| UTD | Course | CS 3376.502 SE 3376.502 |
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| | Professor | Dr. Mohamed Amine Belkoura |
| | Term | Spring 2017 |
| | Meetings | Tuesday & Thursday 5:30pm-6:45pm in ECSS 2.410 |

Professor's Contact Information

| Office Phone | 972-883-4523 (not attended) | |
|----------------------|---|--|
| Office Location | ECSS 4.403 | |
| Email Address | mxb135330@utdallas.edu, Subject: [CS3376-501] + subject | |
| Office Hours | Tuesday & Thursday 4pm – 5pm | |

General Course Information

| Pre-requisites | CE 2336 or CS 2336 or TE 2336 |
|---------------------------------------|---|
| Course Description | CS 3376 - C/C++ Programming in a UNIX Environment (3 semester credit hours) Advanced programming techniques utilizing procedural and object oriented programming in a UNIX environment. Topics include file input and output, implementation of strings, stacks, queues, lists, and trees, and dynamic memory allocation/management. Design and implementation of a comprehensive programming project is required. Prerequisite: (CE 2336 or CS 2336 or TE 2336) with a grade of C or better or equivalent. (Same as SE 3376) (3-0) S |
| Learning Outcomes Required Text | After successful completion of this course, the student should be able to: - Ability to use the UNIX operating system interactively as a user (commands) - Ability to express algorithmic solutions using shell scripting (utilities) - Ability to understand and use regular expressions - Ability to use the UNIX programming environment (editor, compiler and linker) - Ability to understand UNIX processes (creation and control) - Ability to perform input/output of binary files - Ability to use interprocess communication (pipes, sockets and signals) - Ability to understand the UNIX file system - Ability to understand and use version control system 1. Starting Out With C++: From Control Structures through Objects, 8th ed., by Tony Gaddis, Addison Wesley. ©2015. ISBN-10: 0133769399 (This is your textbook for CS1336 and CS1337). 2. Advanced Programming in the UNIX® Environment, 3e. W. Richard Stevens and Stephen A. Rago. Addison-Wesley. © 2013. ISBN-10: 0-321-63773-9. ISBN-13: 9780321637734 (Available online & free via UTD Library => eBook => Safari) 3. A Practical Guide to Linux® Commands, Editors, and Shell Programming, Third Edition. |
| Supplemental | Mark G. Sobell. Prentice Hall. © 2012. ISBN-10: 0-13-308504-X. ISBN-13: 9780133085044 (Available online & free via UTD Library => eBook => Safari) 1. Beginning Linux Programming, 4th edition by Neil Matthew, Richard Stones, |

Text & Online Resources

ISBN-10: 0470147628 ISBN-13: 978-0470147627

- **Resources** 2. *A Tour of C++*, 1/e. Stroustrup. ©2014 Addison-Wesley Professional. ISBN-10: 0321958314. ISBN-13: 9780321958310
 - 3. C++ Programming Language. 4/e. Stroustrup ©2014 Addison-Wesley ISBN-10: 0321958322. ISBN-13: 9780321958327
 - *4. Programming: Principles and Practice Using C++*, 2/e. Stroustrup ©2014 Addison-Wesley Professional. ISBN-10: 0321992784. ISBN-13: 9780321992789
 - 5. Guide to UNIX Using Linux, 4th Edition. Michael Palmer. © 2008 Cengage/Course Technology. ISBN-10: 1418837237 ISBN-13: 9781418837235
 - 6. C++ Primer, 5e. Stanley B. Lippman, Josée Lajoie; Barbara E. Moo. Addison-Wesley Professional 2012. ISBN-10: 0-321-71411-3.
 - 7. *The C Programming Language*, 2e. Brian W. Kernighan, Dennis M. Ritchie. Prentice Hall, 1988. ISBN-10: 0-13-110362-8
 - 8. C++ How to Program, 9ed. Paul Deitel; Harvey Deitel. © 2013 Prentice Hall. ISBN-10: 0-13-337871-3.ISBN-13: 978-0-13-337871-9.
 - C: A reference Manual (5th Edition) by Samuel P. Harbison, Guy L. Steele Jr.
 - C++ language tutorial http://www.cplusplus.com/files/tutorial.pdf
 - C++ tutorial http://www.learncpp.com/
 - C++ reference: http://cppreference.com

(#1-#2 are Available in UTD eLibrary - Safari)

Important Dates*

| 01/10 Tuesday | First Day of Class | |
|--------------------------------------|--|--|
| Sundays * | 5 Assignments + 1 Group Project *- check eLearning for details | |
| 02/23 Thursday * 04/27 Thursday * | Exam 1 and 2 in Classroom | |
| 03/13 - 03/18 | NO CLASSES (Spring Break) | |
| 04/27 Thursday | Last Day of class (Exam day) | |

^{*} Note: The dates here are tentatively assigned and are subject to change as needed.

Course Policies

| Grading Criteria | Assignments 40% Quizes/Homework/Reading Assignments 15% Attendance 5% 2 Tests (20+20) 40% | 97-100 93-96 90-92 87-89 83-86 80-82 77-79 73-76 70-72 67-69 63-66 60-62 Below 60 | A+ A A- B+ B B- C+ C C- D+ D D- F |
|------------------|---|---|-----------------------------------|
| Make-up Exams | Not allowed | | |
| Late Work | 2 points off for every hour late; submission closes 2 days after deadline; | | |
| Class Attendance | - Required; Attendance will be taken | | |

| | 3 consecutive absences = one letter grade drop. 4 consecutive absences = an F grade 5 total absences = one letter grade drop 8 total absences = an F grade | |
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| All other policies | Please visit http://go.utdallas.edu/syllabus-policies for other policies | |