2022SP CS234 Computer Science II

Instructor: Eduardo Ceh-Varela
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For a faster response, please do **NOT** send me a message on Canvas. Only emails.

Office: JWLA 211 L
MTRF: 11:00 a.m. – 12:00 p.m. (Mountain Time)
    W: 10:00 a.m. -12:00 p.m. (Mountain Time)
Or by appointment here
We can meet using *MS Teams* *

Office Phone: (575) 562-2945

Course Description:
Advanced procedural programming. Object-oriented programming techniques: abstraction, inheritance and interface, polymorphism. Object-oriented analysis and design. Recursion. Basic data structure and basic sorting and searching.

Prerequisites
CS 123

Lectures:
MTRF* 10:00 – 10:50 a.m. (Mountain Time)
JWLA 218 / Mediasite

Course dates:
Starts: January 18, 2022
Ends: May 13, 2022
Weeks: 16
Last day to drop: January 25, 2022
Last day to withdraw: April 15, 2022

Required Materials:

Big Java: Late Objects 2nd Edition by Cay Horstmann. Publisher: Wiley
(Previous editions could be used) *
(Java for Everyone – Late Objects, Big Java, Early objects) *
(* Be careful with the activity numbers. These may not match between versions.)

Suggested Materials:
Java Programming with NetBeans for A-level Computer Science, by Graham Hall. Publisher: Lulu.com
Java. An introduction to Problem Solving & Programming 6th Ed., by Walter Savitch. Publisher: Prentice Hall
UML Tutorial: Learn UML online for Free. https://www.guru99.com/uml-tutorial.html

Learning Objectives:

At the completion of the course, students will be able to,
● State problem-solving techniques in computing.
● Apply fundamental concepts of classes and objects.
● Design and write algorithms as working programs.
● Choose the best data structure to be utilized in a program.
● Demonstrate the usage of GUI components
● Produce basic UML diagrams to represent classes and their relationships

Topics.
We will do a quick **review** on:
Problem solving, pseudocodes, flowcharts.
Chapter 2. Fundamental Data Types
Chapter 3. Decisions
Chapter 4. Loops
Chapter 5. Methods
Chapter 6. Array and Array Lists

In this course, we will cover more in detail:
Chapter 8 (Objects and Classes)
Chapter 9 (Inheritance and Interfaces)
Chapter 15 (The Java Collections Framework)
Chapter 10 (Graphical User Interfaces)
Chapter 11 (Advanced User Interfaces)
Java Programming with NetBeans (Chapters: 1,2,3,7, and 10)

If we have time, we will cover the following topics:
Chapter 12 (Object-Oriented Design)
Chapter 18 (Generic Classes)

Course Grading:

Labs	Quizzes	Attendance	Discussions	Project part 1	Project Part 2	Project Part 3	Total
40 %	15 %	5%	5%	10%	10%	15 %	100 %

Grading Scale:

A	B	C	D	F
[90,100]	[80, 90)	[70, 80)	[60, 70)	[0, 60)

Assignment Policy

Quizzes
• Students must prepare themselves for a possible quiz after each topic. Each quiz may contain several multiple-choice, True/False, or short-answer questions.
• Quizzes will be conducted on Canvas. It will be the students' **responsibility** to check Canvas for a new quiz.
• **No second attempt** will be allowed on a missed quiz unless a medical certificate is presented.
• Once a quiz starts, it needs to be finished.

- Quizzes will have a maximum time to be answered, and they will close automatically after the time expires.

Online students:
The quizzes will be assigned depending on the pace of the in-person class. So, it is important that you watch the lessons as soon as they are available.

Students with disabilities, if you need extra time for the quizzes, please contact the Student Accessibility Office at ENMU. The arrangements are not retroactive.

Labs
Students will solve selected problems that are representative of each topic.

- One session will be dedicated to the lab. The Lab day is the last session of the week (Friday). This day I will explain the details about the laboratory. Moreover, you can discuss with me Project/Lab related problems during lab hours.
- There will be around *12* Labs. Labs could include programming assignments from the textbook.
- Please submit your Labs to the assignment space provided on Canvas. I do not receive Labs via email. **Everything must be sent through Canvas.**
- The submission deadline for a Lab assignment is ***before*** the next Lab (i.e., next Friday ***9:59 a.m.***). ***This applies to all students.***
- **No late submission is accepted.**

Online students:
The labs will be assigned depending on the pace of the face-to-face class. So, it is important that you watch the lesson as soon as they are available.

Discussions
- Students will participate in different discussions through the semester.
- Each discussion will have one or more guide questions or topics.
- The students must give their opinion regarding the question or topic, and they need to **reply at least one** other comment.
- The discussion won't be fully moderated by me, so I expect a good behavior and respect in your comments.
- All discussion will have a closing date. After that date, **no** new comments or participation will be **allowed**.

Programming project
Students will create a **computer system** in Java using the elements from the course (**see the Project.pdf document in** Canvas)
- Students can form teams of maximum **3** members (highly recommended, trust me!).
- The project is divided into **three stages**.
- There will be **three** submissions (one per stage)
- For the last stage, one person of each team will have no more than **10 minutes** to present their project (GUI stage).
  Project presentation:
  Friday May 13. 13:15 – 15:15. (Mountain Time)

If a team *does not present* the project, **no points** will be granted for the **third part** of the project, and the grade for this part will be zero.

- I have an [unofficial] extra office hour for project related issues. Thursday, 3:00 p.m. – 4:00 p.m. Make an appointment using Bookings. Time and day could change during the semester.

Attendance/Participation

- All on-site students are expected to attend all classes.
- All students are responsible for all the materials covered in the lecture in their presence and absence.
- Online students are *expected* to watch the class videos the same day of the lectures.
- All online students are welcome to come to class with local students.
- Attendance will be taken for all students. Attendance will be taken through a one-question quiz on Canvas the day of the lecture. For on-site students, the quiz is only accessible through the local network in JWLA 218 and during the time of the lecture. It is your responsibility to answer the quiz before leaving class. For online students, the quiz will be open just for the day of the lecture. It will start next Monday, 24th.
- Students will be held responsible for all **announcements** made in class.
- Students with unusual circumstances should contact the instructor of their situation **before** any submission (i.e., medical issues, accidents, etc.).
- If you feel sick (e.g., COVID symptoms) please do not expose the class.

Students with disabilities. This is not a regular quiz. It is an activity for attendance. Therefore, there is no extra time for this activity.

Syllabus Modification:
The instructor reserves the right to modify any part of the syllabus, including course policies, course and assignment schedule, grade weights.

Response Time for Questions and Assignment Feedbacks

For a faster response time, send your questions by email (use your ENMU email). You may use the message system in Canvas, but it is not as immediate as an email. I will try to answer your emails in a 24-hour frame. Expect delays for replies during weekends.
You can also use MS Teams. Send me a direct message.

Expect feedback for your assignments within 1-2 weeks after submission. However, for some assignments, I will post a solution for the assignment after the due date, so you can verify if your answer was on the right track.

Announcements

- If needed, I will use announcements through Canvas. Please, make sure you have your Canvas notifications **activated**.
- I encourage you to use the Canvas App for Students.
- There will be a team for this class in MS Teams. Please install the app.

Learning Management

The university has provided us with a new learning management system called **Canvas**. You can access Canvas from the myENMU Portal or directly at the university's [Canvas Login Page](#).

Canvas works with most computers, mobile devices, and browsers. You can check this webpage to see if your computer/device and browser are compatible: [What are the browser and computer requirements for Canvas? - Canvas Community (canvaslms.com)](#). Mobile apps for Android and Apple devices can be downloaded at no cost from Google Play and the Apple App Store, respectively.

If you are new to using Canvas, here are a few tips:

- **Welcome Tour** - A welcome tour will pop up and show you the main features of the system. This is a great way to get started.

- **Passport to Canvas** - This self-paced student workshop will teach you everything you need to know about Canvas. Check your Dashboard or Courses menu to access the workshop.

- **Help Menu** - If you need help, click on the Help menu**.** You can:
  - Call or chat with **Canvas Support** 24/7
  - Search the **Canvas Guides** for step-by-step help
  - Open the **Student Guide** and scan by topic
  - And more - click Help to see all the support the university has provided for you.

COVID-19 Student Expectations and Responsibilities

Eastern New Mexico University is pleased to have you back this fall and looks forward to your active engagement. To ensure the health and safety of our students, employees, and community, we require a personal commitment by each of you to adhere to strategies known to reduce the risk of COVID-19 transmission, specifically: Students will adhere to university campus-wide personal safety protocols. https://www.enmu.edu/covid-19-health-advisory/general-operations.

Students will take personal responsibility to minimize the risk of infection by knowing how the virus spreads and employing best practices to protect themselves and others from infection. Review the [Center for Disease Control's COVID prevention page](#) for more information.

Academic Integrity Policy:

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate disciplinary action. See the Student Handbook for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone. Plagiarism is a serious offense. When in doubt, please cite your sources!

Please refer to the Catalog for information concerning plagiarism; action can include, but is not limited to failure of the assignment; failure of or a reduced grade for the course; suspension or dismissal from your program of study.

Disability Statement:
If you have, or believe you have a disability, you may contact the Accessibility Resources and Testing Center to coordinate reasonable classroom accommodations, access to technology or other academic assistance. The Accessibility Resources and Testing Center serves students with a wide range of disabilities including but not limited to medical or health impairment, vision or hearing disability, physical disability, learning disabilities, attention deficit disorder, or mental health impairment. All information will be treated confidentially.

Accommodations are **not** retroactive. They begin only after:
•Appropriate documentation has been received and accepted by the Coordinator of Disability Services
•Letters of Accommodation (LOA) have been prepared
•You have delivered your Letters of Accommodation to your instructors

Appropriate academic accommodations may then be provided for you. You may contact Accessibility Resources and Testing Center in room 186 Student Academic Services building, phone 575.562.2280.

FERPA and Privacy:
As a student, your educational records are considered confidential. Under FERPA (Family Educational Rights and Privacy Act), your records are confidential and protected. Under most circumstances your records will not be released without your written and signed consent. However, some directory information may be released to third parties without your prior consent unless a written request to restrict this is on file. You can learn more about student rights to privacy at enmu.edu/FERPA.

In this course, we will be working with third party applications online (i.e. wikis, blogs and other Web 2.0 applications). The different proprietors of these sites may or may not have privacy guarantees and the FERPA policy at ENMU does not apply to these sites. It will be your responsibility to read the privacy documentation at each site. There are many other options to protecting your information at these sites. If you have filed the paperwork and are classified as protected under the ENMU FERPA qualifications, it will be acceptable for you to use an alias when using the Web 2.0 sites required for this course. If you still have concerns, please e-mail me as soon as possible to discuss your options.

Copyright:
This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are either linked to or are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Title IX:

ENMU is committed to fostering a safe, productive learning environment and we comply with all aspects related to Title IX of the Educational Amendments of 1972 and 34 C.F.R. Part 106. Title IX prohibits sex discrimination to include sexual misconduct defined as harassment, domestic and dating violence, sexual assault, and stalking. Incidents of harassment or assault can be reported to the Title IX Coordinator at (575)562-2991 or titleix.coordinator@enmu.edu . Reports can also go to the ENMU Police Department by calling 575-562-2392. If you wish to receive fully confidential support and victims advocacy you can contact Arise Sexual Assault Services at (575)226-7263.

Confidentiality and Mandatory Reporting:
As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility. I am required to share information regarding sexual misconduct or information about a crime that may have occurred on ENMUs campus with the Title IX Coordinator and/or the ENMU Police. Students may speak to someone confidentially by contact.