



Java Programming Principles II
CPT 431
Southwestern College Professional Studies

COURSE SYLLABUS

I. Course Catalog Description

The course progresses from programming business applications using arrays and strings, through advanced inheritance and composition, to handling exceptions and events. Advanced GUIs and graphics are presented, and recursion is introduced. *Prerequisite: CPT 421.*

II. Required and Supplementary Instructional Materials

Gaddis, T. (2013). *Starting out with Java: From control structures through objects* (5th ed.). Upper Saddle River, NJ: Pearson Education.

III. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each course and each [undergraduate](#) and [graduate](#) program of study, as well as [institution-wide outcomes](#) related to the mission and vision of the college. Outcomes can help learners and instructors focus on the big picture of the learning experience and can help inform potential employers about a graduate's knowledge and skills.

Upon successfully completing this course, the learner will be able to:

- Demonstrate the mastery of the fundamentals of Java programming language
- Analyze and apply the principles of object-oriented programming using the Java programming language.
- Develop enhanced error trapping techniques using exceptions.
- Design, create and execute Java programs using Java IDE.
- Analyze and apply problem-solving techniques using iterative techniques such as recursion.
- Develop database applications in Java.
- Build programming skills with hands-on experience for problem solving with Java.

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

IV. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the blackboard course.

V. Course Requirements:

Requirements	Number of Assignments	Points Possible	Percent of Grade
Discussion Assignments	6	150	15%
Assignments	5	50	50%
Quizzes	7	200	20%
Final Project	1	150	150%
Total Points		1,000	100

VI. Course at a Glance:

Unit	Reading & Preparation Activities	Graded Work Due
1	<ul style="list-style-type: none">• Read <i>Gaddis</i> Chapter 10 (pp.619–687)• Review about Overloading on pp. 376-384• Read “The difference between overriding and overloading in Java is a common source of confusion”	<ul style="list-style-type: none">• Unit 1 Discussion• Unit 1 Assignment• Chapter 10 Quiz
2	<ul style="list-style-type: none">• Read <i>Gaddis</i> Chapter 11 (pp. 699-746)• Read <i>Gaddis</i> Chapter 12 (pp. 755-836)	<ul style="list-style-type: none">• Unit 2 Discussion• Unit 2 Assignment• Chapter 11 Quiz• Chapter 12 Quiz
3	<ul style="list-style-type: none">• Read <i>Gaddis</i> Chapter 13 (pp. 843-900)	<ul style="list-style-type: none">• Unit 3 Discussion• Unit 3 Assignment• Chapter 13 Quiz
4	<ul style="list-style-type: none">• Read <i>Gaddis</i> Chapter 14 (pp.911–976)• Read <i>Gaddis</i> Chapter 15 (pp.985-1007)	<ul style="list-style-type: none">• Unit 4 Discussion• Unit 4 Assignment• Chapter 14 Quiz• Chapter 15 Quiz
5	<ul style="list-style-type: none">• Read <i>Gaddis</i> Chapter 16 (pp. 1013-1101)	<ul style="list-style-type: none">• Unit 5 Discussion• Unit 5 Assignment• Chapter 16 Quiz
6	<ul style="list-style-type: none">• Complete the final project	<ul style="list-style-type: none">• Unit 6 Discussion• Final Project

VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies [Standard Syllabus](#) in Blackboard. You may be required to log in.