



CIS 110 – Object-Oriented Programming, Section 3 (4 credits)

4:00 p.m. – 5:50 p.m. TR

Location: SCI B348 (T), B238(R)

Instructor:	Daehee (Danny) Kim, PhD	Office:	B231, Science Building
Web:	http://dannykim.me	Phone:	715-346-2078
Office Hours:	1:00 – 2:00 p.m. MW 3:00 – 4:00 p.m. TR	Email:	dkim@uwsp.edu

Course Description

Introduction to object-oriented programming paradigm; definition and use of classes; fundamentals of object-oriented design; development of object-oriented programming language principles; coding in an object-oriented meta language; coding in a current object-oriented programming language.

Objectives

- Master basic programming constructs such as variable declarations, assignments, 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 API to solve machine problems close to real world applications.

Required Text and Material Purchase

Tonny Gaddis (2014). *Starting Out with Java – Early Objects*, 5th Edition. ISBN: 978-0133776744

I strongly recommend that you **purchase a flash drive for data backup**. You will save into the flash drive program that you work in eclipse at computing lab. Although you may find a larger drive helpful, a 4GB drive should be sufficient.

Grading Policy:

Assessment:

- Midterm 1 15% (3/2 Thursday, in class)*
- Midterm 2 15% (4/13 Thursday, in class)*
- Final Exam 20% (5/16 Tuesday, 5:00 pm ~ 7:00 pm, Comprehensive Exam)
- 5 Assignments 25% (5% per assignment)
- 5 Programming quiz 20% (4% per quiz)
- Attendance 5% (sign on attendance sheet every class)

* Dates can be changed based on class progress

Grading scale:

Final grades will be determined according to the following scale:

	A	100 – 94%	A-	93 – 90%
B+	B	86 – 83%	B-	82 – 80%
C+	C	76 – 73%	C-	72 – 70%
D+	D	65 – 60%	F	< 60%

Assignments

Assignments will be announced in class and posted on D2L. If you miss class, it is your responsibility to check D2L for any homework assignments and supporting material which may have been given out during class. I recommend that you start working on assignments as soon as possible after they have been announced. Assignments for this class almost always take longer than originally anticipated; starting early greatly increases your odds of completing the assignment to your satisfaction. Please call, email or see the instructor as soon as possible, and **before the due date**, with any questions or concerns about an assignment.

Due Dates & Late Assignments

Unless otherwise noted by the instructor, assignments should be submitted before class (soft copy of report document and program files) and in the beginning of class (hard copy of report document) on the due date. Report document should contain following contents and use the template given by instructor.

- Short description of each question.
- How you solve each question.
- For programming questions, you need to show screen capture of running results.

For the late assignments up to one week, the following reduction of the given points will be deducted.

- After due date ~ 1 week: 30% deduction of given points
- After 1 week ~ 2 weeks: 60% deduction of given points
- After 2 weeks: no points will be given.

Assignments may only be made up if the absence was due to documented illness, approved university activity or family emergency. If you miss class or an assignment due to an approved university activity, illness or family emergency on the day an assignment is due, it is your responsibility to contact the instructor **before the start of class that day** in order to make alternative arrangements.

Attendance

This class assumes perfect attendance. In the event you need to miss a class, please contact the instructor before absence, and consult with classmates regarding material you may have missed. Absence without excuse to the instructor will have an effect on your grade.

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:

<http://www.uwsp.edu/dos/Pages/Information%20for%20Students.aspx>

Student Academic Standards and Disciplinary Procedures (UWS/UWSP Chapter 14) is available at

<http://www.uwsp.edu/dos/Documents/Community%20Rights%20and%20Responsibilities.pdf#page=8>

Academic Dishonesty Policy

Students may discuss assignments with each other and may seek help from the instructor. However, since assignment scores count as a part of the final grade, students must limit the amount of outside help they receive. Students must not copy any part of another person's work or break an assignment into a team project (unless directed to do so by the instructor). If there is ANY doubt in your mind about the amount of help given/received you should immediately consult with your instructor BEFORE submitting the assignment.

Any student who submits an assignment or exam which is in whole or in part the work of another person and any student (whether enrolled in the course or not) who so assists another student will be prosecuted under Chapter UWSP 14 of the Rules of the Board of Regents of the University of Wisconsin System, Wisconsin Administrative Code. Depending upon the severity of the infraction, the consequences of such an act range from a verbal reprimand to an "F" in the course to expulsion from the University.

Cell Phone, IM and Recording Devices

Please turn off cell phones before entering the classroom. Cell phones may not be used in the classroom without prior permission of the instructor. Instant messaging, including *Facebook and social media sites*, should also be turned off, unless you are communicating with a group member working remotely. If you would like to record (video or audio) any aspect of this course, please seek prior permission from the instructor.

Emergency Preparedness

In the event of a medical emergency, call 911 or use red emergency phone located outside of the Public Science Hall 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 at SCIENCE A224. In the event of a fire alarm, evacuate the building in a calm manner. Meet near the grassy area near Lot X. 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.

Communication by email

I do a lot of communication by email. When you email me, please include "CIS110:" in the beginning of subject. It will help me differentiate your email for CIS110 with other emails.

Course schedule

- See "CIS110_schedule.pdf".

CIS110 – Object Oriented Programming (section 3): TENTATIVE COURSE SCHEDULE

*** Dates and topics are subject to change ***

Week	Approx. Dates	Topics	Homework	Exam	Read
1	1/24	syllabus, introduce(class, person), survey			
	1/26	Practice1: HelloWorld.java (notepad++, Eclipse)			Ch1
2	1/31	object-oriented language, basic structure, coding style (Naming), java coding style, primitive data types	HW1		Ch1, 2
	2/2	Assign values, type casting, read input (keyboard, dialog box) Practice2: read input (keyboard, dialog box)			Ch1,2
3	2/7	arithmetic operators, operators precedence, named constant, method, location of main			Ch2
	2/9	Object and class, how to create class, Encapsulation, Programming quiz 1		Quiz 1	Ch3 Ch1,2
4	2/14	Create a class (Rectangle), constructor, Overloading (method & constructor overloading), Class variable/method, scope	HW 1 due HW 2		Ch3,6,8
	2/16	class diagram Practice3: create classes			Ch3
5	2/21	Team work: develop design of application.			
	2/23	Programming Quiz 2: make classes (class diagram)	HW 2 due	Quiz 2	Ch3
6	2/28	Midterm 1 – review			
	3/2	Midterm 1		Midterm 1	
7	3/7	If, if-else, if-else-if, nested if statements, switch, while, do-while, for loop, break, continue			Ch4,5
	3/9	Practice4: if, switch, loop			Ch4,5
8	3/14	Java Swing introduction, Java Swing components, Calculator application	HW 3		
	3/16	Programming Quiz 3: if, switch, loop		Quiz 3	
9	3/21	Spring Break (3/17 ~ 3/26): no class			
	3/23				
10	3/28	What is an array? how to use array (declare, assign values, access array elements, length), ArrayOutOfBoundsException error, Rule of program to use Array, argument passing: array, array of objects			Ch7
	3/30	Two dimensional array, arraylist, Practice5: Array and array list			Ch7
11	4/4	Array applications (selection sort, sequential and binary search)	HW 3 due HW4		Ch7,Ch6

		Make a OOP program using top-down approach: classroom inventories, Make a OOP program: Car dealership			
	4/6	Student club application: review process to draw class diagram and development steps (using Array List), Programming Quiz 4: array and arraylist with method call		Quiz 4	Ch6 Ch7
12	4/11	Inheritance (including class diagram), method overriding Midterm 2 – review			
	4/13	Midterm 2		Midterm 2	
13	4/18	Benefit of inheritance (using course application), private variables, protected access modifier Inheritance (bank account): finding super class and sub classes, Polymorphism	HW4 due		Ch9
	4/20	Abstract class, interface Programming Quiz 5: draw class diagram and make an OOP application (using top-down approach)		Quiz 5	Ch9
14	4/25	Binding (Dynamic binding, Static binding), multiple inheritances, class diagram (abstract class, interface), Hierarchy of default constructors and non-default constructors. Handling exception with try-catch, unchecked/checked and multiple exceptions	HW5		Ch9 Ch10
	4/27	Throwing exceptions, making own exception Practice6: practice collaboration using abstract class and interface in a team			Ch10 Ch9
15	5/2	Exception handling (Finally), Text file (read, write, append), location of file (absolute/relative path) location of file (absolute/relative path) File application with GUI application (read numbers from a file, compute sum/average and save to file), Random class (with GUI)			Ch10,5
	5/4	Tokenizing, File application (to create student objects) with GUI application Practice7: file handling and exception handling			Ch8
16	5/9	Final Review	HW5 due		
	5/11	Final Exam preparation (no class)			
	5/16	Final Exam (5:00 ~ 7:00), Comprehensive		Final	