TQS 120 — Spring Term 2010

UH 1:30-3:35 PM MAT 214
Lecturer: Ruth Vanderpool
Office Hours: Tues 10:30-11:30AM
    Thur 11:30-12:30PM

SLN 18629/18630
Office: GWP 430
Phone: 253-692-4310

e-mail: rvanderp@u.washington.edu
http://www.jfet.net/~ruth/Teaching/Current_Course2/Current_Course.html

Course Description:

TQS 120 is a pre-calculus course intended to prepare you for calculus. To this end we will introduce the concept of a function, its notation, and then work with polynomial, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Note, to progress to TQS 124 you need to obtain a 2.5 whereas a 2.0 is sufficient for TQS 211.

Course Objectives:

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

1. apply algebraic concepts in the precalculus setting to solve problems

2. read, interpret, identify, and generate graphs of elementary functions

3. create linear, quadratic, polynomial, or exponential functions to describe common behaviors in business and the sciences

4. use properties of logs and exponents to answer questions

5. understand how to use trigonometry (trigonometric functions, inverse-trogonometric functions, Identities, Law of Sines & Law of Cosines) to solve problems.

Useful Items:

- Text: *Precalculus, A Prelude to Calculus* by Sheldon Axler. ISBN #: 9780470180723 Note that electric versions of this book are available at significant discounts.

- Calculators: Either scientific or graphing are welcome although no internet access is allowed during quizzes and exams.

Important Dates:

4/22	Exam I	4/4	Last day alter your schedule with no fees
5/13	Exam II	4/9	Last day to add a class
6/8	Final (1:30-3:35)	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:

Two homework assignments will be given every week from WeBWork. One assignment will be due at 5pm on *Tuesday* and the second will be due at 5pm *Friday*. Each assignment will be announced in class and posted on the calendar (found on the class website `http://www.jfet.net/~ruth/Teaching/Current_Course2/Current_Course.html`). *Some assignments are due on days that the class does not meet.* Each time we meet ten minutes 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_TQS_120`

2. Your username is the part of your u.washington.edu email before the @ symbol. For example: If Maurits Escher had the email address tesselate@u.washington.edu, his username would be tesselate.

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 and collected on *Wednesdays*. An additional ten minutes of class on Tuesdays will be reserved to address questions from the handwritten assignments. *If completed early, you may turn these in to the Homework folder on Tuesday at the end of class*, otherwise slide your *stapled* assignment under my office door in GWP 430 by 5pm on Wednesday.

If you miss class it is your responsibility to find out what material and homework you are responsible for. Your homework is expected to be written up neatly, clearly, and completely. No partial credit is given on individual problems so I suggest that you make your final answer and its required supporting work, easy to find and identify.

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.

Mini Quizzes:
A set of small five minute quizzes emphasizing computational skills will be given in the beginning of the quarter. Practicing these skills will decrease the number of mistakes on exams and thus increase overall scores. The mini-quizzes will be administered until the class average is above 75%. Make up mini-quizzes can be scheduled provided they are done in a timely manner.

Quizzes:
A quiz is given every week at the instructor's discretion. Generally you will be given 20 to 25 minutes for the quizzes at the end of classes. 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.

Mini-Quizzes (top score)	5%
WeBWork assignments	10%
Handwritten assignments	15%
Quizzes	15%
2 Midterms	30%
Final	25%

$$f(x) = \begin{cases} 4.0 & \text{if } 85 < x \\ .1x - 4.5 & \text{if } 62 \leq x \leq 85 \\ 0 & \text{if } x < 62 \end{cases}$$