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| **1. Course title/number, number of credit hours** | | |
| **Foundations of Computer Science Laboratory/ COP3014L-001 CRN 56532** | | # of credit hours  1 credit hour |
| **2. Course prerequisites, corequisites, and where the course fits in the program of study** | | |
| 1. **A grade of C or better in Introductory course in programming with C (pre-requisite);** 2. **COP 3014, Foundations of Computer Science (co-requisite).** | | |
| **3. Course logistics** | | |
| *Term*: Summer 2016  This is an online course  This course has limited design content. | | |
| **4. Instructor contact information** | | |
| *Instructor’s name*  *Office address*  *Office Hours*  *Contact telephone number*  *Email address* | Brian Heredia  TBA  TBA  N/A  bheredia@fau.edu | |
| **5. TA contact information** | | |
| *TA’s name*  *Office address*  *Office Hours*  *Contact telephone number*  *Email address* |  | |
| **6. Course description** | | |
| The lab will give students exercises and experiments that build on concepts that are taught in COP 3014 about C/C++ and programming in general. It will not replace the programming assignments given in COP 3014. Students will learn how to use the UNIX computing environment used in later courses. The lab will also teach practical aspects of programming, such as program debugging and program maintenance. If you are taking or have taken Foundations, you must take this lab before you can take Data Structures next term or later. | | |
| **7. Course objectives/student learning outcomes/program outcomes** | | | |
| *Course objectives* | To develop and solidify the basic skills of C and C++ programming;To learn how to create, edit, compile and debug C++ programs in a Microsoft Windows environment using Microsoft Visual Studio 2010.To complete exercises and experiments that will enhance your understanding of the concepts taught in Foundation of Computer Science, COP 3014. | | |
| *Student learning outcomes*  *& relationship to ABET a-k objectives* |  | | |
| **8. Course evaluation method** | | | |
| Lab Projects - 50 %  Lab Quizzes - 50% | | *Note*: The minimum grade required to pass the course is C. | |
| **9. Course grading scale** | | | |
| Grading Scale:  90 and above: “A”, 87-89: “A-“, 83-86: “B+”, 80-82: “B”, 77-79 : “B-“, 73-76: “C+”, 70-72: “C”, 67-69: “C-“, 63-66: “D+”, 60-62: “D”, 51-59: “D-“, 50 and below: “F.” | | | |
| **10. Policy on makeup tests, late work, and incompletes** | | | |
| 1. This is a 1-credit lab course that meets for approximately 2 hours each week. By university guidelines, this means you can reasonably expect that you will require at least 1 additional hours' worth of work outside the time you meet in class, but not much more. 2. Assignments must be completed during the lab session, unless otherwise specified. Plan to complete your work and turn it in that day. Assignments turned in **up to 48 hours after your lab period ends** will not be counted late. Late assignments turned in **after this time will be marked as a zero.** We will be checking to see that you are completing your assignments in a timely manner.  Not completing and turning in assignments may also affect your attendance grade. 3. You will be expected to read the lab exercise on blackboard or on a handout before coming to the lab session. Make this a habit each week! 4. There may be lectures on a topic which may require other readings before coming to the lab session. 5. The new GREEN Engineering building uses a thin client which allows you to work directly with Visual Studios to complete assignments. You may use your laptop if you wish. You may discuss assignments with other students during the lab. However, **your completed assignments must be your own work**. Violation of this will be considered a breach of the Student Code of Conduct and ‘cheating’ as defined in the FAU Student Handbook. 6. **Attendance:** Do not miss a lab, unless something exceptional beyond your control happens. You may be able to make up a lab. If you must miss a lab, contact the Instructor in advance, if possible. Provision may be made where you are somehow allowed to miss one lab during the term. Note: These are supervised, directed sessions, just like chemistry or physics labs. While it may be possible to do a lot of the work outside the class, it’s part of the course that you attend and work through the lab session. This allows us to help you directly and allows us to make sure you're really doing the work. 7. **Quizzes:** All students (excluding Distance Learning - DisL section only) must be present in class to take quizzes as they will be accessible only from on-campus locations during your scheduled lab time. 8. Assignments will be distributed and turned in electronically. Blackboard is used to distribute course information. If you do not yet know how to use Blackboard, you will be taught early in the course. Assignments will be turned in through the Assignments area of Blackboard. | | | |
| **11. Special course requirements** | | | |
| Students should be able to access UNIX through the putty secure shell using their FAU USERID and password. Later in the semester, your TA will show you how to access UNIX.  . | | | |
| **12. Classroom etiquette policy** | | | |
| University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions. | | | |
| **13. Disability policy statement** | | | |
| In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures. | | | |
| **14. Honor code policy** | | | |
| Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at  [www.fau.edu/regulations/chapter4/4.001\_Code\_of\_Academic\_Integrity.pdf](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf) | | | |
| **15. Required texts/reading** | | | |
| 1. Laboratory descriptions and experiments will be provided on Blackboard. 2. Reference: Your current COP 3014 textbook or any other textbook on the C++ language. 3. Internet resources. | | | |
| **16. Supplementary/recommended readings** | | | |
| If you have a specific question, type the keywords in google search. Chances are high that thousands of people have already asked and answered your question!  <http://www.cplusplus.com/doc/tutorial/>  <http://stackoverflow.com/>  <http://www.cprogramming.com/tutorial.html> | | | |
| **17. Course topical outline, including dates for exams/quizzes, papers, completion of reading** | | | |
| **Lab Schedule:**  **(lab order subject to change)**  Lab# Week of:  1 May 16 Introduction (Syllabus, MSVS2010 Introduction, Namespace)  2 May 23 Declarations of Simple Types, Pointers, References,  Structures  3 May 30 Function Declarations, Calls, Function Name Overloading  4,5 Jun 06 Quiz#1(on Labs 1,2,3) and Lab: Intro to UNIX and MSVS C++ and  MSVS C++ debugger example  6 Jun 13 Scope of Variables, Scope of Functions  7 Jun 20 Quiz#2(on Labs 4,5,6) and Lab: Strings (C-style, C++)  8 Jun 27 Arrays (Static, Dynamic), Linked Lists  9 Jul 04 Intro to Classes, Inheritance  10 Jul 11 Quiz#3(on Labs 7,8,9) and Lab: Copy Constructor  11,12 Jul 18 Operator Overloading and Function and Class Templates  13 Jul 25 Quiz#4(on Labs 10,11,12) and Lab: Recursion, Vectors  14 Aug 1 Quiz#5 (Labs 13)  Aug 8 Semester Ends  **Note: There are also labs on most quiz days.**  **Note: Quizzes have about 18-25 questions.** | | | |