MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty is required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT.  CSCI                        COURSE NUMBER:  CSCI1110
NUMBER OF CREDITS:  2
COURSE TITLE:  Concepts of Coding

CATALOG DESCRIPTION :
Exposes the student to computer science foundation logic within a friendly, game-like, coding environment, using JavaScript to generate immediate interactive results

AUDIENCE  : any student 15 years old or older who is interested in learning how to code. This course might kindle an interest in continued advanced programming courses.

FULFILLS MN TRANSFER CURRICULUM AREA(S) *(Leave blank if not applicable)*
Area: by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:
None

LENGTH OF COURSE : 2 credits

THIS COURSE IS USUALLY OFFERED:
Every other year □ fall X spring □ summer □ undetermined □

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. Academic course materials introduce the use of foundational logic concepts to solve computer problems using video lectures, a web browser with hands-on interactive modules of code, displaying immediate results
   b. Academic course materials provide an introductory background exploration of coding encouraging the student’s potential for continued advanced study in computer science
2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. The course will encourage the student to think logically, critically and creatively to solve modules of computer code, explain, analyze and evaluate the results

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. The course will require communication, using a variety of technology devices, from a distance, with the instructor, mentor, tutors and peers as part of the class team

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. The course brings people together for the opportunity to work with support members, to troubleshoot equipment, to study in groups and to network with peers during an exit seminar

TOPICS TO BE COVERED:
CODE.org The Hour of Code and Beyond
Intro to Programming
Drawing Basics
Coloring
Variables
Animation Basics
Text
Functions
Logic and If Statements
Loopping
Arrays
Objects
Object-Oriented Design
Becoming a Better Programmer

LIST OF EXPECTED COURSE OUTCOMES: Following successful completion of this course the student will have added value and worth, and have found confidence to consider computer science as a potential matriculating college path of study in preparation for projected job growth in a variety of careers
LEARNING/TEACHING TECHNIQUES used in the course are:

- Collaborative Learning
- Problem Solving
- Student Presentations
- Interactive Lectures
- Creative Projects
- Individual Coaching
- Lecture
- Films/Videos/Slides
- Demonstrations
- Other (describe below)
- Lab

Required attendance at an Exit Seminar

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

- Reading
- Test Written Final Exam
- Individual Projects
- Oral Presentations
- Worksheets
- Collaborative Projects
- Textbook Problems
- Papers
- Required Exit Seminar
- Group Problems
- Term Paper
- Other (completion of online course modules)

EXPECTED STUDENT LEARNING OUTCOMES:

The student will communicate, from a distance, with instructor, mentor, tutors and peers as part of the class team.

The student will learn the fundamentals of programming logic.

The student will interact with the JavaScript language in a friendly, game-like, coding environment.

The student will observe immediate interactive results.

The student will trouble shoot and correct inaccurate results.

The information in this course outline is subject to revision.

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

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7/30/13