DATE: 7/25/17

NAME: Christopher Simber – csimber@rcbc.edu

Rowan College at BURLINGTON COUNTY

COURSE INFORMATION FORM

This form must be completed, using MS Word, for all new and modified courses offered for credit, including experimental courses. (Form expands to allow full details in each category.)

I. Course Prefix and number: CSE 114

II. Course Title: Object Oriented Programming and Data Abstraction

III. Lecture Hrs.4 Clinical Hrs. Credit Hrs.
Studio Hrs. Lab Hrs. Recitation Hrs.

IV. Course Fee: $30.00

V. Prerequisite(s): CSE 110

VI. Co-Requisite(s):

VII. Division Dean Approval: ___Dr. Tetteh___ _____Date:

VIII. Is this eligible for Perkins Funding? Yes ☒ No ☐

IX. New Course: ☒ Modified Course: ☐ Experimental Course: ☐

(if modified course explain changes and list old course designator and number)

X. Semester and Year Course will first be Offered (or, if a modified course, semester and year when revised course will first be offered): FA 2017

XI. Relation of Course to Curriculum(s):
- ☐ Program requirement
- ☐ General Education requirement
- ☒ Elective
- ☐ Developmental course requirement

XII. General Education Designator (if course is intended to satisfy a general education requirement check appropriate designator):
- ☐ **GCOM** = Communications
- ☐ **GDIV**= Global and Cultural Awareness
- ☐ **GHIS** = History
- ☐ **GHUM** = Humanities
- ☐ **GMAT** = Mathematics
- ☐ **GSCL** = Science
- ☐ **GSOC** = Social Science
- ☒ **GTEC** = Technological Competency

XIII. Catalog Description: This course is an introduction to Object-Oriented Programming and to the methodology of programming from an object-oriented perspective. Through the study of object design, this course also introduces the basics of human-computer interfaces, graphics, with an emphasis on software engineering. A second operating system/programming platform is introduced.

XIV. Course Objectives (Learning Outcomes):

XV. Textbook(s): "Objects First with Java", David Barnes and Michael Kölling, David Barnes and Michael Kölling

XVI. Other Course Materials to be supplied by Student: flash drive

XVII. Grading Policy (number and weight of papers, quizzes, examinations, and rubrics)

XVIII. Detailed Description of Project Final Examination (if applicable):

XIX. Schedule of topics to be covered in Course:

Objects and Classes (Chapter 1)

Class Definitions (Chapter 2)
Object interactions (Chapter 3)
Grouping Objects (Chapter 4)
Using documentation and Java classes (Chapter 5)
Well-behaved objects: testing and debugging (Chapter 6)
Designing Classes: coupling and cohesion (Chapter 7)
In-depth Review Class inheritance, polymorphism, and wrapper classes (Chapter 8)
More on inheritance and polymorphism (Chapter 9)
New topics: UML and Visio Abstraction Techniques (Chapter 10)
Building GUI (Chapter 11)
Exceptions and Error Handling (Chapter 12)
File Access (Chapter 12)
Designing Applications (Chapter 13)
Introduction to UNIX and LINUX operating systems Recursion Abstract Data Types (time permitting)

XX. Schedule lab exercises (if applicable):

IAC Chair Approval Signature_____ Date: _____