

TQS 211

Spring Term 2010

UH 8:00-10:05 AM PNK 131
Lecturer: Ruth Vanderpool
Office Hours: Tues 10:30-11:30AM
Thur 11:30-12:30PM

SLN 18631 /18632
Office: GWP 430
Phone: 253-692-4310

e-mail: rvanderp@u.washington.edu

http://www.jfet.net/~ruth/Teaching/Current_Course1/Current_Course.html

Course Description:

TQS 211 is a calculus course studying the mathematics of motion and change, and its applications in science and business. Topics include advanced functions and their limits, maximums and minimums, rates of change (derivatives), and areas (integrals).

Course Objectives:

By the end of the course students should be able to:

1. apply precalculus concepts in the calculus setting to solve problems
2. understand and compute limits through the use of technology or mathematical techniques,
3. be able to interpret rates of change with the language of differential calculus and compute rates of change with technology or mathematical techniques
4. apply differentiation techniques to find solutions to optimization questions in business and science
5. understand and compute definite integrals with the use of the Fundamental Theorem of Calculus
6. apply integration techniques to find solutions to appropriate questions in business and science.

Useful Items:

- Text: *Applied Calculus* 3rd ed. by Hughes-Hallett, Gleason, Lock, Flath, et al.
- Calculators: Either scientific or graphing are welcome although no internet access is allowed during quizzes and exams.

Important Dates:

4/20	Exam I	4/4	Last day alter your schedule with no fees
5/11	Exam II	4/9	Last day to add a class
6/8	Final (8:00-10:-05)	5/16	Last day to change grading option

Notes:

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

Homework Policy:

Homework will be assigned regularly from WeBWork with due dates announced in class and posted on the class website. *Some assignments will be due on days that the class does not meet.* Prior to each assignment’s due date, ten minutes of class time will be set aside to answer homework questions from the online system. To make the best use of this period I advise you to copy down the questions you have and bring them to class. Note that sometimes WeBWork randomizes the numbers so that individuals may have slightly different problems.

Thus, when answering questions I may not be considering your specific problem, however the techniques I use will usually still apply.

To access WeBWork follow the steps below:

1. Browse to WeBWork through the course website or manually type in the address:
`http://hosted2.webwork.rochester.edu/webwork2/UW_Tacoma_TQS211`
2. Your username is the part of your u.washington.edu email before the @ symbol. For example: If Maurits Escher had the email address tessellate@u.washington.edu, his username would be tessellate.
3. Your initial password is your student number.
4. If you cannot log into WeBWorks, email me as soon as possible. You will not be granted extensions if you cite accessibility issues in the few hours before an assignment is due.

Hand written assignments will also be assigned but *not* collected. An additional ten minutes of class on Tuesdays will be reserved to address questions from the handwritten assignments.

Quizzes:

A quiz is given every week at the instructor's discretion. Generally you will be given 25 to 30 minutes on Tuesdays for the quizzes at the end of class. You may use any written homework that you generated during the previous week during the quiz. This may include the written assignments from the book or work done while completing any WeBWork assignments.

No make up quizzes, unless previously arranged, will be given, but I will drop the lowest scoring quiz so that you have some flexibility.

Outside Resources:

Come visit me if you have questions! If you are unable to attend my posted office hours but would like to meet, please let me know. I am willing to try and work with your schedule. Also remember that you are not alone in this class and your peers are a valuable (and often underutilized) resource.

The Teaching & Learning Center can offer a number of additional instructional services. Additionally math tutors are available Monday through Thursday from 10am to 6pm. Complete information and updates are available at <http://www.tacoma.washington.edu/tlc/>.

Grades:

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

Participation	5%	$f(x) = \begin{cases} 4.0 & \text{if } 90 < x \\ .1x - 5 & \text{if } 62 \leq x \leq 90 \\ 0 & \text{if } x < 62 \end{cases}$
WeBWork assignments	20%	
Quizzes	20%	
2 Midterms	30%	
Final	25%	