

Welcome to MA 15400 Trigonometry - Spring 2021

We are your instructional team this semester. Please feel free to reach out to any of us for help.



Peter Klopfenstein
kloppco1@pfw.edu
MWF 11:00 AM – 11:50 AM
Section 01 KT 123



John LaMaster
lamaster@pfw.edu
TR 10:30 AM – 11:45 AM
Section 04 KT 123



Maxwell Masters
mastmdo2@pfw.edu
MW 4:30 PM – 5:45 PM
Section 02 KT G44

Office Hours: Our office hours are posted [HERE](#) on the Math Department tutoring page, but we are also available by appointment. The Piazza Discussion Board can be found on the same page, as well as other resources.

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

Course Structure: We 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 who has come 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 on e-Homework.

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 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.

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.

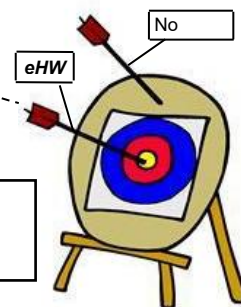
You will need our course code which is **EJDAE**.



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.



If you have purchased access to **eHW** from last semester for this course or for MA 15300, you need not purchase it again. You just need to register for this section using the above course code EJDAE.



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 us.

Yo! Optional!



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



You can also use the 5th Edition or even the 3rd. We do **NOT** use WileyPLUS. You might find it for cheap online at [Chegg](#), [Amazon](#), [eBay](#), [betterworldbooks.com](#), and from [Wiley](#).

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 which requires trigonometry, i.e. MA 16500 or MA 22700. If you do not intend to take either of these courses, there is no reason to take this class. An exception is CHM 11500. If that is the only reason you need it, please let me know. This course is not needed for calculus MA 22900.

MA 15400 emphasizes mathematical modeling of real-world problems using linear, exponential, and trigonometric functions. Topics also include vectors, parametric equations, conic sections, and complex numbers. Solutions to the problems are formulated, validated, and analyzed using mental, paper and pencil, algebraic, and technology-based techniques as appropriate. We will cover portions of Chapters 7, 8, 9, 10, 12, 13, and 14 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**. Absences due to illness or isolation or quarantine 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](#).

e-HW Assignments: If you ask any high performing MA 15400 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.

- **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 the Brightspace 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 your section instructor.

- **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 John LaMaster, lamaster@pfw.edu, he 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 Chapter Exam, so high performing students find they are worth their best effort even after earning six high scores. Since we take only the top six quizzes, there are no make-up quizzes.




(See also the *Rhino Quiz Incentive* on the last page to earn bonus points.)

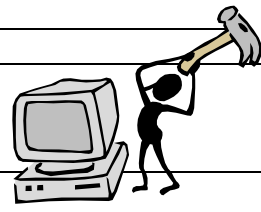
Exams: All exams are online through Möbius. Keep track of these dates in your personal calendar:

- Exam 1 (*Tentatively Sections 7.1-7.5*): Friday, Feb. 5 – Friday, Feb. 12
- Exam 2 (*Tentatively Sections 7.6-7.8, 8.1-8.2*): Friday, Feb. 26 – Friday, March 5
- Exam 3 (*Tentatively Sections 9.1-9.4, 10.1-10.2, 12.1-12.3, 13.1-13.4, 14.1-14.3*): Friday, April 16 – Friday, April 23
- Comprehensive Final Exam (*Tentatively Section 14.4, 9.5 and Comprehensive*): Monday, May 3 – Friday, May 7



Student Support: We 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 your section instructor as soon as possible.

For help with:	From:	Contact Information:
PFW account/password/ Brightspace Support	Information & Technology Services (ITS) Help Desk	Call: 260-481-6030 Email: helpdesk@pfw.edu See the ITS Website
<i>eHW</i> (Möbius) Purchasing an <i>eHW</i> access code	Digital Ed Customer Support	1-833-450-2211 Email: support@digitaled.com
Troubleshooting <i>eHW</i>	<i>eHW</i> 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 and these Support Services for Math Students
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*	Disability Access Center (DAC)	Walb 113, 260-481-6658, See their Website .
How to succeed in MA 15400	Students enrolled in MA 15400 last semester	 See the tips they wrote specifically to you!



***For Students with Disabilities**

If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of Disability Access Center (DAC) as soon as possible to work out the details, as well as your section instructor.

Rhino Success

We believe in your success and want to support you to meet your goals.

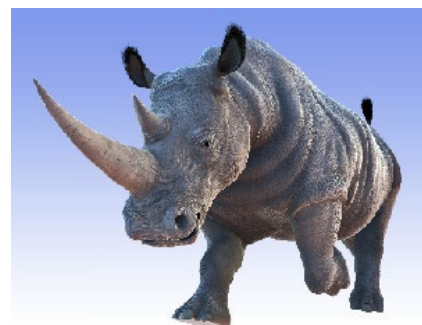
You can do it!

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. The deadlines are also on the eHW Website and on Brightspace and on this handy, clickable [Rhino Checklist](#). 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 15400 Spring 2021 Tentative Schedule

Topic	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
Week 1 (Jan 11-15): Sections 7.1-7.2 Periodic Functions, and the Sine Function (with its sidekick, Cosine)	Jan 10	Jan 11	Jan 12	Jan 13	Jan 14	Jan 15	Jan 16
Week 2 (Jan 19-22): Section 7.3 and 7.4 Radians, Special Angles and the Graph of Sine and Cosine	Jan 17	Jan 18 Martin Luther King Jr. Day	Jan 19	Jan 20	Jan 21 eHW Math Background due eHW0: General Course Info due	Jan 22 Prereq Quiz closes	Jan 23
Week 3 (Jan 25-29): Section 7.5 Transformations of the Graph of Sine and Cosine	Jan 24	Jan 25 Free trial access period ends for Möbius	Jan 26	Jan 27	Jan 28 eHW1: 7.1-7.2 due eHW2: 7.3 due	Jan 29 Q1 7.1-7.2 closes	Jan 30
Week 4 (Feb. 1-5): Sections 7.6-7.8 The Tangent Function, Reciprocal Functions and Inverse Functions	Jan 31	Feb 1	Feb 2	Feb 3	Feb 4 eHW3: Special Angles due eHW4: 7.4-7.5 due	Feb 5 Q2: 7.3 & Special Angles closes Q3: 7.4-7.5 closes Test 1 opens	Feb 6
Week 5 (Feb. 8-12): Sections 8.1-8.2 Right Triangle Trigonometry and the Law of Sines	Feb 7	Feb 8	Feb 9	Feb 10	Feb 11	Feb 12 Test 1 closes	Feb 13
Week 6 (Feb. 15-19): Section 8.2 Solving Triangles	Feb 14	Feb 15	Feb 16	Feb 17	Feb 18 eHW5: 7.6-7.8 due eHW6: 8.1 due	Feb 19 Q4 7.6-7.8 closes Q5 8.1 closes	Feb 20
Week 7 (Feb. 22-26): Section 9.1-9.3 Trig Identities and Equations	Feb 21	Feb 22	Feb 23	Feb 24	Feb 25 eHW7: 8.2 due	Feb 26 Q6 8.2 closes Test 2 opens	Feb 27
Week 8 (Mar. 1-5): Sections 9.4, 10.1-10.2 Polar Coordinates, Function Composition, and Inverse Functions	Feb 28	Mar 1	Mar 2	Mar 3	Mar 4	Mar 5 Test 2 closes	Mar 6
Week 9 Spring Break (Mar. 8-12)	Mar 7	Mar 8	Mar 9	Mar 10	Mar 11	Mar 12	Mar 13
Week 10 (Mar. 15-19): Sections 12.2-12.3, 13.1 Vectors and Sequences	Mar 14	Mar 15	Mar 16	Mar 17	Mar 18 eHW8: 9.1-9.2 due eHW9: 9.2-9.3 due eHW10 9.4 due	Mar 19 Q7 9.1-9.3 closes Q8 9.4 closes IUFW Last day to drop	Mar 20
Week 11 (Mar. 22-26): Sections 13.2-13.4 Finite and Infinite Series	Mar 21	Mar 22	Mar 23	Mar 24	Mar 25 eHW11: 10.1-10.2 due eHW12: 12.1-12.2 due eHW13: 12.3 due	Mar 26 Q9 10.1-10.2 closes Q10 12.1-12.2 closes Q11 12.3 closes	Mar 27
Week 12 (Mar. 29-Apr 2): Sections 14.1-14.2 Parametric Equations and Circles	Mar 28	Mar 29	Mar 30	Mar 31	April 1 eHW14: 13.1 due eHW15: 13.2 due eHW16: 13.3-13.4 due	April 2 Q12 13.1-13.4 closes	April 3
Week 13 (April 5-9): Sections 14.3-14.4 Circles and Ellipses	April 4	April 5	April 6	April 7	April 8 eHW17: 14.1 due	April 9 Q13 14.1 closes	April 10
Week 14 (April 12-16): Section 9.5 Hyperbolas and Complex Numbers	April 11	April 12	April 13	April 14	April 15 eHW18: 14.2-14.3 due	April 16 Q14 14.2-14.3 closes Test 3 opens	April 17
Week 15 (April 19-23): Section 9.5 Complex Numbers Cont'd	April 18	April 19	April 20	April 21	April 22	April 23 Test 3 closes PFW Last day to drop	April 24
Week 16 (April 26-30): Review for the Final Exam	April 25	April 26	April 27	April 28	April 29 eHW19: 14.4 due	April 30 Q15: 14.4 closes	May 1
Final Exam Week	May 2 All late eHW closes	May 3 Final Exam opens	May 4	May 5	May 6	May 7 Final Exam closes	May 8

All eHW, quizzes, and tests are completed online [HERE](#) on Möbius. They will close at 11:59 PM on the day indicated.

- 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. We 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 your section instructor as soon as possible if you have any issues that prevent you from completing your work. We encourage you to reach out to us.


- 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 (≥ 22.5) on each of the quizzes that are over that test material.

- Rhino Final Exam Exemption Award** – Each item below earns you a shiny, Brightspace Rhino Badge. Earn all of these for the grand prize*.


1. Earn 100% of the Participation points (illnesses/isolation/quarantine are excused). 

2. Contribute a substantive post (a question, answer, or tip)

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 your top 6 quizzes. 

5. Earn 80% or higher on **each** of the three chapter tests. 



*If you earn **all** five of the above, you get the **Rhino Final Exam Exemption Award**. You can keep your grade earned and be exempt from the final exam or you can take the final exam without any risk of it hurting your grade. If it bumps you up, you get the higher grade.



Keep track of your progress with the click-able MA 15300 [Rhino Checklist](#).