EASTERN IOWA COMMUNITY COLLEGES
CLINTON ♦ MUSCATINE ♦ SCOTT

C++, CIS161 Syllabus
Spring 2018

Section Number	*CIS161*
High School	West High School
Classroom Number	Room 107
Days the Class Meets	Monday – Friday
Time the Class Meets	2nd Term

Instructor Information

Name	John Brosius
College Email	brosiusj@davenport.k12.ia.us
High School Email	brosiusj@davenport.k12.ia.us
Office Room Number	Room 107
Office Hours or Times Available for Students	Before and after school
Voicemail Number	

Course Information

Course Description:
This course is designed to give students a basic understanding of the C++ language. Topics covered include the Visual C++ environment, variables, calculations, loop structures, decision structures, arrays, functions, and function templates. Object Oriented Programming is introduced.

Objectives and Goals:
1. Plan and create well-structured programs that solve problems the student is likely to encounter in the workplace using C++.
2. Implement programs using the Visual C++.NET environment.
3. Debug C++ programs.
4. Demonstrate understanding of programs using the sequence, selection, and repetition structures.
5. Demonstrate understanding of arrays, functions, and function templates.

Course Prerequisites: None

Students will be able to:

    a. Design and code the if, if/else, and nested if/else forms of the selection structure. Utilize the Switch form where appropriate.
    b. Distinguish between a variable, a named constant, and a literal constant and select an appropriate name, data type, and initial value for program data.
    c. Create and invoke a function that returns a value utilizing passing information by value or by reference where appropriate.
    d. Demonstrate String handling features including concatenation, changing the contents of a String variable from uppercase or lowercase and the use of the CompareTo( ) method.
    e. Declare, initialize, and enter data into a one-dimensional array.
    f. Design and code a pretest loop using the *while* and *for* repetition structure. Utilize counter and accumulator variables within the structure.
    g. Recognize common logic errors in selection structures and demonstrate appropriate run time debugging techniques.
    h. Distinguish between #include directive, using namespace std, #include <iostream>, and #include <string>.
    i. Calculate the total and average of the values in a one-dimensional array, search and access individual elements.
    j. Design and code the correct arithmetic operators in an expression utilizing the correct order of operations and that uses comparison operators and logical operators.

Textbook(s) Required:
- An Introduction to Programming with C++, Diane Zak, 7th edition, Course Technology, 2013.

Course Requirements:

Grading (Evaluation): See Class Schedule for Dates

(1) Components:
    a. <u>In-Class Programming.</u> There will be individual and group work throughout the course. Programs are designed to allow the instructor to view your work. All work is submitted through GitHub.
    b. <u>Quizzes.</u> There is a quiz over each chapter covered.
        i. 10 – 25 multiple choice questions.
        ii. Will open first day of new chapter and close at teacher discretion.
        iii. May be taken two times with highest submitted grade recorded.
    c. <u>Final.</u> A 100 multiple choice question test will be given covering terminology and syntax questions.
    d. <u>Final Project.</u> Will be completed with a partner covering all the standards throughout the course.

(2) Approximate Weight of Grading Components:
- 25% In-Class Work, <u>Programming assignments.</u>
- <u>25% Quizzes.</u>
- <u>25% Final Project</u>.
- <u>25% Debugging</u>

Approved 7/2013 J. Coogan

Grading Policies

Grading Scale:

A	100 -- 93	A-	92-90

B+	89 – 87%	B	86 – 83%	B-	82 – 80%
C+	79 – 77%	C	76 – 73%	C-	72 – 70%
D+	69 – 67%	D	66 – 63%	D-	62 – 60%
F	Below 60%				

Information on Late Assignments:
- Any **unexcused/truancy** absence will result in a zero grade for any assignment, quiz, or test.
- Any late work will be graded at instructors discretion

Information on the Procedure for Missed Assessments:
- Excused Absences (per school policy) will be allowed to make up work. For every one day missed, two days are allowed for makeup work. Absences determined by Attendance Office.
- Student will take the test if in attendance on test day. If student is absent the day before the test or on test day (excused) student **must** make up the test the **next** returning day. Make appropriate plans to stay after school to make up test. A different chapter test will be administered.

Student Information

College Website	http://eicc.edu
Midterm Date	
Last Day to Withdraw If a student is not passing, he/she should withdraw from the course by contacting the class instructor who will in turn contact his/her SCC Concurrent Registration Representative so that the student can be officially withdrawn by this date. Requests made after this date will not be handled and students will automatically receive the grade earned in the class. If a student chooses not to withdraw, it is important to remember that a failed grade on a college transcript stays on a college transcript until the course is repeated and the grade is improved at the <u>same</u> college. *Note: Students should always consult with their high school counselors before dropping any class.*	If your high school calendar does not coincide with the SCC calendar, students must drop **2 weeks prior to the last day of the concurrent class.**
Final Date	

Expectation of Behavior:
- **EICC Code of Conduct and Plagiarism / Dishonesty Policy:**
  To access the Student Code of Conduct go to www.eicc.edu, choose *EICC connect* and log in.
  Then, choose *Student Resources*, *Student Handbook*, *Rights and Responsibilities, Code of Conduct*.

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- **Technology statement:**
  - *The Board recognized the need for our students to communicate with their families under certain circumstances while they are attending school. The District offers the use of school phones as the first means of communication if the need arises during and after school hours. We want to ensure that cell phones or other electronic devices do not interfere with classroom instruction or cause any other problems for students or staff while on District property. During the instructional day, students may not use cell phones or other electronic devices unless given written permission from the principal/assistant principal.*
  - *Under no circumstances are cell phones or other electronic devices to be used to take photos or audio/video recordings of students in locker rooms, restrooms, or other private situations at school or at District sponsored activities. It is the responsibility of the Superintendent or superintendent's designee, in conjunction with the building principal, to develop a standard administrative regulation for this policy to provide consistency throughout the District for students.*
  - *Phones are to be turned <u>off</u> and out of <u>sight</u> during the instructional day. If a device has been confiscated the parents/guardians will be notified as such and are required to pick up the device from the school.*

- **Attendance statement:**
  - Excused Absences (per school policy) will be allowed to make up work. For every one day missed, two days are allowed for makeup work. Absences determined by Attendance Office.
  - Student will take the test if in attendance on test day. If student is absent the day before the test or on test day (excused) student **must** make up the test the **next** returning day. Make appropriate plans to stay after school to make up test. A different chapter test will be administered.
  - Any **unexcused/truancy** absence will result in a zero grade for any assignment, quiz, or test.

Study Tips for this Course:
- My role is to help you be successful in this class, but **your success in this class will hinge largely on self-discipline and the quality & quantity of effort you apply.**
- Students should read the textbook
- Take additional notes besides what is covered in the classroom.
- All reading assignments shall be completed prior to class. This will allow students to provide quality participation in class discussions. All assignments shall be typed, unless otherwise stated.

<u>Student Handbook & Student Conduct.</u> The handbook clearly defines the district's expectation of student behavior, consequences, and due process

College Information

- **To Check Final Grades on Your College Transcript**:
  Go to www.eicc.edu, choose *EICC connect* and log in.
  Then, choose *eBridge, Students, Academic Profile.*

- **FERPA Information**: Scott Community College, in full compliance with the Family Educational Rights and Privacy Act of 1974, shall make educational records available to students upon request. Likewise,

in accordance with the law, individually identifiable educational records will not be released to other than authorized individuals without written consent of the student. Students have the right to file complaints with the Family Educational Rights and Privacy Act (FERPA) Office concerning alleged failures by the institution to comply with the act. For more information go to www.eicc.edu, choose *EICC Connect* and log in. Then choose *Student Services*, *Student Resources*, *Student Files*, and *FERPA.*

- **ADA Information**: Anyone who feels they may need an academic accommodation based on the impact of a documented disability should contact the learning specialist on the Belmont campus at 536-441-4027 to arrange an appointment as soon as possible. At the appointment, course format, individual needs, and potential accommodations will be discussed. This service is FREE and confidential.

Tentative Class Calendar

Dates might change slightly throughout the semester depending on the needs of the students in the class.
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Week	Dates	Topics	Assignment and Due Dates of Major Requirements
1	Chapter #2 Chapter #3	Beginning the Problem-Solving Process Variables and Constants	Ex. #2 Ex. #9, Quiz Ex. #4, Ex. 9, Quiz
2	Chapter #4	Completing the Problem Solving Process	Test #1 (Ch. 2 and 3), Ex. #12, Ex #13 Quiz
3	Chapter #5	The Selection Structure	Ex. #11, #12, #13, Quiz
4	Chapter #6	More on the Selection Structure	Ex. #13, #15, #18, Quiz
5	Chapter #7	The Repetition Structure	Test #2 (Ch. 4 – 6) Ex. #24, #25, #26, #27,
6	Chapter #7 Chapter #8	The Repetition Structure More on the Repetition Structure (loop)	Finish Ch. #7, quiz. Ex #16, Ex. #17, Quiz
7	Chapter #9 Chapter #10	Value-Returning Functions Void Functions	Test #3 (Ch. 7 – 8) Ex. #17, #18, Quiz Ex. #15, #16
8	Chapter #11	Arrays	Quiz (Ch. #10) Test #4 (Ch. 9 – 10) Ex. #21, #22, Quiz
9	Chapter #12 Final	Strings	Ex. #21, #22