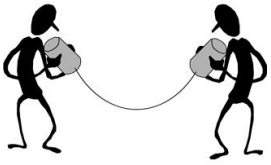
MA 15300-04 Fall 2020
M or W 1:30-2:20 Kettler 123

Instructor: John LaMaster

Course Website: purdue.brightspace.com (Click on **Purdue Fort Wayne**, enter your PFW username and password, click **Login**)

How to Reach Me: E-mail: **lamaster@pfw.edu** ← **preferred**
Google Voice: 260-267-0416
Office/voice mail: 260-481-5430
Math Dept: 260-481-6821
I normally respond within 24 hours (often sooner) except on holidays and weekends.

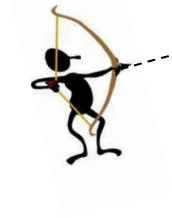


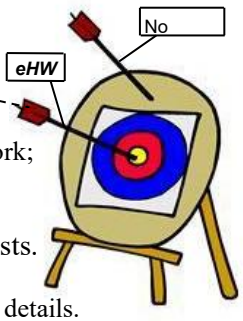
Office Hours: In addition to the virtual hours posted online, I am happy to arrange a virtual meeting with you in my Zoom Room (found **HERE**) or on the phone. Please reach out to me and we will find a time to connect.

Course Structure: I have designed the course with your utmost safety in mind. To lower the spread of the virus and to accommodate anyone who must isolate who has tested positive or came in contact with someone who has tested positive, you will access video lecture content on Brightspace. These videos are best watched with pencil and paper in hand so you can work along with the class on the video. **TIP**: Keep a special section in your notes or a binder to collect any questions as you watch the videos and work eHW.
You will be expected to attend **one class meeting per week during our normal class meeting time** which will be best used to answer the questions on your list, work through problems together, and build on the concepts in the videos. If you have a laptop, please bring it to class. If you have any of **these symptoms of the coronavirus**, you may have been exposed and we do not want you to come to class. You can still participate in our class meeting virtually and will not be penalized. If you are sick and unable to participate, please let me know.

Materials: In addition to access to a device that is able to play audio and video using a good Internet connection (a computer or laptop is recommended), as well as a notebook plus binder for organizing your notes, please see these three items below.

1. Access to ***eHW*** (commercially called Möbius) will be **required** for all your graded homework, quizzes, and tests. Follow the steps on the ***eHW* Web Site** to pay ($15) and to access it. You will need our course code which is ZTPTX.





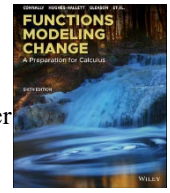
Despite the extra fee for *eHW*, past students have shared that it was worth every penny. It gives you the essential practice you need to succeed.
Note: If you have purchased an *eHW* access code from last semester it should still work; you will just need to register for my section using the above course code.

2. A **graphing calculator** will be used for activities, assignments, quizzes and tests. The **TI-84Plus** or **TI-84 CE Plus** the *tools of choice*.
Note: You can rent one at Walb Student Union 225 (260-481-6586). Click **HERE** for details.
Since all quizzes and exams are online this semester, these free alternatives are also possible: **Wabbit Emu** **Desmos** **Geogebra**

If you know of other free options, please share this info with me.
I will use the TI-84 Plus CE since it will be more likely you would be allowed to use that in future course work.

3. The **text** *Functions Modeling Change, 6th Edition* by Connally, et al. is **optional** but recommended. Some of my stronger students have shared they did fine without a text and learned everything from doing eHW.

If you do buy a text online, please be careful. Make sure it has the cover shown → We do **NOT** use WileyPLUS.
You might find it for cheap online at **Chegg**, **Amazon**, **eBay**, **betterworldbooks.com**, and from **Wiley**. It is also in brick and mortar stores in town (**Follett's**) but usually it is much higher at Follett's than anywhere else. Recommended exercises out of the text will be given to deepen your understanding, but not required.



Objectives and Content: The purpose of this course is to prepare you for calculus. (If you do not intend to take calculus, a better course to take would be either MA 140 or STAT 125.They have higher success rates.) In this course you will solve problems presented as real-world situations by creating and interpreting mathematical models which include linear, exponential, quadratic, power, polynomial and rational functions. Solutions to the problems are formulated, validated, and analyzed using mental, paper and pencil, algebraic, and technology-based techniques as appropriate. MA 15300 meets all eight outcomes (3.1 to 3.8) in *Area 2: Quantitative Reasoning* of the Indiana General Education Core. We will cover portions of Chapters 1-6 and Chapter 11 of the text.

Grading:

Participation.....	25 pts.	(3.125%)
Prerequisite Skills Quiz..... .	25 pts.	(3.125%)
e-HW Assignments……	100 pts.	(12.5%)
6 Quizzes @ 25 pts each ……..	150 pts.	(18.75%)
Test 1 ……..	100 pts.	(12.5%)
Test 2 ……..…...	100 pts.	(12.5%)
Test 3 ……..	100 pts.	(12.5%)
Comprehensive Final Exam ….	200 pts.	(25%)
Total Points Possible ……	**800 pts.**	

90% -100%	(720 pts. or more)	A
80% - 89%	(640 to 719 pts.)	B
70% -79%	(560 to 639 pts.)	C
60% - 69%	(480 to 559 pts.)	D
<60%	(Below 479 pts.)	F

Participation: You will earn participation points by completing the *Getting to Know You* survey, by posting your self-introduction on Brightspace, and your participation in synchronous ("live" or literally "same time") class meetings as described above in the **Course Structure** above. Absences due to illness or isolation are excused.

Prerequisite Skills Quiz: This quiz provides quick and early feedback to you on your proficiency with the skills needed for this course. Study the eHW assignment *Math Background Needed for MA 15400* (and its worked out solutions). There are eHW Flash Cards to practice this content on the ***eHW* Web Site** and free Khan Academy resources **HERE**.

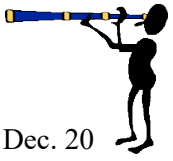
e-HW Assignments: If you ask any high performing MA 15300 student from a previous semester what was the key to their success in the course, they will uniformly cite eHW, which is described in the document ***General Course Information***. See also the ***eHW* Web Site** for help with how to obtain access and use *eHW* (commercially called Möbius). You are encouraged to work ahead on an assignment, even before the material is covered, and do the assignment **multiple times** (even after you have earned a perfect score). Research shows that students who do this retain the material better for the exam. You have unlimited attempts until the due date and the highest score is taken. The average score of all your best eHW scores is converted to a percentage and taken out of 100 points. For example, a student with perfect scores on every eHW assignment earns 100 points; one who scores an average of 80% earns 80 points, etc.

Late eHW may be submitted for some partial credit, but certain conditions apply: for each perfect score you earn before the due date in the *Assignments (for a Grade)* area, you may redo one past due assignment at a 10% late penalty, i.e. for late eHW, a score of 20 would be entered in my grade book as a score of 18. Go to a separate area once you login to eHW (called *Rhino Opportunity for Late Assignments*) to access these after the due date. Once you've earned a higher score, please notify me.

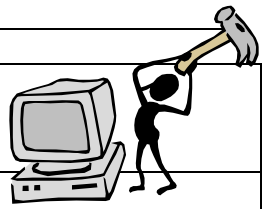
eHW Guarantee: The question bank is well scrubbed; however, if you do find that your answer is correct and the system tells you otherwise (due to mathematics, not text entry) and you are the first to report it to me, I will gratefully award you double points for that question.

Quizzes: To help make quizzes a learning experience, you can **drop all but the top six quizzes** (except the prerequisite quiz, which can not be dropped). All quizzes are online through Möbius. Quizzes serve as "dress rehearsals" for the big performance (the Chapter Exam), so high performing students find they are worth their best effort even after earning six high scores. Since I take only the top six quizzes, if you miss one there are no make-ups.

Exams: All exams are online through Möbius. Keep track of these dates in your personal calendar:
Exam 1 *(Tentatively Sections 1.1-1.5, 2.1,2.2,2.5,2.6):* Friday, Sept. 25 – Wednesday, Sept. 30
Exam 2 *(Tentatively Sections 4.1-4.5, 5.1-5.3):* Friday, Oct. 23 – Wednesday, Oct. 28
Exam 3 *(Tentatively Sections 2.4, 6.1-6.2, 3.1-3.2, 11.1-11.3):* Sunday, Nov. 29 – Sunday, Dec. 6
Comprehensive Final Exam *(Tentatively Section 11.4-11.5 and Comprehensive):* Monday, Dec. 14 – Sunday, Dec. 20



Student Support: I want you to be successful. Please reach out to me if you need help. Below is a directory of resources for specific issues. If technical difficulties affect your ability to complete assignments, please notify me as soon as possible.



For help with:	See:	Contact Info:
PFW account/password/ Brightspace Support	Information & Technology Services (ITS) Help Desk	Call: 260-481-6030 Email: helpdesk@pfw.edu See the ITS Website
eHW (Möbius) Purchasing an *eHW* access code	Digital Ed Customer Support	1-833-450-2211 Email: support@digitaled.com
Troubleshooting *eHW*	*eHW* Technical Support	Email: ehwtechsupport@pfw.edu
Graphing Calculator Rental	Student Government	Walb 225 or call: 260-481-6586 See the Calculator Rental Website
Using eHW	Check out the resource ***General Course Information*** first. Then see the Möbius Support Website for help.	
Tutoring (Face to Face & Online)	Online **HERE** and limited Face to Face tutoring in KT G19	
Attending PFW in a Pandemic	PFW Prepared	PFW Prepared Website See Information & Support for Current Students See Campus Resources See Wellness and Prevention
Short-term Counseling (Free)	Campus Health Clinic	Call the 24 hour Hotline: 800-342-5653 See their Website Or call: 800-342-5653
If you don't know where else to turn for resources, then contact…	… the CARE team	See their Website or call: 260-481-6601
Withdrawing from the class	Student Success & Transitions	Call: 260-481-0404, E-mail: withdraw@pfw.edu See the Student Success & Transitions Website
Accommodations for students with disabilities*	Services for Students with Disabilities (SSD)	Walb 113, 260-481-6658, See their Website

***For Students with Disabilities**

Please contact me as well as SSD in advance of an exam if testing accommodations are needed due to a disability.
If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of Services for Students with Disabilities (SSD) as soon as possible to work out the details. Students requiring test accommodations based on disability should contact the SSD Director of Testing Services at least seven (7) business days before the scheduled test date. Disability documentation may be required.

Rhino Success

I believe in your success and want to support you to meet your goals.
You can do it!
But it will require that you take charge of your learning,
do the work required,
and make the commitment to do what it takes to succeed.
If you want to succeed in life, be like the rhinoceros!
Wake up each morning and CHARGE straight ahead to accomplish your goals.
No obstacles get in the way of a 3 ton snorting rhinoceros charging at full speed!

Overall Course Calendar: The tentative course calendar on the next page provides more details about deadlines and may be helpful to see the big picture. Sorry for the small print. The deadlines are also on the eHW Website. If for any reason you are unable to complete an exam during the specified dates for reasons beyond your control, please reach out to me for help. The following page also describes some **RHINO incentives** you can earn. Polish that rhino horn and charge!

MA 15300 Fall 2020 Tentative Schedule

Topic	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
Week 1 (Aug 24-28): Sections 1.1-1.3 Functions, and Rate of Change	**Aug 23**	**Aug 24**	**Aug 25**	**Aug 26**	**Aug 27**	**Aug 28**	**Aug 29**
Week 2 (Aug 31- Sept. 4): Sections 1.3-1.5 Slope, Linear Functions and Modeling using Graphs, Tables, and Formulas	**Aug 30**	**Aug 31**	**Sept 1** eHW Math Background due eHW0: General Course Info due	**Sept 2** Prereq Quiz closes	**Sept 3**	**Sept 4**	**Sept 5**
Week 3 (Sept. 8-11): Sections 2.1-2.2 Input and Output, Domain and Range	**Sept 6**	**Sept 7** **Labor Day**	**Sept 8**	**Sept 9**	**Sept 10** eHW1: 1.1-1.4 due eHW2: 1.5 due	**Sept 11** Q1 1.1-1.4 closes Q2 1.5 closes	**Sept 12**
Week 4 (Sept.14-18): Sections 2.5-2.6 Composition of Functions, Inverse Functions, and Concavity	**Sept 13**	**Sept 14**	**Sept 15**	**Sept 16**	**Sept 17** eHW3: 2.1-2.2 due	**Sept 18** Q3 2.1-2.2 closes	**Sept 19**
Week 5 (Sept. 21-25): Sections 4.1-4.2 Modeling with Exponential Functions	**Sept 20**	**Sept 21**	**Sept 22**	**Sept 23**	**Sept 24** eHW4: 2.5-2.6 due	**Sept 25** Q4 2.5-2.6 closes **T1 opens**	**Sept 26**
Week 6 (Sept. 28-Oct 2): Sections 4.2-4.5 Compound Interest and Continuous Growth	**Sept 27**	**Sept 28**	**Sept 29**	**Sept 30** **T1 closes**	**Oct 1** eHW5: 4.1-4.2 due	**Oct 2** Q5 4.1-4.2 closes	**Oct 3**
Week 7 (Oct 5-9): Section 5.1 Logarithmic Functions	**Oct 4**	**Oct 5**	**Oct 6**	**Oct 7**	**Oct 8** eHW6: 4.3-4.5 due	**Oct 9** Q6 4.3-4.5 closes	**Oct 10**
Week 8 (Oct 12-16): Sections 5.2-5.3 What Good Are Logarithms?	**Oct 11**	**Oct 12**	**Oct 13**	**Oct 14**	**Oct 15** eHW7: 5.1 due	**Oct 16** Q7 5.1 closes	**Oct 17**
Week 9 (Oct 19-23): Section 2.4 & 6.1 Translations of Functions	**Oct 18**	**Oct 19** Fall	**Oct 20** Break	**Oct 21**	**Oct 22** eHW8: 5.2 5.3 due	**Oct 23** Q8 5.2-5.3 closes **T2 opens**	**Oct 24**
Week 10 (Oct 26-30): Sections 6.1-6.2 Transformations of Functions (Reflections, Vertical Stretches, and Vertical Compressions)	**Oct 25** **IUFW Last day to drop**	**Oct 26**	**Oct 27**	**Oct 28** **T2 closes**	**Oct 29**	**Oct 30** **PFW Last day to drop**	**Oct 31**
Week 11 (Nov 2-6): Sections 3.1-3.2 Quadratic Functions	**Nov 1**	**Nov 2**	**Nov 3**	**Nov 4**	**Nov 5** eHW9: 2.4,6.1,6.2 due	**Nov 6** Q9 2.4,6.1,6.2 closes	**Nov 7**
Week 12 (Nov 9-13): Sections 11.1-11.2 Power Functions and Introduction to Polynomials	**Nov 8**	**Nov 9**	**Nov 10**	**Nov 11**	**Nov 12** eHW10: 3.1,3.2 due	**Nov 13** Q10 3.1,3.2 closes	**Nov 14**
Week 13 (Nov 16-20): Sections 11.3-11.4 Short Run Behavior of Polynomials and Intro to Rational Functions	**Nov 15**	**Nov 16**	**Nov 17**	**Nov 18**	**Nov 19** eHW11: 11.1 due	**Nov 20** Q11 11.1 closes	**Nov 21**
Week 14 (Nov 23-24): Section 11.5 Rational Functions, Intercepts and Asymptotes	**Nov 22**	**Nov 23** eHW12: 11.2 due eHW13: 11.3 due	**Nov 24** Q12 11.2 11.3 closes	**Nov 25**	**Nov 26** ***Thanksgiving Break***	**Nov 27**	**Nov 28**
Week 15 (Nov 30-Dec. 4): Section 11.5-11.6 Short Run Behavior of Rational Functions and Comparing Polynomial, Exponential, and Logarithmic Functions	**Nov 29** **T3 opens**	**Nov 30**	**Dec 1**	**Dec 2**	**Dec 3**	**Dec 4**	**Dec 5**
Week 16 (Dec. 7-11): Review for the Final Exam	**Dec 6** **T3 closes**	**Dec 7**	**Dec 8**	**Dec 9**	**Dec 10** eHW14: 11.4 due eHW15: 11.5 due eHW16:11.6 due	**Dec 11** Q13 11.4 closes Q14 11.5-11.6 closes	**Dec 12**
Final Exam Week	**Dec 13** All late eHW closes	**Dec 14** **Final Exam opens**	**Dec 15**	**Dec 16**	**Dec 17**	**Dec 18**	**Dec 19**
	Dec 20 **Final Exam closes**						

All eHW, quizzes, and tests are completed online HERE. They will close at 11:59 PM on the day indicated.

- You have unlimited attempts to complete your eHW Assignments until the deadline.
- **To help accommodate any possible Internet outages, you will have 3 attempts for each quiz and each exam.** You have 90 minutes to complete each quiz, taking the highest score. Similar to the eHW Assignments, these are short. The longer time limit is so you can take it unrushed. I will drop all but the top six (6) quizzes, so no late quizzes are allowed. You have 120 minutes to complete each test, taking the highest score. Please contact me as soon as possible if you have any issues that prevent you from completing your work. I encourage you to reach out to me.
- **Rhino e-Homework Assignment Incentive:** For each eHW Assignment earned at 90% or above, you can redo one eHW at 10% late penalty.
- **Rhino Quiz Incentive:** Earn a +2 Rhino Bonus on the chapter test if you earn 90% or above on each of the quizzes that are over that test material.
- **Final Exam Rhino Award** – can keep your grade earned and be exempt from the final* if you do the following:
  1. Earn 100% of the Participation points (illnesses/isolation are excused).
  2. Contribute to the Piazza Discussion Board at least once.
  3. Earn 90% or higher on each eHW assignment
  4. Have a quiz average of 90% or higher on top 6 quizzes
  5. Earn 80% or higher on each chapter test.

  *Or you can take the final without any risk of it hurting your grade. If it bumps you up, you get the higher grade.