

# **CPS-261 – Advanced Java Concepts Course Syllabus**

## **Course Code:**

CPS-261

## **Course Title:**

Advanced Java Concepts

## **Course Description:**

This course is a continuation of the Java concepts covered in CPS 161. Topics covered include input/output; graphical user interfaces associated with AWT/Swing; data structures; networking; and multitasking (Threads). Students entering this class should have a good understanding of object-oriented programming concepts such as inheritance and polymorphism. The title of this course was previously Programming in Data Structures in Java.

## **Prerequisites:**

Academic Reading and Writing Levels of 6; CPS 161 minimum grade B-

## **Outcomes and Objectives:**

[Please refer to the CPS-261 Master Syllabus](#)

## **Required Text and Materials:**

Please confirm edition with [WCC Website](#) or go to the WCC Bookstore and use the Find the Course Materials feature to view the required and recommended course materials: <https://washtenaw.bncollege.com/course-material/course-finder>

None – All required materials are included in your tuition within the Bb course site.

## **Other Requirements**

- Notebook(s)
- Java SE 8 or above
- Eclipse or IntelliJ IDE(or any compiler)
- Internet connectivity
- A flash drive or cloud storage access.

## **Course Overview and Structure:**

This course is designed to provide advanced concepts in Java programming language. The following topic list does not necessarily represent the order in which material will be covered in the course.

- Exception handling
- I/O Processing
- Graphical User Interfaces
- Multithreading
- Aggregation Operation
- Lambda Expressions

- Data Structures
- Unit Testing

### Grading

- Grades are posted in Blackboard under My Grades.
- Grading is typically completed within a week of the assignment due date.

Grades will be assigned using the following numeric scale:

Graded Items	Points Total
Participation	100
Machine Problems	350
Final Project and Presentation	250
Community Work	50
Mid-Term and Final Exam	250
<b>Totals Points</b>	<b>1000</b>

#### *Class participation and community work*

You can receive a total of 100 points for participation and 50 points for community work. Please see the attached files for detail.

#### *Machine Problems (MP)*

You can receive a total 350 points for completing the coding machine problems. The points for individual problems vary based on complexity. Follow the schedule carefully for specific due dates. To be successful, begin each set early. Do not wait until the last minute.

#### *Final Project*

You will be completing a final project at the end of the semester which is required to pass the course. Detailed information can be found under "Assignments"->"Final Project".

#### *Quizzes and Exams*

Each module includes a self-assessed quiz. The quizzes are for you to test your knowledge on the subject taught in the module and will not be counted towards your grade. However midterm and final exams will use the same question pool. The quizzes can be used as the study guide for the exams.

#### *Late Assignments*

No late assignment will be accepted.

You should expect to make several revisions/runs of a program assignment over several days before it is working to our satisfaction. Do not wait to the last day to start designing your machine problems!

### Communication

- Email is the preferred way of communication.
- Please send emails from **your WCC account** to be in compliance with federal privacy regulations.
- Provide a clear subject line.

- Always include your first and last name in the email message, along with the class you are taking.

**Expectations and Availability of Instructor**

I will usually respond to email within 24 hours Monday-Friday and 48 hours on the weekends and Holidays.

**Group Study and Tutoring**

The Learning Commons is a place where students can receive academic tutoring, improve technology literacy, develop study skills, and access computers and software to excel in their coursework. Check out the schedule on this site:

<http://www.wccnet.edu/resources/learningcommons/> early in the semester so that you know what help you can get when the assignments become more difficult.

**Academic Integrity:**

Plagiarism and other forms of academic dishonesty will result in discipline according to the [WCC Student Rights & Responsibility guidelines](#). Always complete your own work using your own words. If you do use information, ideas, or words from other sources, credit that source using MLA or APA format.

**Accommodation of Special Needs:**

[Learning Support Services Department](#) provides support to students who may need accommodation for documented disabilities, or other learning need. WCC will work with you to accommodate any of your individual learning needs, however, I need to know of any requests in advance in order to make the necessary arrangements.

**WCC Student Policies and Support Information:**

Review the material within the Washtenaw Community College Student Policies and Support Information for additional policies and procedures that affect you and your course. Find this information [on this shared page](#).