



NASSAU COMMUNITY COLLEGE
Department of
Mathematics / Computer Science / Information Technology

Course Syllabus for ITE204 Java Programming

Course Information

Title: Java Programming

Course Number: ITE 204

Credits: 4.0 Credits

Section:

Semester / Term:

Meeting Times /

Location:

Instructor/Contact Information

Professor Name: Prof. Jared M. Ganson

Office Location: C-3088

Office Hours: Wed 2:00pm - 3:15pm, Fri 11:00am - 12:15pm

Office Phone: 516-572-7977

Email Address: jared.ganson@ncc.edu

Website URL: <http://newton.ncc.edu/gansonj>

Professor Name: Prof. Jared M. Ganson

Office Location: C-3088

Course Description

This course is an introduction to object-oriented programming using the Java programming language. Students will become familiar with the concepts of objects and classes, inheritance, polymorphism, and encapsulation. Topics include creating graphical user interfaces, servlets, networking, and exception handling. Optional topics include applets and multi-threading. Laboratory fee applies.

Course Pre-requisite

At least a C in ITE 154, or permission of Department. Students must have satisfied all MAT, ENG and RDG remediation requirements prior to starting the course. (4.0 lecture hours).



Course Syllabus for ITE204 Java Programming

Learning Outcomes and Objectives

To provide a background in object oriented programming using the Java programming language.

SUNY General Education Goals & Outcomes

1. Object Instantiation

Students will understand object instantiation and how to access object data through calling instance methods

Outcome

1.1 Objects of Pre-defined Classes

Students will create objects of pre-defined classes and understand how to extract data from these objects.

2. Programmer Defined Classes

Students should learn how to produce a decision making program using an if statement.

Outcome

2.1 Creating New Classes

Students will write constructors, accessors, mutators and other member methods; and ensure data integrity by hiding implementation details using the keyword "private".

3. Inheritance

Students will learn how to create loops with their code to avoid programming redundancy and promote atomization of repeating code.

Outcome

3.1 Parent and Child Classes

Students will correctly use the keyword "extends" to define a child class of a pre-existing parent class, and identify which member data fields and member methods are inherited.

4. Graphic User Interface

Students should be able to work with programmer created functions.

Outcome

4.1 Design a GUI

Students will design and implement event-driven GUI software using Java's Swing library and event interface.



NASSAU COMMUNITY COLLEGE

Department of Mathematics / Computer Science / Information Technology

Course Syllabus for ITE204 Java Programming

Instructional Methods

This course is taught using a variety of instructional methods including lecture, class discussion and hand-on computer lab instruction.

Textbook and Materials

Starting Out With Java: From Control Structures Through Objects, by Gaddis, Tony, 5th edition, published by Pearson/Prentice Hall
ISBN-13: 978-0133957051 ISBN-10: 0133957055

Student Responsibilities/Course Policies

Instructors need to complete the following for their specific policies. It is recommended that in class exams are required.

Homework:	10-15 assignment 15% of final grade
Projects:	3-5 projects 25% of final grade
Exams / Quizzes:	3 examinations, 60% of final grade
Attendance / Lateness Policy:	3 unexcused absences, half letter off final grade for each absence over 3. Multiple lateness will count as absences
Missed Exam / Quiz Policy	Zero for missed exams, doctor's note exception
Homework:	10-15 assignment 15% of final grade
Projects:	3-5 projects 25% of final grade
Exams / Quizzes:	3 examinations, 60% of final grade
Attendance / Lateness Policy:	3 unexcused absences, half letter off final grade for each absence over 3. Multiple lateness will count as absences

Academic Dishonesty & Plagiarism

Academic dishonesty, which includes plagiarism and cheating, will result in some form of disciplinary action that may lead to suspension or expulsion under the rules of the Student Code of Conduct. Cheating can take many forms including but not limited to copying from another student on an examination, using improper forms of assistance, or receiving unauthorized aid when preparing an independent item of work to be submitted for a grade, be it in written, verbal or electronic form. Anyone who assists or conspires to assist another in an act of plagiarism or any other form of academic dishonesty may also be subject to disciplinary action.



NASSAU COMMUNITY COLLEGE

Department of Mathematics / Computer Science / Information Technology

Course Syllabus for ITE204 Java Programming

Plagiarism is a particular type of academic dishonesty that involves taking the words, phrases or ideas of another person and presenting them as one's own. This can include using whole papers and paragraphs or even sentences or phrases. Plagiarized work may also involve statistics, lab assignments, art work, graphics, photographs, computer programs and other materials. The sources of plagiarized materials include but are not limited to books, magazines, encyclopedias or journals; electronic retrieval sources such as materials on the Internet; other individuals; or paper writing services.

A student may be judged guilty of plagiarism if the student:

- (a) Submits as one's own an assignment produced by another, in whole or in part.
- (b) Submits the exact words of another, paraphrases the words of another or presents statistics, lab assignments, art work, graphics, photographs, computer programs and other materials without attributing the work to the source, suggesting that this work is the student's own.

Allegations of student plagiarism and academic dishonesty will be dealt with by the appropriate academic department personnel. It is the policy of Nassau Community College that, at the discretion of the faculty member, serious acts will be reported in writing to the Office of the Dean of Students, where such records will be kept for a period of five years beyond the student's last semester of attendance at the College. These records will remain internal to the College and will not be used in any evaluation made for an outside individual or agency unless there is a disciplinary action determined by a formal ruling under the Student Code of Conduct, in which case only those records pertaining to the disciplinary action may apply. A student whose alleged action is reported to the Office of the Dean of Students will be notified by that office and will have the right to submit a letter of denial or explanation. The Dean will use his/her discretion in determining whether the alleged violation(s) could warrant disciplinary action under the Student Code of Conduct. In that case the procedures governing the Code of Conduct will be initiated.

Copyright Statement

The Higher Education Opportunity Act of 2008 (HEOA) requires the College to address unauthorized distribution of copyrighted materials, including unauthorized peer-to-peer file sharing.

Thus, the College strictly prohibits the users of its networks from engaging in unauthorized distribution of copyrighted materials, including unauthorized peer-to-peer file sharing. Anyone who engages in such illegal file sharing is violating the United States Copyright law, and may be subject to criminal and civil penalties. Under federal law, a person found to have infringed upon a copyrighted work may be liable for actual damages and lost profits attributable to the infringement, and statutory damages of up to \$150,000. The copyright owner also has the right



Course Syllabus for ITE204 Java Programming

to permanently enjoin an infringer from further infringing activities, and the infringing copies and equipment used in the infringement can be impounded and destroyed. If a copyright owner elected to bring a civil lawsuit against the copyright infringer and ultimately prevailed in the claim, the infringer may also become liable to the copyright owner for their attorney's fees and court costs. Finally, criminal penalties may be assessed against the infringer and could include jail time, depending upon the severity of the violation. Students should be aware that unauthorized or illegal use of College computers (such as engaging in illegal file sharing and distribution of copyrighted materials), is an infraction of the Student Code of Conduct and may subject them to disciplinary measures. To explore legal alternatives to unauthorized downloading, please consult the following website: <http://www.educause.edu/legalcontent>.

Course Resources

Suggested websites: <https://docs.oracle.com/javase/tutorial/>

Library services: Course textbook is available at the reference desk at the NCC library.

Labs and learning centers: As part of this course, students should avail themselves to further study and/or educational assistance that is available in the Computer Center in B225.

Extra help options: Office hours if available and the Computer Center in B225.

Assessments and Grading Methods

Provide a clear explanation of evaluation, including a clear statement on the assessment process and measurements. Be explicit! Include format, number, weight for quizzes and exam, descriptions of papers and projects as well as how they will be assessed and the overall grading scale and standards.

Americans with Disabilities Statement & Non-discrimination Statement (NCC Required)

If you have a physical, psychological, medical, or learning disability that may have an impact on your ability to carry out the assigned coursework, I urge you to contact the staff at the Center for Students with Disabilities (CSD), Building U, (516) 572 – 7241, TTY (516) 572 – 7617. The counselors at CSD will review your concerns and determine to what reasonable accommodations you are entitled as covered by the Americans with Disabilities Act and section



Course Syllabus for ITE204 Java Programming

504 of the Rehabilitation Act of 1973. All information and documentation pertaining to personal disability will be kept confidential.”

Course Schedule and Important Dates

Provide a detailed list of meeting dates, topics, assignments, and due dates for all exams, scheduled quizzes, papers, projects, assignments, labs, etc. Use a grid format to help students easily read and understand the information.

Week Number	Date	Topic
Week 1		Introduction to Java syntax, compiling code Variables, data types and calculations IF statements Input using JOptionPane() Parsing data
Week 2		Loops - For loops and While loops Methods Parameters and arguments Arrays Using arrays in code Searching arrays Project #1 Array related assignment
Week 3		Sorting Arrays Intro to Object Oriented Programming User defined classes, driver classes Instance variables Constructors 'this' keyword Instance Methods toString() Creating objects Calling methods from objects
Week 4		Private instance variables Getter methods Arrays of objects Review Project #2 Object Oriented related assignment
Week 5		Review Exam #1



NASSAU COMMUNITY COLLEGE
 Department of
Mathematics / Computer Science / Information Technology

Course Syllabus for ITE204 Java Programming

Week 6		Introduction to Inheritance Extends keyword Understanding the parent - child relationship Calling super() from child Understanding instance variables and inheritance Method overriding Object casting
Week 7		Creating parent child family of classes Understanding their relationship Creating objects and casting to parent Explicit vs. implicit casting Creating an array of parent objects Down casting to access child defined methods
Week 8		Creating driver classes to work with parent - child classes Polymorphic methods Dynamic Binding Instanceof comparative operand More explicit casting
Week 9		Introduction to Abstract class Understanding their purpose Creating abstract methods Overriding abstract methods in child classes Understanding how abstract methods allow explicit casting to be done implicitly Creating driver class to work with abstract classes Example of implicit casting using abstract classes Abstract classes and polymorphic methods Project #3 Inheritance related assignment
Week 10		Review Exam #2
Week 11		Introduction to Exception Handling Try{} and catch{} clauses Throw statement
Week 12		Introduction o GUI programming Basic GUI interface JButtons, JTextfield, JCheckbox Event handling Interfaces and Implement keyword



NASSAU COMMUNITY COLLEGE
Department of
Mathematics / Computer Science / Information Technology

Course Syllabus for ITE204 Java Programming

Week 13		More GUI Layout management FlowLayout, BorderLayout, GridLayout JPanel
Week 14		More GUI examples GUI programming and exception handling
Week 15		Review Exam #3