## NEW COURSE PROPOSAL FORM

**ACADEMIC AREA:** BUSINESS AND TECHNOLOGY

**PROGRAM:** AS COMPUTER PROGRAMMING AND ANALYSIS

**PROPOSEd by**: Scott Vanselow

**PRESENTER:** Scott Vanselow

**SUBMISSION DATE:** 1/3/2012

**CURRENT COURSE PREFIX, NUMBER AND TITLE:**

### COP 2360 C# PROGRAMMING I

### SECTION I

**COURSE INFORMATION: TYPE iN THE APPROPRIATE INFORMATION FOR EACH ITEM:**

**DEPARTMENT:** BUSINESS AND TECHNOLOGY

**COURSE PREREQUISITE(S):** COP 1000

**MINIMUM GRADE OF prereqUISITE(s):** C

**COURSE COREQUISITE(S):** LIST ALL COREQUISITES IN SEQUENTIAL ORDER

**COURSE CREDITS OR CLOCK HOURS:** 3

**credit type:** COLLEGE CREDIT (TRANSFERABLE)

**CONTACT HOURS:** 3

**COURSE DESCRIPTION:**

This course teaches software development fundamentals using the C# programming language. C# is an evolution of the C and C++ programming languages. It uses many of the features found in those languages. It also includes enhancements to type safety, versioning, events and garbage collection. Familiarity with basic programming concepts is required but experience with C, C++, or C# is not required.

**GENERAL TOPIC OUTLINE:**

* Computer storage and data types
* Computer decision structures
* Repetition structures
* Error handling
* The fundamentals of classes including inheritance, polymorphism, and encapsulation
* Application life cycle management
* Interpreting application specifications
* Algorithms and data structures
* Web page development and Web services
* Windows Forms applications, console-based applications, and Windows Services
* Relational database management systems, query methods, and connection methods
* Professional codes of conduct

**LEARNING OUTCOMES:**

TYPE IN ALL OF THE LEARNING OUTCOMES, ASSESSMENTS AND GEN ED COMPETENCIES AS THEY SHOULD BE DISPLAYED IN THE SYLLABUS

|  |  |  |
| --- | --- | --- |
| **LEARNING OUTCOMES** | **ASSESSMENTS** | **GENERAL EDUCATION COMPETENCIES** |
| Students will analyze a problem and solve it using algorithmic problem-solving techniques. | Pseudocode and flowchart creation assignments. |  |
| Students will evaluate system technical blueprints, user-experience design documents, and the Windows User Experience Design Principles. | Program design activities and multiple choice questions. |  |
| Students will identify database connection methods. | Multiple choice questions covering connecting to various types of data stores such as flat file; XML file; in-memory object; and resource optimization. |  |
| Students will identify characteristics and capabilities of Web applications using Visual Studio.  | Multiple choice questions covering HTML, CSS, JavaScript, page life cycle, event model, state management, client-side vs. server-side programming, Web hosting, IIS, Web services, SOAP, and WSDL. |  |
| Students will create basic Windows Forms applications and console-based applications to meet different specifications. | Program coding activities including object oriented programming. |  |
| Students will evaluate and apply basic testing techniques. | Testing activities including multiple choice questions covering white-box and black-box testing, unit testing, integration testing, system testing, acceptance testing, and regression testing.  |  |
| Students will analyze current industry trends. | A short paper. |  |
| Students will identify and discuss issues contained within professional codes of conduct. | A written report about the Association for Computing Machinery Code of Ethics and Professional Conduct in general. | GSR, COM |

### SECTION II (Must complete each item below)

**ICS CODE FOR THIS COURSE:** ADVANCED AND PROFESSIONAL - 1.16.07 - COMPUTER & INFO SCIENCE

**IF YOU INTEND TO RESTRICT STUDENT REGISTRATION BASED ON THE STUDENTS’ MAJOR(S), ENTER ALL APPLICABLE MAJOR RESTRICTION CODE(S)—Enter “NA” OR MAJOR code(S):**

NA

**GRADE MODE:** STANDARD GRADING

**IS THIS AN “INTERNATIONAL OR DIVERSITY FOCUS” COURSE?** NO

**IS THIS A GENERAL EDUCATION COURSE?** NO

**IS THIS A WRITING INTENSIVE COURSE?** NO

**iS THIS AN HONORS COURSE?** NO

**IS THIS A REPEATABLE\* COURSE?** NO

(A repeatable course may be taken more than one time for additional credits. For example, MUT 2641, a 3-credit hour course, can be repeated 1 time and a student can earn a maximum of 6 credits.)

\*not the same as Multiple Attempts or Grade Forgiveness

**IF “YES”, WHAT IS THE MAXIMUM NUMBER OF CREDITS A STUDENT CAN EARN FOR THIS COURSE? if “NO”, ENTER “na” BELOW.**

NA

**DO YOU EXPECT TO OFFER THIS COURSE THREE TIMES OR LESS?** NO

**WILL THESE CHANGES HAVE AN IMPACT ON OTHER COURSES, PROGRAMS OR DEPARTMENTS?** NO

**IF “YES,” please eXPLAIN or submit comments (ENTER “NA” or COMMENTS):**

CLICK HERE TO ENTER TEXT

**IF “YES,” HAVE YOU DISCUSSED THIS PROPOSAL WITH ANYONE (FROM OTHER DEPARTMENTS AND/OR PROGRAMS) REGARDING THE IMPACT? WERE ANY AGREEMENTS MADE (ENTER “NA” OR COMMENTS)?**

CLICK HERE TO ENTER TEXT

**DO YOU ANTICIPATE THAT STUDENTS WILL BE TAKING ANY OF THE PREREQUISITES LISTED FOR THIS COURSE IN DIFFERENT PARTS OF THE SAME TERM?** NO

**IS ANY COREQUISITE LISTED ON THIS COURSE LISTED AS A COREQUISITE ON ITS PAIRED COURSE?** SELECT ANSWER

eXAMPLE: CHM 2032 IS A COREQUISITE FOR CHM 2032L AND CHM 2032L IS A COREQUISITE FOR CHM 2032.

### SECTION III (MUST COMPLETE EACH ITEM BELOW)

**PROVIDE JUSTIFICATION FOR EACH CHANGE ON THIS PROPOSED CURRICULUM ACTION (OTHER EXPLANATORY INFORMATION)—ENTER “na” OR TEXT:**

This course will be another option in the Windows I course group. C# is an important and popular programming language that needs to be part of the program.

**NOTE:**

CHANGES FOR THE UPCOMING FALL TERM MUST BE SUBMITTED AND APPROVED NO LATER THAN THE FEBRUARY CURRICULUM COMMITTEE MEETING PRIOR TO THE START OF THE NEXT ACADEMIC YEAR. CHANGES DURING MID-SCHOOL YEAR ARE NOT ALLOWED. EXTREME CIRCUMSTANCES WILL REQUIRE APPROVAL FROM THE DISTRICT DEAN OF INSTRUCTION AS WELL AS THE VICE PRESIDENT OF ACADEMIC AFFAIRS TO BEGIN IN EITHER THE SPRING OR SUMMER TERM.

**TERM IN WHICH PROPOSED ACTION WILL TAKE PLACE:**

FALL 2012 TYPE IN TERM IF “EXCEPTION” AND OBTAIN BOTH SIGNATURES BELOW OR TYPE “NA”

**oRDER OF APPROVAL FOR EXCEPTIONS IS AS FOLLOWS:**

SIGNATURE #1 NEEDED FOR EFFECTIVE TERM EXCEPTION:

SIGNATURE #2 NEEDED FOR EFFECTIVE TERM EXCEPTION:

**FACULTY ENDORSEMENTS:**PLEASE SEPARATE FACULTY MEMBERS WITH A COMMA (,)



**DEPARTMENT CHAIR / PROGRAM COORDINATOR ENDORSEMENT:**

 1/3/2012

**ASSOCIATE / ACADEMIC DEAN ENDORSEMENT:**

 1/3/2012

**DEANS’ COUNCIL ENDORSEMENT:**

 1/18/2012

**STUDENT ASSESSMENT COMMITTEE CHAIR ENDORSEMENT:**

 2/9/2012

**FOR CURRICULUM COMMITTEE MEETING DATE:**



AFTER REVIEWING AND SIGNING THIS PROPOSAL, THE DISTRICT DEAN WILL RETURN THE PROPOSAL TO THE DEPARTMENT CHAIR OR PROGRAM COORDINATOR WILL SUBMIT THE PROPOSAL TO THE VPAA OFFICE. THE DEPARTMENT CHAIR/PROGRAM COORDINATOR WILL SEND THIS PROPOSAL ALONG WITH ANY OTHER PROPOSALS FROM HIS/HER DEPARTMENT BEING SUBMITTED FOR REVIEW BY THE CURRICULUM COMMITTEE TO THE STUDENT ASSESSMENT COMMITTEE FOR REVIEW. ONCE APPROVED BY THE STUDENT ASSESSMENT COMMITTEE, SUBMIT THE PROPOSAL(S) TO DROPBOX BY THE MEETING DUE DATE. FOR MORE DETAILS, PLEASE REFER TO THE CURRICULUM COMMITTEE MANUAL: www.edison.edu/facultystaff/curriculum.php