Bossier Parish Community College
Master Syllabus

Course Prefix and Number: CTEC 213   **Credit Hours:** 3-3-0

Course Title: Advanced C++ Programming

Course Prerequisites: CTEC 113

Textbook(s): None

Course Description: This course continues to build computer programming concepts using the C++ programming language. Topics include arrays, pointer variables, string manipulation, classes, and object oriented programming concepts. Upon completion, students should be able to design, code, debug, test, and document programs using advanced features.

Learning Outcomes:
At the end of this course, the student will:
    A. write programs that use array;
    B. write programs that use dynamic memory addressing;
    C. write programs that manipulate characters and strings; and
    D. write programs using object oriented methods.

To achieve the learning outcomes, the student will or will be able to:
(The letter designations at the end of each statement refer to the learning outcome(s).)
1. write code that declares and initializes a one-dimensional array (A);
2. write a code that manipulates a one-dimensional array (A);
3. describe the use of pointer variables in programs (B);
4. write programs that use pointers as arguments to functions (B);
5. write programs that search and change the values of character data in strings (C);
6. write programs that perform conversion between strings and numeric data types (C);
7. describe encapsulation, inheritance, and polymorphism (D);
8. write programs that create and use classes (D); and
9. write programs that implement class inheritance structures (D).

Course Requirements:
1. A student must successfully complete the course with an average of 70% or above on the combined learning outcomes.
2. Each student is expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension (refer to the student handbook for attendance policies).

Course Grading Scale:

      A = 90 - 100
      B = 80 - 89
      C = 70 - 79
      D = 60 - 69
      F =   0 - 59

Attendance Policy: The college attendance policy is available at
http://catalog.bpcc.edu/content.php?catoid=5&navoid=369

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

Nondiscrimination Statement: Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

COORDINATOR FOR SECTION 504 AND ADA
Angie Cao, Student and Disability Services Specialist
Disability Services, F-254
6220 East Texas Street
Bossier City, LA 71111
Phone: 318-678-6511
Email: acao@bpcc.edu
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator
Teri Bashara, Director of Human Resources
Human Resources Office, A-105
6220 East Texas Street
Bossier City, LA 71111
Phone: 318-678-6056
Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.