SYLLABUS

DATE OF LAST REVIEW: 02/2013
CIP CODE: 24.0101
SEMESTER: Departmental Syllabus
COURSE NAME: C++ Programming
COURSE NUMBER: CIST0240
CREDIT HOURS: 3
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: 913-334-1100
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KCKCC issued email accounts are the official means for electronically communicating with our students.

PREREQUISITE(S): CIST-180 Visual Basic

REQUIRED TEXT AND MATERIALS:
See bookstore for current textbook.

COURSE DESCRIPTION:
The C++ programming language is a general purpose programming language featuring short statements, ease of writing and utilization of a wide variety of standard pre-written library functions and objects as well as installation (user) defined and cataloged functions and objects. It allows the programmer to secure functions and data through the use of objects.

METHOD OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
A. A Brief History of Programming Languages
B. Introduction to the compiler
C. Program structure
D. Data types and uses
E. Operators, arithmetic, relational and others
F. Decision making
G. Loops and control constructs
H. Structures
I. Functions
J. Classes and objects
K. Arrays
L. Operator overloading
M. Inheritance
N. Pointers
O. Streams and files
P. Large programs

EXPECTED LEARNER OUTCOMES:
1. Upon completion of this course the student should be able to use C++ to solve non trivial business problems.
2. Upon completion of this course the student shall be able to define program structure, data types and uses.
3. Upon completion of this course the student shall be able to demonstrate structures, functions and arrays.
4. Upon completion of this course the student shall be able to demonstrate the use of large programs.

COURSE COMPETENCIES:
Upon completion of this course:
1. The student shall be able to define Machine Languages, Assembly Languages, and High level languages.
2. The student shall be able to define the use of a compiler.
3. The student shall be able to define the use of an algorithm.
4. The student shall be able to define and use program structure.
5. The student shall be able to define and use sequence structure
6. The student shall be able to define and use repetition structure
7. The student shall be able to define and use selection structure
8. The student shall be able to show data types and uses.
9. The student shall be able to define a constant.
10. The student shall be able to define a variable.
11. The student shall be able to use an assignment statement.
12. The student shall be able to define the difference between operators, arithmetic, and relational.
13. The student shall be able to use the arithmetic operators.
14. The student shall be able to demonstrate decision making.
15. The student shall be able to define and use loops and control constructs.
16. The student shall be able to demonstrate the use of structures and functions.
17. The student shall be able to demonstrate the use of classes and objects.
18. The student shall be able to define and use arrays.
19. The student shall be able to define operator overloading.
20. The student shall be able to define inheritance.
21. The student shall be able to define and demonstrate the use of pointers.
22. The student shall be able to define the use of streams and files.
23. The student shall be able to demonstrate large programming.
24. The student will demonstrate an ability to meet deadline.

ASSESSMENT OF LEARNER OUTCOMES:
Assessment methods may include, but are not limited to, the following: Homework, Assignments, Quizzes, Class Participation, Chapter Tests, and Final Exam. The grading scale and the process for calculating the course grades are to be determined by the individual instructors. This information will be included in each instructor’s syllabus.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

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