TMATH 115   Autumn Term 2016

MWF 9:30-10:50am JOY 106   SLN 22070/22071
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Course Description: TMATH 115 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 prepares student to work with piece-wise, exponential, logarithmic, polynomial, and rational functions. Emphasizes computational skills, graph reading, and problem solving. One of a two-part series. Maximum of 10 credits from TMATH 115, TMATH 116, and TMATH 120 may be counted.

Student Learning 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. model common behaviors in business and the sciences using linear, quadratic, exponential, polynomial or rational functions
4. use properties of logs and exponents to answer questions

The course supports the following department Student Learning Objectives across campus:

- (Env. Sci.) *Cultivate skills critical to interpreting scientific concepts for public understanding, including* familiarity with the scientific method, *information literacy*, statistical data analysis, hypothesis formulation, & *conceptual modeling*, research project design & working collaboratively. a
- (Env. Sci.) *Participate in engaged inquiry as a means of connection classroom learning to real-world* environmental *problem solving & establishing the skills needed for life-long learning.*
- (Env. Sci) *Develop advanced scientific skills* necessary to achieve an understanding of and solutions to environmental problems including physical and biological measurement techniques, statistical data analysis, *hypothesis formulation and conceptual modeling*, research project design & working collaboratively.
- (PPE) *Students will strengthen their analytic skills*
- (PPE) *Students will develop their ability to write with* style and *precision.*
- (PPE) *Students will become more competent with quantitative analysis.*
- (PPE) *Student will develop their* ethical and *logical reasoning.*
- (Info. Tech. & Sys.) *Students will be able to apply knowledge of* computing and *mathematics, appropriate to the discipline.*

Useful Items:

- Text: *Precalculus A Unit Circle Approach, 2nd Ed.* by Ratti & McWaters.
- Access to online homework system, MyMathLab.
  Resources for purchasing the text & MyMathLab access are posted on the class website.
- Calculators: Either scientific or graphing are welcome although no internet access is allowed during quizzes and exams.

Important Dates:

10/21	Exam I	10/4	Last day alter your schedule with no fees
11/9	Exam II	10/7	Last day to add a class
12/14	Final (8:00-10:05am)	11/15	Last day to change grading option

Homework Policy:

Three homework assignments will be posted every week on MyMathLab. The assignments will be due at 4pm on Tuesdays, Thursdays, and Saturdays. Each assignment will be announced in class and posted on the calendar (found on the class website `http://faculty.washington.edu/rvanderp/`). 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 MyMathLab 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 MyMathLab follow the steps below:

1. Browse to MyMathLab through the course website or manually type in the address: `http://www.pearsonmylabandmastering.com/`
2. Under Register, click **Student**
3. Enter "vanderpool42097" and hit **Continue**.
4. Sign in with an existing Pearson account or create an account:
5. If you already have a Pearson account, type in your login information, if not, create an account and log in.
6. If you cannot log into MyMathLab, email me as soon as possible. You will not be granted extensions if you cite accessibility issues right before an assignment is due.

When you first log in you will see a notice about a grace period and payment options. You can register with an Access Code card (available in the enhanced MyMathLab textbook) or you can buy an Access Code online with a credit card. After the grace period you will again see the notice and you will not be able to to continue without entering an Access Code.

I suggest you post any homework questions on one of the MyMathLab discussions. These discussion boards gives you a place to discuss any homework problems that were not addressed in class and, if answering a question correctly, earn you extra credit on your homework scores. You may also request WebHW extensions as they are given freely.

Hand written assignments will also be collected on *Tuesdays*. Note, the written homework is due on a day that class does *not* meet! An additional ten minutes of class on Mondays will be reserved to address questions from the handwritten assignments. *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 MDS 303C by 4pm 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 that can earn full marks. 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:
Small five minute quizzes emphasizing computational skills will be given every day. 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 are not given and only the top score from each set is recorded.

Quizzes:
A quiz is given every week at the instructor's discretion. Generally you will be given 15 minutes for the quizzes after the homework question period is over on Fridays. 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.

Mini-Quizzes	5%
WeBWork assignments	10%
Handwritten assignments	15%
Quizzes	15%
2 Exams	30%
Final	25%
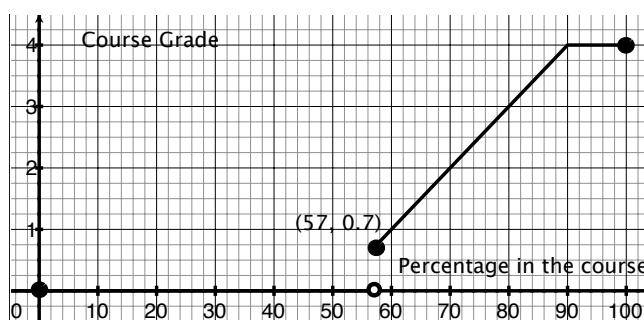
Outside Resources:
Come visit me in the TLC (Snoqualmie 260) for office hours! If you are unable to make my posted office hours, please let me know and I will try to work with your schedule. Also remember that you are not alone in this class and your peers are a valuable (and often underutilized) resource.

Visit the Teaching & Learning Center (TLC)! Math tutors are available Monday through Thursday from 9am-7pm and Fridays from 9am-3pm. Complete information is available at http://www.tacoma.uw.edu/teaching-learning-center/teaching-learning-center.

Notes:

- I do *not* check my email or the discussion boards after 4pm. Any homework questions, discussion board posts, or requests for an extension 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 & rewrites and to 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), located in MAT 354, functions as the focal point for coordination of services for students with disabilities. If you have a physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," and will require accommodation in this class, please contact DSS at (253) 692-4508, email at dssuwt@uw.edu, uwtshaw@uw.edu or visit www.tacoma.uw.edu/dss for assistance.

- 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 253-692-4522, email uwtshaw@uw.edu, or stop by the Student Counseling Center (SCC), located in MAT 354. Additional information can also be found by visiting www.tacoma.uw.edu/counseling.

- Safety Escorts are available 24 hours a day, 7 days a week, there is no time limit. They can be reached either through the duty officer, dialing #300 from a campus phone, or call the main office line at 253-692-4416. Additional safety information and emergency procedures is available at `http://www.tacoma.uw.edu/campus-safety/campus-safety-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.