Dallas County Community College District

COSC 1415 / COSC 1436 / ITSE 1407
Intro to Programming with C++

Course Syllabus

Instructor Information:

Instructor: Dr. Bill Hammerschlag
For general questions, information or to schedule a meeting:
  Phone: (972) 860 - 4882 (voice mail)
  E-Mail: whammer@dcccd.edu
(In general, E-Mail will get you a faster response)

Important Contacts:

For problems logging in, accessing the web site or other technical issues:
  Technical Support - call 972-669-6402 or visit the ecampus web site and look for the Student Technical Assistance area.
General questions about on-line Computer Information Technology courses offered through Brookhaven:
  Ms. Tarrilynn Wall - call 972-860-4746 or E-Mail twall@dcccd.edu
  Mr. Toby Lackey call 972-860-4567 or E-Mail tlackey@dcccd.edu

Course Description:

This is an introductory course in computer programming using the C++ programming language. Emphasis is on structured design concepts, the program development process, sequence, selection and repetition constructs, simple data structures and language syntax.

Course Prerequisites:

An Introduction to Computing course such as ITSC 1401, COSC 1301, COSC 1401, BCIS 1405 or equivalent.

Student Learning Outcomes:

 Upon successful completion of this course, you will be able to:

 1) Identify methods for providing structured, computerized solutions to problems.
 2) Demonstrate the software design and development process including logical solution development, detailed logic design, coding in C++, program execution and solution testing.
 3) Identify the program structure and syntax of C++.
 4) Demonstrate the use of data items and structures such as the variable, array and file.
 5) Demonstrate simple input and output in C++.
 6) Demonstrate arithmetic operations in C++.
 7) Demonstrate the use of sequential, selection and repetition statements.
 8) Demonstrate the use of development software for the entry, testing and execution phases of programming.
Course Materials:

All students are required to use the following book:


You may use a new book, used book, shared book or even the earlier 6th Edition of the text. Chapter 1 is provided free of charge within the course to help you get started, after that you do need access to the book.

You will also need some free software which will allow you to create and run C++ programs. This software is available for download from Microsoft and you will be given detailed instructions for getting and using it later.

A free set of PowerPoint chapter slide files are also provided within the course. These slides are COPYRIGHT ©2013 by Thomson Course Technology, a division of Thomson Learning, Inc. and are for students’ personal use only.

Computer Requirements:

You will need convenient access to a personal computer with:

- A recent version of Microsoft Windows such as 8 or 7.
- At least 1 GB of free hard drive space.
- Access to the Internet and an E-Mail account.
- Microsoft Internet Explorer 8.0 or higher. Other browsers such as Netscape and Firefox may not always work with all parts of the course website but you are welcome to try them.
- A Windows word processor such as Microsoft Word. If you don’t have that, Notepad can be used. It comes with Windows so it should be on your computer. (look on in All Programs, then find Accessories) This will be used for portions of your assignments.

Student Contributions:

Experiences in this course include:

- Reading assignments.
- Online attendance. Although this is not a traditional class with specific meetings at given times, your “attendance” and participation is measured by the frequency and quality of your interactions with your instructor.
- Written and hands-on work using the C++ Programming Language.
- Communicating via live chat, a group discussion board and E-Mail.

Grading System:

You will accumulate course points for work done as follows:

<table>
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<tr>
<th>Course Component</th>
<th>Maximum Points</th>
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</thead>
</table>

Your final course grade will be determined as shown:

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Final Grade</th>
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</thead>
<tbody>
<tr>
<td>585-650</td>
<td>A</td>
</tr>
<tr>
<td>520-584</td>
<td>B</td>
</tr>
<tr>
<td>455-519</td>
<td>C</td>
</tr>
<tr>
<td>390-454</td>
<td>D</td>
</tr>
<tr>
<td>000-389</td>
<td>F</td>
</tr>
</tbody>
</table>

Point deductions, some severe, will be made as needed if you violate the rules and procedures of this course. Details are noted below.

A small amount of Extra Credit work is available near the end of the course, this is the only extra work available.

End-of-semester grades will not be mailed to you by the college. You may receive your grade through the Internet by using the following directions:

- Browse to the DCCCD eConnect web site.
- Click the Current Student Menu tab.
- Find the My Personal Information section.
- Click on Check My Grades (GPA).
- The system will then ask you to login, do so.
- Select Term – choose the correct semester.
- Select Grade Type (CR – Credit Grades).
- Click the SUBMIT button and your grades will display.

**Required Course Work and Late Penalty Information:**

This course is divided up into segments called Lessons. Each Lesson contains several activities for you to do and a Completion Date. These Dates are clearly noted in the Course Schedule. Items for the Orientation and for Lesson 1 will be accepted up to 1 week late to help you get started in the course. Work for Lesson 2 and beyond will not be accepted late except cases of extreme emergency, which must be proved with official documentation. Technical difficulties, being “busy” at home or work, minor illness or similar problems are not acceptable excuses at any time in this course. Also, please be sure you are always aware that this is NOT a self-paced course.

- Homework Assignments
  - may be done by yourself or you may partner with one other person,
  - are required course work,
must be done by their scheduled completion date, as a full or partial solution is often (but not always) provided once the due date passes so obviously we can’t take your work late,

- (you will see an Announcement when there is a solution available. No other answers will be provided beyond that.)

- may not be submitted more than once for credit (That is, correcting your mistakes and re-submitting for a higher grade isn’t permitted).

- **Discussion Board Posts**
  - must be done by yourself
  - provide you an opportunity to do share some thoughts, opinions and experiences with the class,
  - must be written in your own words (i.e. no copying or re-phrasing from anywhere.)
  - are required course work,
  - must be done by their scheduled completion date,
  - will get you feedback from your instructor on less than full credit scores,
  - may not be submitted more than once for credit.

- **Quizzes**
  - must be done by yourself
  - are short multiple-choice exercises designed to test your general knowledge of items in this course,
  - are required course work,
  - must be done by their scheduled completion date,
  - may be taken up to 2 times - though the questions will vary with each attempt,
  - will not have correct answers provided due to test security issues, but you may ask general questions about what you got wrong,
  - will have a final score from your final attempt - not necessarily the highest score. If you re-take a Quiz and do worse the second time you are stuck with that score.

Pay close attention when working your way through the course as not all Lessons have all activities. For example, Lesson 1 does not have a Homework Assignment and Lesson 6 does not have a Quiz. A number of Lessons don’t have Discussion Board posts either.

**Withdrawal with a "W":**

If you are unable to complete this course, YOU must withdraw by the official drop date for this course, which is **April 14, 2016**. If you stop “attending” class and do not withdraw you will receive a performance grade, usually an "F".

**STOP BEFORE YOU DROP!**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges.

Students often drop courses when help is available which would allow them to continue. Please feel free to discuss your plans with your instructor if you are considering a drop.
If you still wish to drop, after having reviewed all of the above, you should:

- Browse to the DCCCD eConnect web site.
- Click the Current Credit Student Menu link.
- Click the Log In link.
- After logging in, find and click the Drop Classes link (look under the Register for Classes area).

Americans with Disabilities Policy Statement:

If you feel the need for an academic adjustment due to any type of physical disability or learning difference, please contact Special Services at 972-860-4847 or visit the Disability Support Services web page for advisement and counseling. They will be happy to work with you.

The BlackBoard Content Management system is ADA compliant. Students using screen readers are advised to consult the screen reader tutorial available in BlackBoard help. Also, you are welcome to look at BlackBoard’s Commitment to Accessibility on the web.

Please note for those visually impaired students using screen readers – a second set of PowerPoint slides accompanying each Lesson in this course have been included in a simple text format so your reader can use them.

Notice for Students on Financial Aid:

If you are receiving Financial Aid grants or loans, be aware that:

- Your participation in this course must begin on or before the official certification date.
- If you are failing the course, you must participate after the drop date.
- You must check with the Financial Aid Office prior to Dropping/Withdrawing this course.

Violation of any of these rules may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester.

Incomplete ("I") Grading:

Incompletees are only considered in those circumstances where a student has had a documentable crisis or emergency occurring sometime in the last several days of the course, preventing the student from completing the final few items of required work (a last Homework or Quiz, for example). The "I" is designed only to provide a little extra time to finish up, and is not granted to students who are substantially behind in their work as the end of the course approaches. It is not to be considered as a grade to request should you simply not have the time to get your work done during the semester.

If you feel you meet the qualifications for an "I" and would like to request one, contact your Instructor as soon as possible. Students who do not qualify for an "I" may not complete any coursework for credit after the Absolute Deadline as shown in the Course Schedule.

Repeating the Course:
Each college of the DCCCD charges additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and continuing education/workforce training courses will result in additional tuition being charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts included courses taken at any of the DCCCD colleges since the Fall 2002 semester.

**Academic Dishonesty:**

All work in this course is undertaken with the understanding that academic honesty is the only acceptable behavior for students. Further, it is understood that the Instructor sets the standards of academic honesty in this course, determines when those standards have been violated and determines the consequences of that behavior by the student.

Students are expected to do all Discussion Board Posts, Quizzes by themselves and anyone caught cheating will be penalized. Homework Assignments may be done in teams of 2 people but no more. Large group collaboration is not allowed in this course.

Cheating is defined as collusion, collaboration, access and use of material intended for Instructors only, viewing of another students’ work before or after submission for grading, file sharing, password sharing, fabrication or plagiarism. None of these will be tolerated. Excuses such as "It was an accident" or "I didn't know we couldn't work together" will not relieve the student of penalties. There are no acceptable explanations for any of these behaviors. Additionally, any item requiring student writing is expected to be an original composition and not copied or paraphrased from another student, printed matter or the Internet.

For the first offense, a grade of 0 will be issued for the coursework in question. Students then failing to complete all further coursework on their own will receive a score of 0 for the entire related Course Component involved in the second offense.

All students in this course are expected to abide by the rules and regulations as set forth in both the DCCCD Student Code of Conduct. Failure to comply may result in legal and/or disciplinary action.

**Deadline Extensions for Religious Holidays:**

A student shall be granted an extension of any due date or deadline which coincides with the observance of a religious holy day, including travel for that purpose. A “religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. Students must notify the instructor in writing or via E-mail of their intent to claim any extension. This notification must take place within 7 days of the published starting date of the course and must include the date(s) for which an extension is needed. The instructor will respond with an adjusted due date or deadline.

**The Family Educational Rights and Privacy Act (FERPA):** is a federal law that protects students. Also known as the Buckley Amendment, this law gives students four rights:

1. The right to inspect and review education records.
2. The right to seek the amendment of education records.
3. The right to consent to the disclosure of education records.
4. The right to file a complaint with the FERPA Office in Washington, D.C.

More information about this is available at the [DCCCD web site](http://example.com).

**Instructor’s Right to Modify**: Your Instructor has the right to add to, delete, change or revise segments of this course or syllabus anytime during the course.

**Course Schedule and Completion Dates - Spring 2016:**

Failure to follow this Schedule will result in grading penalties.

**Drop Date: April 14**
**Last Course Day: May 11**

<table>
<thead>
<tr>
<th>Course Work</th>
<th>Work to Do</th>
<th>Completion Date</th>
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</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Assignment 0</td>
<td>Jan 24</td>
</tr>
<tr>
<td>Lesson 1 Intro to Programming</td>
<td>Lesson 1 Quiz</td>
<td>Jan 31</td>
</tr>
<tr>
<td>Lesson 2 General Problem Solving</td>
<td>Lesson 2 Quiz, Homework Assignment - Lesson 2</td>
<td>Feb 7</td>
</tr>
<tr>
<td>Lesson 3 Variables and Constants</td>
<td>Lesson 3 Quiz, Discussion Board Post - Lesson 3 Forum, Homework Assignment - Lesson 3</td>
<td>Feb 14</td>
</tr>
<tr>
<td>Lesson 4a C++ Problem Solving</td>
<td>Nothing!</td>
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<tr>
<td>Lesson 4b C++ Program Development</td>
<td>Homework Assignment - Lesson 4</td>
<td>Feb 24</td>
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<tr>
<td>Lesson 5 Selection Structure</td>
<td>Lesson 5 Quiz, Discussion Board Post - Lesson 5 Forum</td>
<td>Mar 2</td>
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<td>Lesson 6 More Selection Structure</td>
<td>Homework Assignment - Lesson 6</td>
<td>Mar 20</td>
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<td>Lesson 7 Repetition Structure</td>
<td>Lesson 7 Quiz</td>
<td>Mar 27</td>
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<td>Lesson 8 More Repetition Structure</td>
<td>Lesson 8 Quiz, Homework Assignment - Lesson 8</td>
<td>Apr 6</td>
</tr>
<tr>
<td>Lesson 9 Value-Returning Functions</td>
<td>Lesson 9 Quiz, Discussion Board Post - Lesson 9 Forum</td>
<td>Apr 13</td>
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<td>Lesson 10 Void Functions</td>
<td>Lesson 10 Quiz, Homework Assignment - Lesson 10</td>
<td>Apr 20</td>
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<td>Lesson 11</td>
<td>Lesson 11 Quiz,</td>
<td>Apr 27</td>
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<td>Single-Dimension Arrays</td>
<td>Discussion Board Post - Lesson 11 Forum</td>
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<tr>
<td>Lesson 12</td>
<td>Lesson 12 Quiz, Homework Assignment - Lesson 12</td>
<td>May 8</td>
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<td>Multi-Dimensional Arrays</td>
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<tr>
<td>Lesson 13</td>
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<td>Strings</td>
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<tr>
<td>Lesson 14</td>
<td>Lesson 14 Quiz</td>
<td>May 11</td>
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<td>Files</td>
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