific times. Quizzes are worth 10% of your lecture grade. Please pay close attention to due dates.

#### Exams

There will be two in-semester exams in this course. Exams may be cumulative. Any student missing an exam for an unexcused absence will receive a zero on the exam. A student missing an exam for an excused absence, when the absence is known in advance, must make arrangements to take the exam early. Students missing an exam for an emergency, excused absence will be allowed to make up the exam within a week of returning from that emergency. Failure to make up the exam within that week will result in a zero for the exam. Exams will be completed on your own during lab (to give you additional time). The exam weights can be found in the Grading section of this document.

## **Final Exam**

The final will be held in accordance with the final exam schedule as listed on the official university web page. Makeup finals will only be given in extreme circumstances, such as student hospitalization or death in the family. Both of which must be reported through student services. The final will be given on the date and time specified by the registrar's exam schedule web page. A link to the registrar's final exam schedule web page is on the course AsULearn page. You must pass the lecture final exam with a score of 55% or higher in order to pass the course.

## **Late Work**

Work is expected to be turned in by the assigned date and time.

# General course policies

## Office Hours

I will hold office hours in-person. If I am with another student, please be patient and respectful to the other student by waiting your turn. There may be times throughout the semester when I must cancel or reschedule my office hours due to last minute meetings or appointments. I will make sure to announce these changes. If you cannot attend my scheduled office hours, you may email me for an appointment. You are always welcome to ask questions over email. I will answer all emails within 24 hours during the week, although it will generally be faster than that. I may not immediately answer emails sent after 5pm on weekdays or sent at any time on weekends.

### **Help Available**

Visit the Student Learning Center website https://studentlearningcenter.appstate.edu (https://studentlearningcenter.appstate.edu/)

#### **Public Labs**

Anne Belk Hall, Rooms 309 and 311, are available to all Computer Science majors outside of scheduled class times and during normal building hours.

#### **Attendance**

It is the policy of Appalachian State University that class attendance is an important part of a student's educational experience. Students are expected to attend every meeting of their classes, however, I do understand that life happens. I will take attendance every day for my own records, but attendance will not count towards or detract from your grade in any way. Regardless of what reasons there may be for absence, students are accountable for all academic activities.

See the University policies on attendance <a href="https://academicaffairs.appstate.edu/resources-forms/syllabi-policy-and-statement-information">here (https://academicaffairs.appstate.edu/resources-forms/syllabi-policy-and-statement-information)</a>.

### **Attention and Participation in Class**

You must be an agent in your learning experience by attending lectures and paying attention. I will not be recording lecture meetings and lecture materials will not necessarily be posted to the course AsULearn page. I will be using the textbook and associated materials heavily in this course. The text is an excellent resource and you should take advantage of it.

I reserve the right to give pop-quizzes or surprise in-class assignments that are to be factored into your course grade. Please be sure to attend lectures.

#### **Email and Communications**

I assume that students check their ASU email several times daily. If you check a different email address more frequently than your ASU address, then set your AppalNet account so that your email gets forwarded. I will hold you responsible for all information conveyed to you through email from either myself or other CS 2440 instructors (for lab).

Any updates will be posted to the AsULearn Announcements forum. When an announcement is posted on AsULearn, you should also receive an email. Again, I expect you to check your official campus email with some regularity. However, if I inform you in class that an assignment will be posted, I expect you to check for that assignment online even without an email. Assignments will appear on the calendar on the course AsULearn page as well as being listed in the week it was assigned. I will announce assignments in lecture as well. Please check the Announcements regularly in the event that you are not receiving emails sent from the course AsULearn page.

Please use proper email etiquette when emailing me (or any professor). Use your official AppState email and include your course number and section (or at least meeting time) in the subject line. As I am getting to know everyone in the beginning of the semester, I ask that you are sure to introduce yourself in every email. Please be respectful in your emails. I will not respond to emails that I feel are rude or lack proper etiquette. If you are unsure of how to write an email to a professor please use the template below.

Hello Professor Hills,

My name is {first name last name} and I am in your {section number or meeting time} section of CS 2440. {insert question or comment here}

Thank you,

{first name last name}

## Accommodations for Students with Disabilities (quoted from Vice Provost)

Appalachian State University is committed to providing an inclusive experience, accessible learning environments and equal opportunity to individuals with disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Individuals needing reasonable accommodations should contact the Office of Disability Resources (828.262.3056 or odr.appstate.edu (https://odr.appstate.edu/)).

## **Religious Observance Policy**

Students must be allowed a minimum of two excused absences each academic year for religious observances. Students are responsible for requesting excused absences for religious observances required by the faith of a student. Except in extraordinary circumstances, student requests for excused absences for religious observances must be submitted to instructors in writing no later than three weeks after the first class day of the term. For the purposes of this policy, ASU defines the term religious observance to include religious holidays, holy days, or similar observances associated with a students faith that require absence from class.

### **Student Engagement**

In its mission statement, Appalachian State University aims at providing undergraduate students a rigorous liberal education that emphasizes transferable skills and preparation for professional careers as well as maintaining a faculty whose members serve as excellent teachers and scholarly mentors for their students. Such rigor means that the foremost activity of Appalachian students is an intense engagement with their courses. In practical terms, students should expect to spend two to three hours of studying for every hour of class time. Hence, a fifteen-hour academic load might reasonably require between 30 and 45 hours per week of out-of-class work.

#### **Academic Integrity Code (quoted from Vice Provost)**

#### Introduction

Appalachian State University's Academic Integrity Code is designed to create an atmosphere of trust, respect, fairness, honesty, and responsibility. The Academic Integrity Code outlines "user-friendly" procedures and mechanisms for resolving alleged violations of academic integrity. The Academic Integrity Code is the result of cooperation among Appalachian's faculty, students and administrators, and promotes a campus dialogue about academic integrity. All members of the Appalachian State University community are responsible for promoting an ethical learning environment.

### The Academic Integrity Code

Students attending Appalachian State University agree to abide by the following Code:

- · Students will not lie, cheat, or steal to gain academic advantage.
- · Students will oppose every instance of academic dishonesty.

Students shall agree to abide by the Academic Integrity Code when submitting the admission application.

#### **Extreme Circumstances**

Extreme circumstances include extended illness documented by a doctor's statement, death of a close relative, or other such problem. It does not include field trips, sporting events, other class work, oversleeping, bad hair days, problems with pets, working overtime, etc.

#### **Class Cancellations**

The university will send out an email should classes be cancelled for adverse weather. If I need to cancel class for any reason, I will notify you via email

### **Special Days**

Please reference the registrar's official 2022-2023 academic calendar for special days for the semester. Be aware of Add/Drop days and final exam periods. You can find the academic calendar <a href="here">here</a> (<a href="https://registrar.appstate.edu/calendars-schedules)</a> or a pdf link can be found on the course AsULearn page. You can find the final exam schedule here

(https://registrar.appstate.edu/sites/default/files/app\_state\_spring\_2023\_exam\_schedule\_final.pdf) or a link can also be found on the course AsULearn page.

#### Covid

Appalachian State University has returned to pre-pandemic operations. Please see here for more

information: <a href="https://www.appstate.edu/go/coronavirus/">https://www.appstate.edu/go/coronavirus/</a> (https://www.appstate.edu/go/coronavirus/). Masks are not required in classrooms, but you are welcome to wear a mask at your discretion.

## Withdraw dates

Withdraw no academic penalty: Monday, January 23, 2023

Withdraw using a career drop: Monday, March 27, 2023

Learn more about how to withdraw in the Withdrawal Policy (https://registrar.appstate.edu/resources/policies/academic-policies/withdrawal-policy)

Syllabi Policy and Statement Information (https://academicaffairs.appstate.edu/resources-forms/syllabi-policy-and-statement-information)

Additional Syllabi Policy and Statement Information (https://academicaffairs.appstate.edu/resources-forms/optional-syllabi-policy-and-statement-information)