ITEC 310 Programming in C and Unix

Fall 2018

Instructor:

Professor Dr. C. Shing

Office Davis 209

Class Time: 10:00 am - 10:50 am MWF Davis 201

Office Hours: MWF 11 am – 12 pm, F 12 pm – 2 pm, or by appointment

Phone 831-5996

Email cshing@radford.edu

home page: ITEC 310-01 on D2L

Text: (Optional)

- 1. *C How to Program*, *8/e* by Deitel, ISBN 978-0-13-397689-2 Addison Wesley
- 2. Practical Unix & Internet Security, 3rd Edition by Simson Garfinkel, Gene Spafford, Alan Schwartzl, ISBN: 978-0596003234, O'Reilly (Click the link to access eBook)

Description This course introduces students the Unix system, system call interface to the Unix operating system and C programming language.

Prerequisites: ITEC 110 and ITEC 220 (both require grade of "C" or better).

Goals and Objectives of the Course:

To provide information technology students with the knowledge and skills needed read and write programs written in C and to be able to effectively use the services and tools provided by and with the Unix operating system.

Topics: <u>C Programming Language</u> (about 8 weeks), <u>Unix Operating Systems</u> (about 6 weeks)

Course Outcomes:

Students who complete the course will be able to

- 1. Demonstrate an ability to understand and apply mathematical concepts.
- 2. Describe and design a C program using functions and queues.
- 3. Describe design, and use a shell command and its options.
- 4. Understand Unix File Structures.
- 5. Describe, design, and use a Unix shell script.

Grade Computation:

Professionalism (Attendance): 15%, (drop the lowest)

Quiz: 15% (submitted on D2L, allow collaboration, drop the lowest)

Assignments: 25% (drop the lowest, individual work, must have comments & to be submitted on rucs)

Midterm Exams 25% (take home, open book, no discussion, write program in C) Final Exam 20% (closed book, in class multiple choice, Comprehensive)

Note: Students are strongly encouraged to do extra credit HW. Every extra credit problem must be demonstrated to me first before submission and can be resubmitted before the due date. No extra credit HW will be graded without demonstration. No HW/extra credit HW will be accepted after the due date. No partial credit will be awarded for any extra credit HW. No make-up work for any extra credit (HW, Quiz, pre-test).

Attendance Policy:

Students must attend every class. Absences of classes for more than 2 weeks will be awarded a grade **F** for the course no matter how you perform in the rest of categories. All excused and make-up work must be pre-approved by responding to e-mail or formal documentation by either doctor or dean of students.

Class Courtesy Policy:

Students are to be in their seats when class begins with all cell phones, pagers, and laptop computers turned off. Arriving late or leaving the room to take phone calls is disruptive to the class and instructor. The instructor will take steps (such as ask students to leave classroom) to discourage these types of behavior if necessary. **In-class activities missed due to tardiness cannot be made up.**

Checking e-mail, exploring the Internet, and/or completing assignments for other classes are not permitted during class time. Such activities during class are distracting to other students and to the class instructor. The instructor will take

steps to discourage these types of behavior if necessary. This statement applies to lab as well as to the use of wireless devices during lecture (i.e. No cell phone allowed in the class). Anyone who disrupts the class will be forced to drop the class.

Honor Code:

By accepting admission to Radford University, each student makes a commitment to understand, support, and abide by the University Honor Code without compromise or exception. Violations of academic integrity will not be tolerated. This class will be conducted in strict observance of the Honor Code. Refer to your Student Handbook for details. In particular, the copying of computer assignments, in whole or in part, will be considered plagiarism. Students may discuss each other in the lab not in assignment programs. Furthermore, consulting with anyone other than the instructor on either the nature or answers to programming assignments is expressly forbidden. Any violation of honor code will be suspended.

Assignments Grading Policy:

All work will be due in class. No late work will be accepted. All work must be submitted and graded on rucs. Any syntax error work will be awarded no more than 40% of the grade. Any run-time error work will be awarded no more than 50% of the grade.

Student Services:

Center for Accessibility Services: Students seeking academic accommodations under the Americans with Disabilities Act must register with the Center for Accessibility Services (CAS) to determine eligibility. Students qualified for academic accommodations will receive accommodation letters and should meet with each course professor during office hours, to review and discuss accommodations. For more information, call 540-831-6350. www.radford.edu/cas



Center for Diversity and Inclusion "envisions Radford University as a multicultural institution that provides a forward thinking and progressive approach to social justice and equality." Heth Hall 157, 831-5765, diverse@radford.edu

Learning Assistance and Resource Center (LARC) provides free tutoring to students who need to strengthen their academic skills. 125 Walker Hall. 540-831-7704, larc@radford.edu.

Military Resource Center helps military students (veterans, active duty, reservists, and dependents) to access all of the campus resources available and provides study space, transition counseling, and tutoring. 100 Calhoun Hall, military@radford.edu, 540-831-5002.

Office of Diversity and Equity, 314B Tyler Place, 2nd Floor, 831-5307 To report an instance of harassment or sexual assault: http://www.radford.edu/content/diversity-equity/home/title-ix-reporting.html

Safe Zone at Radford University is a collaborative effort among students, staff, and faculty to secure trustworthy allies and supportive, safe spaces on campus for students who are lesbian, gay, bisexual, transgendered, and questioning. Safe-Zone trained allies can be found across the campus and community, just look for the Safe Zone sticker.





Substance Abuse and Violence Educations Services (SAVES): provides education, counseling, advocacy and support for students dealing with substance abuse or sexual violence. SAVES will also help you to help a friend who is struggling with substance abuse or is a victim or

help a friend who is struggling with substance abuse or is a victim or survivor of sexual assault, dating violence, or stalking. Heth Hall, Room 215, 831-5709 www.radford.edu/saves

Student Counseling Services can help with adjusting to college life, relationship or family concerns, anxiety, depression, eating disorders, and many other issues you may experience, including how to help a friend who is struggling. Tyler Hall Basement, 831-5226 www.radford.edu/content/student-counseling/home/faq.html

Writing Center located in CHBS 4800 (above Starbucks), offers help to CORE101 and CORE102 students for any writing assignment for any course. One-on-one sessions with a writing consultant are available every day beginning Monday, September 25 (hours TBA). To make an appointment, login to MyRU, click on Academics, and click on Writing Center, or stop by CHBS 4800 during open hours.