Rowan College at Burlington County

Science, Technology, Engineering, and Mathematics Division

Course Code: CSE 151 - XXX **Course Title:** Introduction to Java

Prerequisites: CIS 101/CSE 110/higher; MTH012 or equivalent skills **Credits:** 4

Location: TEC 300 **Class Time**: Thursday 5:00 – 7:30

Instructor: Chris Simber **email:** csimber@rcbc.edu **Phone:** x 2090

Office: TEC – 211G **Office hours**: Mon 10:00 – 12:00, 1:00 – 2:00
Tues 10:30 – 12:00, 1:30 – 2:00

SECTION 1:

Course Description: This course provides an introduction to Java and Object Oriented programming. It focuses on simple data types; control structures; an introduction to array and string data structures; algorithms; debugging techniques; and the social implications of computing. It emphasizes good software engineering principles and developing fundamental programming skills in the context of a language that supports the object-oriented paradigm. The lab component provides hands-on programming experience that is vital for beginning programmers and computer science students.

Flash Drive: A flash drive is required for assignments and programs.

Web-enhanced: This is a web-enhanced course and will utilize **Blackboard**.

Required Text: Java Concepts: Late Objects, Third Edition, Cay Horstmann, Wiley:
ISBN-13: 978-1-119-32102-6

Course Learning Outcomes: Upon completion of this course, students will be able to:

- Achieve basic coding skills in the Java language
- Apply object-oriented design and coding techniques
- Understand key computer science terms and concepts
- Prepare for the Sun Java 2 Programmer certification exam.

General Education Outcomes:

- Written and Oral Communication: Communication
  - Students will logically and persuasively support their points of view or findings
- Technology Competency or Information Literacy: Technology
  - Students will use critical thinking skills for computer-based access, analysis, and presentation of information.

Core Course Content:

- What is Java?
- Object-oriented programming
- Java PL elements
- Java Operators and Controls
- Classes
- Strings and Wrappers
- Arrays
- Classes & Inheritance
- Packages+ 10 AWT
- Applets+ 12 Except
- Files, Streams, I/O
- Collections
- Threads
- Review

SECTION 2:

Course and Classroom Policies:

Expectations: Students are expected to attend class, be prepared having read the text chapter beforehand, complete assignments, and to participate in discussions. Students are expected to complete and submit assignments on or before the due date. Students are expected to conduct themselves in a professional manner in classes and labs.

Required email: Students are assigned an email account by the college (*firstname_lastname@mymail.rcbc.edu*). Students are expected to use this account to correspond with the instructor, submit assignments, and to include the course number in the subject line.

Criteria for Grade Determination: Grades will be based on programming assignments, and two (2) exams as noted below. Assignments submitted after the due date will incur a grade penalty. Makeup tests require a valid excuse and can result in loss of grade points. Class participation will be considered in the final grade.

Assessment Methods:

Chapter Assignments*	70%
Exam 1	15%
Exam 2	15%
Total	100%

Letter Grades

A = 90 - 100
B+ = 85 - 89
B = 80 - 84
C+ = 75 - 79
C = 70 - 74
D = 60 - 69
F = Below 60

* Chapter Assignments weighting:

Review Exercises	25%
Programming Exercises	35%
Programming Projects	40%

Assignments: will be computer generated and will be emailed to the instructor with any written answer assignments in a single **text** file. The email title should include the course code. The filename should include your first initial, last name, and the course number. Late submissions will incur a grade penalty, but should be submitted.

CSE 151 Course Outline/Schedule (tentative):

Session	Application/Chapter	Assignments
1	Introduction to the Course, Computer Overview	
2	Java Programming Basics (Chapter 1)	CH #1 Assignments
3	Common Errors and Algorithm Design (Chapter 1)	
4	Variables and Data Types (Chapter 2)	
5	Arithmetic Operators and I/O (Chapter 2)	CH #2 Assignments
6	Math and Formatting (Chapter 2)	
7	Problem Solving and Strings (Chapter 2)	
8	Decisions, and Flow of Control (Chapter 3)	CH #3 Assignments
9	Branching, and Operators (Chapter 3)	
10	Branches, Tracing, and loops (Chapter 4)	
11	Application Processing (Chapter 4)	CH #4 Assignments
12	Random Numbers (Chapter 4)	
13	Methods and Black Boxes (Chapter 5)	
14	Methods and Parameters (Chapter 5)	CH #5 Assignments
15	Return Values, Reusable Methods, and Scope (Chapter 5)	
16	**Midterm Exam – Thru Chapter 5**	
17	Arrays and Array Lists (Chapter 6)	
18	Arrays References and Algorithms (Chapter 6)	CH #6 Assignments
19	Methods, Two-dimensional Arrays, and Lists (Chapter 6)	
20	File Input and Output (Chapter 7)	CH #7 Assignments
21	File I/O and Exception Handling (Chapter 7)	
22	Objects and Implementing Classes (Chapter 8)	CH #8 Assignments
23	Instance Methods, and Constructors (Chapter 8)	
24	Super Class, Polymorphism (Chapter 9)	CH #9 Assignments
25	Inheritance (Chapter 9)	
26	Graphical User Interfaces (Chapter 10)	CH #10 Assignments
27	Graphical User Interfaces (Chapter 10)	
28	Review	
29	**Final Exam**	

* Course Outline is subject to change

SECTION 3:

College Policies: In order for students to know their rights and responsibilities, all students are expected to review and adhere to all regulations and policies as listed in the College Catalog and Handbook. The current college catalog and student handbook are important documents for understanding your rights and responsibilities as a student in the RCBC classroom. Please read your catalog and handbook as they supplement this syllabus, and can be accessed at rcbc.edu/publications. Important policies and regulations include, but are not limited, to the following:

- College Attendance Policy
- Grading Standards
  - Withdraw (W) and Incomplete Grades (I & X)
  - Withdrawal date for this semester – Academic Calendar
- Student Code of Conduct
  - Academic Dishonesty/Plagiarism and Civility
- Use of Communication and Information Technology

- ## Academic Integrity Code

- ***Plagiarism*** – Plagiarism includes copying or paraphrasing another's words, ideas, or facts without crediting the source; submitting a paper written by someone else, either in whole or in part, as one's own work; or submitting work previously submitted for another course or instructor. Plagiarism on any assignment will result in failure for that assignment and may result in further disciplinary action, including but not limited to failure for the course. Please refer to the Student Handbook for additional information regarding plagiarism and College regulations.

- ***Texting, Cell phones, and Laptops*** – should be turned off in class or the ringer must be turned to silent. No texting is allowed in class during instruction time.

- ***Internet and Other Computer Use*** – all students are required to abide by established RCBC computer and Internet use procedures and regulations. Willful damage to or misuse of RCBC computers and/or software will be considered a violation of the RCBC Student Code of Conduct. Criminal prosecution may also result. This applies to IPODS, games or electronics of any kind, instant messenger, and social media.

Student Conduct Code - We shall abide by the expectations outlined in the Student Handbook (page 106-112). RCBC students are accountable according to the standards established in this policy.
http://www.rcbc.edu/PDFFiles/publications/1314Handbook.pdf

Tutoring - RCBC offers free tutoring for all currently enrolled students. For more information regarding the Tutoring Center, please call extension 1495 at (609) 894-9311 or visit the Tutoring Center website at *:*
http://www.rcbc.edu/pages/218.asp

Academic Advisement – RCBC provides Academic advising and free referral services to all students through the office of Academic Advising. For more information, visit the drop in centers at the Lewis Parker Center (Pemberton Campus) or Laurel Hall (Mt. Laurel Campus). Call extension 7337 at (609) 894-9311 or (856) 222-9311 or visit the website at: ***http://www.rcbc.edu/pages/206.asp***

Library Resources – The RCBC Library provides access to the information resources you need to succeed in your studies, including books, journals and databases. Library Information Specialists provide support in finding and utilizing these resources. Library services are available at the Pemberton and Mount Laurel campuses and online. In Pemberton you can visit the Library located in the William K. McDaniel Integrated Learning Resource Center (ILRC), in Mt. Laurel at the Technology and Engineering Center (TEC) and online at **http://staff.rcbc.edu/library**. Online services include IM Chat, text, and phone support during regular hours and access to a wide variety of journals and databases 24/7/365 from both on and off campus. Library hours are posted in the libraries and on the library website.

Office of Student Support and Disability Services: RCBC welcomes students with disabilities into the college's educational programs. Access to accommodations and support services for students with learning and other disabilities is facilitated by staff in the Office of Student Support (OSS). To receive accommodations, a student must contact the OSS, self-identify as having a disability, provide appropriate documentation, and participate in an intake appointment. If the documentation supports the request for reasonable accommodations, the OSS will provide the student with an Accommodation Plan to give to instructors. For additional information, please contact the Office of Student Support at 609-894-9311, ext. 1208, disabilityservices@rcbc.edu, or rcbc.edu/studentsupport .

Educational Technology Statement: Rowan College at Burlington County (RCBC) advocates the use of technology to enhance instruction. Students should assume that classroom and online technology will be used throughout their coursework at RCBC, as it will most certainly be used in their future education and

careers. The College provides on-campus facilities for the convenience of the RCBC community. Various college departments, including the Office of Information Technology and the Office of Distance Education, provide technology training and assistance to faculty and students.

Student Success Services: RCBC offers a variety of free services for its students including those listed below. Descriptions of these services, as well as many others, can be found in the College Catalog and Handbook and on the RCBC website at rcbc.edu/publications.

- Academic Advisement (rcbc.edu/advising)
- Career Services (rcbc.edu/careers)
- Educational Opportunity Fund (EOF) (rcbc.edu/eof)
- Financial Aid (rcbc.edu/financialaid)
- International Students Office (rcbc.edu/international)
- Library/Integrated Learning Resource Center (ILRC) (rcbc.edu/library)
- Office of Veteran Services (rcbc.edu/vets)
- Student Support Counseling (rcbc.edu/cpit)
- Tutoring Center (rcbc.edu/tutoring)
- Test Center (rcbc.edu/testcenter)
- Transfer Services (rcbc.edu/transfer)