1. Catalog Description

COP 2006: Introductory computer programming concepts and problem solving skills are learned using a modern programming language. Principles of good programming style are emphasized.

2. Course Objectives and Learning Outcomes

The student will learn fundamental-to-intermediate programming concepts, including data types, expressions, classes, arrays, methods, conditional statements, loops, and input/output, with application development using the Java object-oriented programming language. Essential skills to decompose, design, and code basic control structures and program modules will also be taught.

Specifically, the student will acquire:
- the ability to identify and formulate simple computational problems
- an understanding of fundamental principles of programming
- an understanding of the programming life cycle
- the ability to apply programming principles to solve simple computational problems
- the ability to evaluate the program’s quality.

3. Prerequisites and General Expectations

COP 1500 (Introduction to Computer Science) and MAC 2311 (Calculus I) – each for level UG with min. grade of C. In general, students are expected to have knowledge of the basic components of a computer; how to install and run Windows and Web applications; how to manage files, directories, and disks in a Windows environment; how to create, edit, compile, debug, and execute programs.

4. Textbooks

Web links: http://computerscience.jbpub.com/ppsjava/student_resources.cfm
http://javagently.cs.up.ac.za/jg3e

Note. During open book quizzes and tests only printed books and notes are allowed (no use of computers or any other electronic devices).
5. Course Outline

Week 0&1*: Introduction and Program Structure (Chapters 1 and 2)
Week 2: Program Structure (Chapter 2 cont.)
Week 3: Classes and Methods as Elements of a Program (Chapter 3)
Week 4: Data Types and Expressions (Chapter 4 and Section 7.7)
Week 5: Elementary Control Structures – “if” Statement (Chapter 5) – Exam #1**
Week 6: Advanced Control Flow – Loops (Chapter 6 & Sections 7.1-7.6)
Week 7: Input/Output (Section 6.2)
Week 8: Exceptions (Section 7.8)
Week 9: Packages and Program Design, Object Input/Output (Chapter 8) – Exam #2**
Week 10: Arrays (Chapter 9)
Week 11: Arrays cont. (Chapter 9)
Week 12: Multidimensional Arrays (Sections 9.5-9.6)
Week 13: Inheritance and Scope (Chapter 10)
Week 14: Java Overview: web-based, no formal class meeting [Thanksgiving Week]
Week 15: Comprehensive Test** and Preparation for Final

*) Week #0 is a partial week when classes begin, 8/19-21; Week #1 is the first full week of 8/24.
**) Open printed books and hard-copy notes; no use of computers or other electronic devices.

6. Assessment and Administrative Issues

Assignments and Quizzes:
Homework assignments or unannounced quizzes will be given on a weekly basis, in general.

Exams:  Exam #1 – September 24, 2015;  Exam #2 – October 20, 2016
        Comprehensive Test – December 1, 2015
        Final – Thursday, December 10, 2015 (12:30-2:45pm) – if taken counts as 33.3% of the grade.

Grading Policy: Assignments 25%, Quizzes 25%, Exams #1 & #2 – 25%, Comprehensive 25%
A: 90-100%    B: 80-89.9%    C: 70-79.9%    D: 60-69.9%    F: < 60%
Plus/minus grades at Instructor’s discretion.

Attendance: Presence is required in all classes. No make-up will be given for missed classes, quizzes or exams, unless a case is made in advance with Instructor’s approval.
Since the University requires Proof of Attendance in the first week of classes via CANVAS, all students must take special quiz set for this activity (a special email will be distributed as a reminder).
Note. No food, drinks, cell (or equivalent) phones are allowed in classroom, labs or Instructor’s office.

Ethic, Disabilities Act, and Observance of Religious Holidays
Instructor follows general university policies as spelled out, respectively, in:
• Academic Behavior Standards & Academic Dishonesty Policy in the Student Guidebook
  (sections on “Student Code of Conduct” and “Policies and Procedures”).
  See: http://studentservices.fgcu.edu/JudicialAffairs/
• Americans with Disabilities Act of 1990 – services provided by Office of Adaptive Services
  See: http://studentservices.fgcu.edu/adaptive/
• Policy 4.005 Student Observance of Religious Holidays
  See: http://www.fgcu.edu/generalcounsel/policies-view.asp

Disclaimer: This syllabus has been prepared to the best of the Instructor’s knowledge, but the right is
reserved to modify or adjust it slightly depending on circumstances beyond Instructor’s control.