Washtenaw Community College Comprehensive Report

CPS 292 C# for Programmers
Effective Term: Fall 2019

Course Cover

Division: Business and Computer Technologies
Department: Computer Instruction
Discipline: Computer Science
Course Number: 292
Org Number: 13400
Full Course Title: C# for Programmers
Transcript Title: C# for Programmers
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
Consultation with all departments affected by this course is required.
Course title
Pre-requisite, co-requisite, or enrollment restrictions
Rationale: Title change to better reflect the purpose of the course and prerequisite change per department directive.
Proposed Start Semester: Spring/Summer 2019
Course Description: In this course, students will learn more advanced skills in C#. Class projects will include many advanced features of Microsoft Visual Studio. There will be a special focus on making full use of the C# language using XML, database, web services and other technologies. Additional focus will be on creating reusable code, and using object-oriented techniques such as encapsulation, inheritance, interfaces, delegates, and polymorphism. Students with equivalent programming experience may contact the instructor for permission to waive the prerequisites. The title of this course was previously Intermediate and Advanced C# .Net.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 60 **Student:** 60
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 4

Requisites

Prerequisite
CPS 161, minimum grade "B-"
or
Prerequisite
CPS 171, minimum grade "B-"

General Education

General Education Area 7 - Computer and Information Literacy
Assoc in Arts - Comp Lit
Assoc in Applied Sci - Comp Lit
Assoc in Science - Comp Lit

Request Course Transfer

Proposed For:
Eastern Michigan University
Lawrence Tech
Oakland University
University of Michigan
Wayne State University
Western Michigan University

Student Learning Outcomes

1. Create object-oriented Windows applications and custom controls to access and process data from databases, web pages, spreadsheets, etc.
   Assessment 1
   Assessment Tool: Lab projects
   Assessment Date: Winter 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty

2. Create Web User controls and custom controls for web-based applications and create web services to access and process data from databases, web pages, spreadsheets, etc.
   Assessment 1
   Assessment Tool: Lab projects
   Assessment Date: Winter 2020
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty

Course Objectives

1. Manipulate strings and use regular expressions and use StringBuilder and String Classes in C#.
2. Build Windows and web forms based applications that can address data in databases, web pages, spreadsheets, or other documents with ADO.NET, ActiveX Data Objects, and with DotNet controls.

3. Invoke COM (Component Object Model) components within applications written in C#.Net.
4. Use .Net Remoting to allow objects residing in different application domains to talk to one another.
5. Effectively use Classes, Inheritance, Polymorphism in design of projects.
6. Apply proper coding techniques to throw and handle error exceptions.
7. Apply proper coding techniques to manage collections of objects.

New Resources for Course

Course Textbooks/Resources

Textbooks
TBD. *TBD*, ed. TBD, 0
Manuals
Periodicals
Software

Equipment/Facilities

Computer workstations/lab

Reviewer	Action	Date
Faculty Preparer:		
Philip Geyer	*Faculty Preparer*	*Jan 08, 2019*
Department Chair/Area Director:		
Philip Geyer	*Recommend Approval*	*Jan 09, 2019*
Dean:		
Eva Samulski	*Recommend Approval*	*Jan 10, 2019*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Feb 18, 2019*
Assessment Committee Chair:		
Shawn Deron	*Recommend Approval*	*Feb 19, 2019*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Feb 20, 2019*