



## **Campus Core Course Performance Objectives**

The student will be able to:

1. Develop the knowledge of an object and object-oriented programming, data abstraction, and software design. (CCC 5, 6; PGC 1, 3)
2. Use the basic command set, IDE, and debugger in programming. (CCC 5, 6; PGC 1, 3)
3. Develop and use the concept of predefined classes, the construction of objects with classes, and the principles and uses of inheritance in programming. (CCC 2, 6; PGC 2, 7, 8, 10)
4. Apply the concepts of virtual functions and polymorphism in programming. (CCC 2, 6; PGC 2, 7, 8, 10)

## **Measurable Performance Objectives**

1. Develop the knowledge of an object and object oriented programming, data abstraction, and software design.
  - 1.1 Explain object-oriented programming.
  - 1.2 Use data abstraction in software design.
2. Use the basic command set, IDE, and debugger in programming.
  - 2.1 Install Visual or Turbo development package.
  - 2.2 Familiarize with command set.
  - 2.3 Familiarize with debugger.
3. Develop and use the concept of predefined classes, the construction of objects with classes, and the principles and uses of inheritance in programming.
  - 3.1 Define and use classes, the basic units of reliable and reusable codes.
  - 3.2 Instantiate objects from classes.
  - 3.3 Derive new classes from existing classes with inheritance.
  - 3.4 Use of inheritance in object-oriented programming.
4. Apply the concepts of virtual functions and polymorphism in programming.
  - 4.1 Use polymorphism in object-oriented programming.
  - 4.2 Use virtual functions in defining polymorphism.

## **Evaluation Criteria/Policies**

1. Students will demonstrate proficiency on all measurable performance objectives at least to the 75% level to successfully complete the course.
2. The letter grade will be determined using the College Grading System:

<b>Grade</b>	<b>Point Value</b>		<b>Explanation</b>
A	92	100	Student meets the measurable objectives in an outstanding manner.
B	83	91	Student meets the measurable objectives in an above average manner.
C	75	82	Students meets the measurable objectives.
R	0	74	Student does not meet the measurable objectives.

3. In order to achieve the maximum benefit from this course of instruction, the student is responsible for attending scheduled classes, completing all readings and instructor handouts, and completing all computer assignments.
4. Each student is required to complete all programs (the programs will be evaluated using a published programming standard), assignments and examinations. Students who miss classes are expected to get missed assignments from the instructor and missed lecture notes from another student. Any student having difficulty will be expected to seek individual instructional aid from the instructor by appointment.
5. The instructor will announce the schedule for two written tests: midterm and final. Each test will also include a hands-on computer problem. Your final grade in this course will be based on the following:

Two tests (midterm and final)	50%
Programming exercises/assignments/projects	50%

**Students should refer to the Student Handbook for information on Academic Standing Policy, Academic Honesty Policy, Student Rights and Responsibilities and other policies relevant to their academic progress.**