# Syllabus

## Course Title: CNMT 110 Object Oriented Programming

## **Class Schedule:**

• Sections 3

Section 3: Tuesday and Thursday, 8:00 - 9:50, Science Building Room B238

Instructor: John Heckendorf Office: SCI D221 Phone: N/A Email: jheckend@uwsp.edu Office hours: 7:00 – 7:50 Tuesday and Thursday

## **Course Description**

This course encompasses an introduction to object-oriented programming paradigm; definition and use of classes; fundamentals of object-oriented design; development of object-oriented programming languages principles; coding in a current object-oriented programming language.

## **Course Objectives**

- Master basic programming constructs such as variable declarations, assignment, decision structures, loops, and methods.
- Understand essential concepts in object-oriented programming such as classes, objects, inheritance, and polymorphism.
- Obtain the ability to use Java application program interfaces (API) to solve machine problems close to real world applications.
- Interpret business problems and prescribe logical program code solutions.
- Establish and follow coding standards
- Analyze problem solving and task processes

## **Prerequisites**

• No prerequisite courses required.

## **Textbook and Materials**

- Starting Out with Java Early Objects, 5th Edition, By Tony Gaddis, Publisher: Addison Wesley, and ISBN-978-0-13-377674-4.
- It is strongly recommended that you purchase a flash drive for data backup. Although you may find a larger drive helpful, a 2GB drive should be sufficient.

**Grading (approximation - these percentages will change)** 

•	Lab assignments:	45%
•	POP tests/In class code test	10%
•	Tests/Quizzes:	45%

## **Assignments and Deadlines**

- In-class activities may not be made up or turned in after the end of class; unless, you have the supporting document for your absence (including "Pop Quizzes".)
- Each assignment is due by/on its due date by default. However, late submissions will be penalized 10% for the first 7 calendar days. Penalty cannot be waived; unless there is a case of illness or other substantial impediment beyond your control, with proof in documents from the school.
- Submissions 14 days after the due date will receive a 20% deduction.
- All late assignments for weeks 1 8 must be submitted by the mid-term exam.
- Even if late, every homework assignment and project must be completed and turned in, to pass the course.
- No late submissions are allowed after the last day of class.

## Attendance

- Monitors are turned on ONLY when you are asked to.
- If you miss class due to an approved university activity, illness or family emergency on the day a test is given. It is **YOUR** responsibility to contact the instructor **BEFORE** the start of that day.
- I prefer **notice in advance** if you prepare to miss the class.
- On a weekly basis, I am required to report any lack of attendance. Note: mid-term or final exams are not attendance items.

# **Grading Scale**

• Final grades will be assigned according to the following scale:

А	93 - 100	A-	90 - 92.99
B+	87 - 89.99	В	83 - 86.99
В-	80 - 82.99	С+	77 – 79.99
С	73 – 76.99	С-	65 - 72.99
D	60 - 64.99	F	0 – 59.99

# **Office Hours Policy**

- I prefer that you come to my office during my scheduled office hours.
- However, you are still welcome to my office to ask me any questions at any other times with appointments. (Note: I am adjunct so; my time on campus is limited.)

## **Re-grading**

- Scores of Labs, Projects, Tests, and Exams will be posted on D2L, and announcements will be made on D2L.
- After the scores are announced, you have **5 calendar days** to request for re-grading by contacting the instructor (office hours or email). Your grade will be final after **5 calendar days**.

## D2L

- The D2L URL is <u>https://uwsp.courses.wisconsin.edu</u>. Use your UWSP Network ID and password to login. We use D2L for the following activities:
  - Posting assignment instructions and files.
  - $\circ$  Posting scores and grades.

# **Academic Integrity**

- The university cannot and will not tolerate any form of academic dishonesty by its students. This includes, but is not limited to cheating on examinations, plagiarism, or collusion.
- Any form of academic dishonesty may lead to F grade for this course.
- You may help each other. However, sharing files is copying.

# **Academic Standards**

- The University of Wisconsin Stevens Point is an academic community of individuals committed to the pursuit of learning, the acquisition of knowledge, and the education of all who seek it. This course expects that all work turned in for a grade is your own, or that of your group. A description of your rights and responsibilities as a member of the UWSP community can be found at: <u>http://www.uwsp.edu/dos/Documents/CommunityRights.pdf</u>
- Student Academic Standards and Disciplinary Procedures (UWS/UWSP Chapter 14) is available at <u>http://www.uwsp.edu/dos/Documents/Community%20Rights%20and%20/Responsibilities.pdf#page=8</u>

## **Emergency Procedures**

"In the event of a medical emergency call 911 or use Red Emergency Phone located outside of lab B238. Offer assistance if trained and willing to do so. Guide Emergency Responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure. See

www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span rooms and buildings. In the event of a fire alarm, evacuate the building in a calm manner. Meet at Science Building's East Parking lot. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of Emergency Responders. See UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgt for details on all emergency response at UW-Stevens Point."

## **Students with Disabilities**

- If you require accommodation based on disability. I would like to meet with you in the privacy of my office during the first week of the semester. To ensure that you are appropriately accommodated.
- Again, I prefer notice in advance if you need anything.

## File Storage

- **Backup your work often**, and make a backup copy of your files at the end of every work session.
- UWSP Information Technology cannot restore individual files should you inadvertently delete something, nor can they restore individual files should your UWSP account become inactive.
- Extensions on assignments will **NOT** be given on assignments which are late due to lost or damaged files.

Week#	Module / Topics
1	Syllabus
	Introduction
	What is Java and computer programming?
	Precursor CIS110 test
	Basic information technology and programming components
1.	Fundamentals:
	Basic/required Java program components
	Eclipse interactive development environment (IDE)
2.	User Input:
	Scanner object and console user input
	Dialog boxes, user input, and data type conversion
3.	Methods:
	Programmer created methods
	How to break a large problem down into manageable/smaller tasks

## TENTATIVE COURSE OUTLINE

4.	Decision Logic 1: if/else statements
5.	Decision Logic 2: More decision logic and handling input exceptions: Comparing Strings, Switch/Case structure, Formatting numeric output Simple input exceptions: try/catch blocks
6.	Part 1: - Looping/repetition structures
7.	Part 2: Part 2: Simple array constructs Part 3: - Random numbers
8.	Mid-term Exam
9.	Static Classes i.e. organizing re-usable methods: Non-instantiated classes to break the larger problem down Additional problem solving techniques Static classes
10.	Instantiated classes and creating class objects
11.	More Instantiated classes: Array lists Garbage Collection Throwing exceptions try/catch and finally method
12.	Inheritance
13.	Disk file I/O and handling file I/O exceptions
14.	Graphical User Interface applications (GUI) .jar files Additional String class methods Make Up Testing

Note: The course outline is used as a guide and is subject to change.