TCSS 321 Winter Term 2013

MW 4:15pm-6:20pm DOU 101
Lecturer: Ruth Vanderpool
Office Hours: Tue & Thur 1:30-2:00pm
Wed 3:00-4:00pm

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Course Description:

This course is part of the foundation strengthening course for the Computer Science and Systems Bachelor of Science degree. The course introduces definitions and tools for reasoning about discrete mathematical objects useful for computer professionals, including set theory, propositions and predicates, Boolean algebra, sequences, enumeration, algorithms, methods of proof, and relations.

Prerequisites:

2.0 or better in Fundamentals of Object-Oriented Programming Theory and Application (TCCS 143) and Computer Programming II (CSE 143).

Student Learning Goals:

1. Recognize and use mathematical formalisms, e.g., sets, logic, summations, proofs.
2. Translate problem descriptions into mathematical formalisms.
3. Manipulate (procedural knowledge) and apply mathematical formalisms to solve problems.

The course supports the following global Student Learning Objectives:

- (CSS) An ability to apply knowledge of computing and mathematics appropriate to the discipline.
- (UWT) *Inquiry and Critical Thinking:* Students will acquire skills and familiarity with modes of inquiry and examination from diverse disciplinary perspectives, enabling them to access, interpret, analyze, quantitatively reason, and synthesize information critically.

Useful Items:

- Text: *Discrete Mathematics and its Applications,* 7^{th} *Ed.* by Kenneth H. Rosen. ISBN #: 978-0-07-338309-5 Purchasing information is posted on the class website.
- Calculators: Either scientific or graphing are welcome although no internet access is allowed during quizzes and exams.
- Internet Access for Sage labs.

Important Dates:

1/28	Exam I	1/13	Last day alter your schedule with no fees
2/20	Exam II	1/13	Last day to add a class
3/20	Final (4:15-6:20pm)	2/24	Last day to change grading option

Homework Policy:

Written assignments will be assigned daily and the materials assigned in week $(n-1)$ will be collected on *Tuesday* of week n. *Notice that homework is due on days that the class does not meet.* Ten minutes at the start of each class period will be reserved to address questions from the homework. *If completed early, you may turn these in to the Homework folder on Monday at the end of class*, otherwise slide your *stapled* assignment under my office door in GWP 430 by 8pm on Tuesday.

You are responsible to find out what material was covered and assignments given if you miss class. Your homework is expected to be written up neatly, clearly, and completely. No partial credit is given on individual problems so make your final answer and its required supporting work easy to find and identify. No extensions are given for written homework.

After receiving your corrected homework you are given one week to turn in a rewrite. Answers are marked only as right or wrong so you are responsible for finding and correcting your mistakes. I am available to help answer questions during office hours, but no additional class time will be dedicated to that homework assignment. Rewrites must be clearly marked as such and stapled on top of the original work with the section number clearly visible.

Sage Labs:

Sage is an open-source Python based mathematical software system. Three to four Sage-based labs will be assigned throughout the course so that you can develop some hands-on experience with the topics in the course. Additional information about Sage, including how to set it up, is available on the class website.

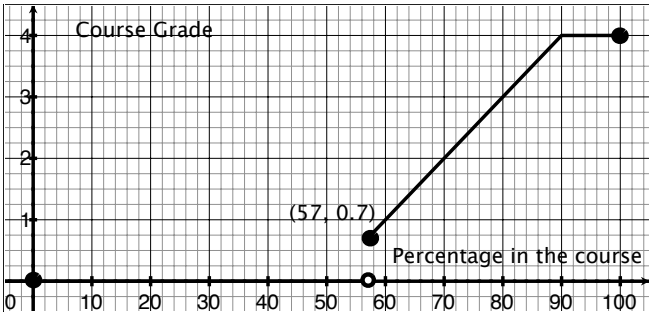
Quizzes:

A quiz is given every week at the instructor's discretion. Generally you will be given 20 minutes for the quizzes in class on Wednesdays. No make up quizzes, unless previously arranged, will be given, but I will drop the lowest scoring quiz so that you have some flexibility.

Grades:

The following weights will be used to calculate your percentage in the course. The function graphed takes your percentage in the course and returns your grade on a 4. scale.

Homework	20%
Sage Labs	10%
Quizzes	15%
2 Midterms	30%
Final	25%



Outside Resources:

Come visit me after class! If you are unable to stay for my posted office hours, please let me know and I will try to work with your schedule. Also remember that you are not alone in this class and your peers are a valuable (and often underutilized) resource.

Visit the Teaching & Learning Center (TLC)! Seminars designed for TCSS 321 students will be announced and regularly held throughout the term. Additionally math tutors are available Monday through Thursday from 10am-6pm. Complete information is available at `http://www.tacoma.washington.edu/tlc/`.

Notes:

- I do *not* check my email after 4pm. Any questions sent to my email after 4pm may not receive a response until the next morning.

- There will be no tolerance for cheating. All exams and quizzes are to be done individually unless otherwise specified. You are encouraged, however, to work together on the homework and rewrites and form study groups outside of class.

- Since the computing labs are offered to Institute-related students and faculty members for academic and authorized uses only, all students in the class must respect and follow the CSS computing lab policies. See the CSS labs website for information about when you need help and information: `http://css.tacoma.washington.edu/~lab/`

- The University of Washington Tacoma is committed to making physical facilities and instructional programs accessible to students with disabilities. Disability Support Services (DSS) functions as the focal point for coordination of services for students with disabilities. In compliance with Title II of the Americans with Disabilities Act, any enrolled student at UW Tacoma who has an appropriately documented physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning, and working]," is eligible for services from DSS. If you are wondering if you may be eligible for accommodations on our campus, please contact the DSS reception desk at 692-4522.

- The Counseling Center offers short-term, problem-focused counseling to UW Tacoma students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Counselors are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and without additional charge to currently enrolled undergraduate and graduate students. To schedule an appointment, please call 692-4522 or stop by the Student Counseling Center (SCC), located in MAT 253.

- Safety Escorts are available Monday - Thursday 5:00pm - 10:30pm. They can be reached either through the duty officer or by dialing #300 from a campus phone. Additional safety information and emergency procedures is available at `http://www.tacoma.washington.edu/security`.

- While I have attempted to make this syllabus as complete as possible, adjustments will be made throughout the course. Announcements will be made during class and it is the responsibility of the student to keep updated if class is missed.