

## CIT-111 – Introduction to Programming: Java COURSE OUTLINE

Class Section(s):	NC31	Class Location:	North Campus
Class Time(s):	Tuesday/Thursday 9:00am - 11:00am		

Instructor:	Dr. Rebecca DuPont	Semester:	Fall 2021
Office Hours:	Monday - 12:00 to 2:00 Tuesday - 1:00 to 2:00, 4:00 to 5:00 Thursday - 8:00 to 9:00	Office Location:	North Campus, 2036
Instructor Contact Methods:	Email at RDupont@ccac.edu or Microsoft Teams		

	<ul> <li>Access to a Computer or Laptop (NOT a Chromebook)</li> <li>Access to the software program NetBeans</li> <li>Textbook: Starting out with Java (w/MyProgrammingLab Access Code)</li> </ul>		
Books & Materials	<ul><li>Edition: 7th</li><li>ISBN: 9780135188637</li></ul>		
	<ul><li>Author: Gaddis</li><li>Publisher: Pearson</li></ul>		

Course Credits:	4	
Prerequisites / Co-requisites:	Prerequisites: Basic skills using a personal computer and operating system, eligibility for MAT 090.	
Course Description:	This course is an introduction to software development using the Java programming language. Students create basic Java applications using algorithm development and problem-solving strategies. Topics include the software development process, Java language basics, data type representations and storage considerations, Graphical User Interface (GUI), program control structures, methods and parameter passing, one-dimensional arrays and Object-Oriented Programming (OOP).	
Learning Outcomes (from the master course syllabus):	<ul> <li>Upon successful completion of the course, the student will:</li> <li>1. Apply algorithm development and problem-solving techniques to create Java applications.</li> <li>2. Utilize a Java Integrated Development Environment (IDE) to enter, compile, execute, test and debug Java applications.</li> </ul>	

3.	Choose the appropriate data type representations in a Java application.
4.	Create a simple GUI to interface with Java applications.
5.	Implement control structures in a Java application.
6.	Apply methods and parameter passing in a Java application.
7.	Apply the array data structure in a Java application.
8.	Utilize classes and methods found in the Java Application
	Programming Interface (API).
9.	Create OOP user-defined classes and methods that interface with a GUI.

General Education Goal(s)	How does this course meet the General Education goal(s)?
Critical Thinking and Problem Solving	1, 2, 3, 8, 9
Quantitative and Scientific Reasoning	5, 6, 7
Technological Competencies	1, 2, 3, 4, 5, 6, 7, 8, 9
Information Literacy	9, 10

## Course Policies & Procedures

Evaluation Plan:			
	Homework Program (x5)	300 Points	
	Labs	100 Points	
	Review Questions	200 Points	
	Final Exam	300 Points	
	Total Points	1000 Points	
	Grade Total: A (1000 - 900), B (899 - 800), C (799 - 700), D (699 -600), F (599 and below)		
	Homework Project: Projects throughout programs discussed and demonstrated in be completed no later than the due date circumstances. An extraordinary circumst	the course. All projects are expected to	

students, and unnatural occurrences. Students will be expected to provide documentation in such circumstances.

**Homework Project Late Policy:** Students will be able to turn in assignments up to two days after the due date for 10% off the total grade on the assignment. After this time, the grade will be zero and the assignment will not be accepted.

Additionally, students involved with sports and groups on campus must turn in assignments prior to leaving for school-sponsored activities.

**Homework Project Attempts:** Once a project is graded, students have one additional attempt to redo and correct the mistakes made on the project. This is to be completed in the two weeks after the due date.

**Lab**: These are small activities and assessments that are completed through the week of each course. These can range from review of terminology to implementation of different elements in Java. These are to reinforce the content students learned during that class and are due by the start of the following class meeting.

**Review Questions**: These are self-paced quizzes in Blackboard to help students review the content for that specific section of the course. Although students will have one week to complete the review questions, they will have unlimited attempts at the questions.

**Final Exam:** The final exam encompasses all programs, assets, and theories examined throughout the semester. Through this process, students will have a complete demonstration of the process to design and layout in preparation for their portfolios. There will be no late policy applied to this project, and it must be handed in on the provided due date.

## Attendance & Tardiness:

Students are allowed 1 unexcused absence from the course meeting time. Students who continue to miss course meetings and do not provide proper documentation will lose **25 points per absence** from their final overall grade.

An excused absence is where proper documentation is provided to the instructor of the course. Accepted forms of documentation include doctor's Excuse, University documentation for participation in events, obituary of a family member. This documentation must be presented to the instructor at the following class meeting to be recorded.

Instructors are required to check attendance for the first three weeks of the term (or 20% of shorter terms) and report students who have never attended or stopped attending to the college Registrar. For this course, if you are not attending our live Zoom sessions, I will use the last date you completed an assignment or contacted me directly. If you do neither, I will be forced to mark you as not attending, even if you have logged into Blackboard. Students who have never attended will be dropped from the class, and financial aid will be adjusted – no refund of tuition or fees. Students who withdraw or stop attending prior to the

	10th week of class (or 60% for shorter terms) will have financial aid adjusted to reflect the dates of attendance. You may be required to repay the college for the funds that are returned to the federal government. See Appendix A of the college catalog at catalog.ccac.edu.		
Test and/or Quiz Makeup:	There are no quizzes or exams in the course. Weekly activities will be Blackboard-based with students having one week to complete the activity.		
Technology Used:	<ul> <li>A computer with internet and web browser, CCAC Blackboard account, and CCAC email</li> <li>NetBeans 8.2 IDE with         JDK(https://www.oracle.com/technetwork/java/javase/downloads/jdk-netbeans-jsp-3413139-esa.html)</li> <li>If this link doesn't work, you can download components individually:         Java SE 8 JDK (https://jdk.java.net/java-se-ri/8-MR3) or Amazon Corretto 8         (https://docs.aws.amazon.com/corretto/latest/corretto-8-ug/downloads-list.html), and then Netbeans 8.2 (https://netbeans.org/downloads/old/8.2/)</li> <li>Additional Resources         <ul> <li>SoloLearn Java (http://www.sololearn.com/Course/Java/)</li> <li>JDOODLE online Java Compiler</li></ul></li></ul>		
Academic Honesty:	Academic Misconduct Rules—the college expects students will not engage in:  Cheating: The act or attempted act of deception by which a student misrepresents that he/she has mastered information on an academic exercise that, in fact, has not been mastered.  Fabrication: The use of invented information or citation in an academic exercise or		
	the falsification of research or other findings.  Plagiarism occurs when a student:		
	<ul> <li>fails to place quotation marks around material copied word-for-word from another source, published or not, including web-based content (long quotes are indented and blocked, according to discipline documentation requirements);</li> <li>neglects to attribute words and/or ideas to the author, whether the author is published or not;</li> <li>closely follows the original's wording and sentence structure when attempting; and/or</li> <li>presents all or part of a paper from an essay-purchasing website or other sources as his or her own work.</li> </ul>		
	If you are not sure - ASK! I will let you know! Failure to follow this will result in a failing grade for the project. Further infractions will result in a failing grade for the class and report to the Dean of Academic Affairs.		
Other Policies and Procedures:	<ul> <li>File corruption, Drive failures, and other miscellaneous technological issues are not grounds for an assignment or final project extension. If this occurs, the student is still held to the due date and late policy (if applicable).</li> </ul>		

- For on-campus classes, as students will have computers for use during the class with all needed software, students are responsible for their own personal computers and troubleshooting issues that can occur.
- Make-Up Quizzes will be offered only for those presenting valid medical excuses within one week of the quiz or exam.
- Final Exams are scheduled per College Policy. Your presence at the scheduled final exam time is mandatory. Failure to attend will result in a failing grade for the final showcase/critique.
- Any electronic devices including cell phones, music players, laptops, and tablets should be muted during class.
  - Cell phones are not to be out on the desks during class. Students will not text during the class.
- Students should be attentive during lectures and follow-along activities during the class period. Therefore, any non-class-related websites should not be open during this time, as they are distracting to you, and those around you.
- Concerns related to the course should be presented to the professor in a timely manner before exploring other options. Set up an appointment with the instructor and present your concerns in a respectful, professional manner.
- E-mails will be answered in a timely manner. However, they will not be answered from 4:00 pm to 8:00 am during the week.
  - Emails sent after 4:00 pm on Fridays will not be responded to until Monday.
  - During university holidays, e-mail responses will not occur until the start of classes again.
  - Emails sent 24 hours prior to the due time of an Assignment or Final Project will not be answered.
- Students are to behave in a professional manner during the class periods.
   Disrespectful or disruptive behavior towards students or the professors will not be tolerated, and you may be asked to leave the class.
  - The student forfeits any assistance with that day's topic should they be asked to leave.
  - Conduct will be recorded as an Incident Report and conveyed to the Dean.
- Cheating, Plagiarism, or any other unethical behavior will be handled per the policies outlined by the Community College of Allegheny County.
   Students are expected to familiarize themselves with, and follow these policies.

All students are expected to read and comply with the policies and regulations set forth in the CCAC Student Handbook, including without limitation the College's policies regarding academic and behavioral conduct, the procedures for requesting an accommodation based upon a disability, pregnancy or pregnancy-related condition, or religious observance, and for reporting unlawful discrimination and harassment.

The Student Handbook is available to view and download from the College's website at the following URL: https://www.ccac.edu/policies.

The full text of the College's *Policy Manual, Administrative Regulations Manual*, and the Civil Rights Complaint Procedure can also be viewed and downloaded at: https://www.ccac.edu/policies.

Information concerning the process and documentation required to request a disability-related accommodation can be obtained by contacting the campus' Office of Supportive Services for Students with Disabilities (OSSSD) or by visiting the OSSSD information page at https://www.ccac.edu/policies.

Students are reminded that they can access their course information and CCAC email account, the CCAC Academic Calendar (including add/drop/withdrawal deadlines), the Student Handbook, the College's Incident Report form, and many other College services through the MyCCAC portal at <a href="https://mv.ccac.edu">https://mv.ccac.edu</a>.

## **Course Plan:**

Class Week/Date	Topics / Learning Activities	Assignments / Homework	Tests, Quizzes, Evaluations
Week 1	Programming Terms & Concepts	Read Chapter 1	Lab 1
WEEK 1	Beginning Java & NetBeans		
	Java Key Terms & Fundamentals Part 1:	Read Chapter 2, Sections 2.1 to	lah 2
	Variables, Literals, Data Types and Operators	2.5	Lab 3
Week 2	Lab: Basic Input Output Lab: MPG		Edd 3
	Syntax, Rules, Operators and Concepts	Read Chapter 2, Sections 2.6 to	HW Program
	Review	2.15	Algorithm/Pseudocode
Week 3		HW Program	Review Questions
		Review Questions Chapter 1 &	Discussion
		2	
	Decision Structures, Part 1	Read Chapter 3, Sections 3.1 to	Lab 4
Week 4	Lab: If Then	3.4	
		HW Program	
		Review Questions Ch. 3	
	Decision Structures Pt. 2: Logical Operators	Read Chapter 3, Sections 3.5 to	
	and While	3.11	Lab 6
Week 5	Lab: Switch	HW Program	HW Program
	Lab: Adapt	Review Questions Ch. 3	Algorithm/Pseudocode
			Review Questions
			Discussion
Week 6	Looping, Part 1: While	1 ' '	Lab 7
	Lab: Loop (While, Do-While)	to 4.4	
Week 7	Looping, Part 2: For, Files	Read Chapter 4, Sections 4.5 to	
week /	Lab: Loop (For)	4.12	Lab 9
	Lab: Adapt	Review Questions Ch. 4	

			HW Program
			Algorithm/Pseudocode
			Review Questions
			Discussion
Week 8	Methods	Reach Chapter 5, Sections 5.1	Lab 10
	Lab: Method	to 5.3	
	Methods	Reach Chapter 5, Sections 5.4	Lab 11
	Lab: Adapt	to 5.6	HW Program
Week 9		HW Program	Algorithm/Pseudocode
		Review Questions Ch. 5	Review Questions
			Discussion
Week 10	Classes	Reach Chapter 6, Sections 6.1	Lab 12
Week 10	Lab: Class	to 6.4	
	Classes	Reach Chapter 6, Sections 6.5	Lab 13
	Lab: Adapt	to 6.10	HW Program
Week 11		HW Program	Algorithm/Pseudocode
		Review Questions Ch. 6	Review Questions
			Discussion
Week 12	GUI Programs/JavaFX	Reach Chapter 12, Sections	Lab 14
Week 12	Lab: GUI	12.1 to 12.3	
	GUI Programs/JavaFX	Reach Chapter 12, Sections	Lab 15
Week 13	Lab: Adapt	12.4 to 12.11	
		HW Program	
		Review Questions Ch. 12	
Final Exam Due: Tuesday, December 14th by 11:00am			

Course Outline Corrections: During the semester/session, reasonable changes to the course outline may be academically appropriate. Students will be notified of these adjustments by the instructor in a timely manner.