

Welcome to MA 16500-01

Analytical Geometry and Calculus I

Spring 2024

Class Meeting Time: MW 9:00 AM – 9:50 AM Kettler 218
TR 9:00 AM – 10:15 AM Kettler 218



Instructor: John LaMaster
Preferred Pronouns: he, him, his
Office: Kettler 264

How to Reach Me: E-mail: lamaster@pfw.edu ← preferred
Please use the following protocol when e-mailing me →
Google Voice: 260-267-0416
Office Phone/voice mail: 260-481-5430
Math Dept: 260-481-6821
I normally respond within 24 hours (often sooner)
except on holidays and weekends.

- To make sure your email reaches me, include in the subject line your full name and course. For example: **Peter Parker, MA 16500-01**
- University policy requires that you use your university e-mail address to email me to protect your privacy. Please do not use your private email address.
- Please keep the topic about the class.
- For questions about assignment due dates check out Brightspace or My Math Lab first.
- I prefer to be addressed as *John*.

Office Hours: My office hours are posted in Brightspace. I hold these office hours on Zoom at [this link](#). I am more than happy to set up a one-on-one appointment with you any time, either Zoom or face-to-face.

Prerequisites: MA 15400 with C- or higher or by math placement.

Course Website: Go to purdue.brightspace.com to access our course. Click on **Purdue Fort Wayne**, enter your PFW username and password, and click **Log in**. The suggested browsers are Chrome and Firefox. Explore and become familiar with the content and resources available in Brightspace.

What You Need: To be successful, make sure you have the following!

1. Access to **My Math Lab** (MML). Follow the steps on Brightspace to purchase an access code if you do not have one. To register for the course you will need my course ID: **lamaster72371**.



TIP: If you have previously purchased 24 month access last semester, when you enter the MML portal you should immediately be taken to the course. If not, contact me and I can help. For those who must take MA 26100 next semester and must purchase MML this semester, you get a price break if you choose the 24 month access. You can get free temporary access 14 days after you register.

The text *Briggs, Cochran, Gillet, and Schulz: Calculus: Early Transcendentals, 3e, Pearson* is included digitally with your purchase of My MyLab. All graded homework will be from MML.

2. A **graphing calculator**. The **TI-84 Plus** or **TI-84 CE Plus** are the *tools of choice*.
Note: You can rent one at Walb Student Union 225 (260-481-6586). Click [HERE](#) for more info.
3. A **notebook plus binder** for organizing papers and notes.
4. **Internet access:** high speed recommended. Free access is on the campus Wi-fi or, off-campus, [here](#).
5. **Study Buddies**
 - Participate in the Piazza Discussion Forum at piazza.com/pfw/spring2024/ma16500, where you can ask a question (even anonymous to the class), answer a question, or share a tip.
 - Most students have an easier time with the course when they have a group of people with whom they can work on homework, activities, and study for exams. In addition to Piazza, you may find it helpful to study in the [Math MALL](#) (Math Assistance Learning Center) in KT G38. Hours will be posted in Brightspace.

6. **The attitude of a Rhino**

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!



Content: This course is designed to introduce the concepts of differential and integral calculus of one variable and their applications. The content will essentially be the first five chapters of the text of the text *Briggs, Cochran, Gillet, and Schulz: Calculus: Early Transcendentals, 3e*.

Course Objectives/Learning Outcomes: A successful student in this course will be able to do the following:

1. Find limits of functions (graphically, numerically and algebraically)
2. Analyze and apply the notions of continuity and differentiability to algebraic and transcendental functions.
3. Determine derivatives by a variety of techniques including
 explicit differentiation,
 implicit differentiation, and
 logarithmic differentiation.
4. Use derivatives to study the characteristics of curves.
5. Use basic techniques of integration to find particular or general antiderivatives.
6. Demonstrate the connection between area and the definite integral.
7. Apply the Fundamental theorem of calculus to evaluate definite integrals.
8. Use differentiation and integration to solve real world problems.

General Education Proficiencies: MA 16500 meets all eight outcomes (3.1 to 3.8) in Area 3: Quantitative Reasoning of the Indiana General Education core listed below.

Interpretation and Representation

- 3.1. Interpret information that has been presented in *mathematical form**
- 3.2. Represent information/data in *mathematical form** as appropriate
 **mathematical form* = functions, equations, graphs, diagrams, tables, words, and geometric figures.

Mathematical Procedures

- 3.3. Demonstrate skill in carrying out mathematical
 (e.g. algebraic, geometric, logical, statistical) procedures flexibly, accurately,
 and efficiently to solve problems.

Critical Thinking

- 3.4. Analyze mathematical arguments, determining whether stated conclusions can be inferred.

Application / Analysis

- 3.5. Communicate which assumptions have been made in the solution process.
- 3.6. Analyze mathematical results in order to determine the reasonableness of the solution.
- 3.7. Cite the limitations of the process where applicable.

Communication

- 3.8. Clearly explain the representation, solution, and interpretation of the math problem.

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Grading:

Prerequisite Skills Quiz	25 pts.	(3%)
Participation.....	25 pts.	(3%)
MML Assignments.....	100 pts.	(13%)
Top 4 Quizzes @ 25 pts each	100 pts.	(13%)
Test 1	100 pts.	(13%)
Test 2	150 pts.	(19%)
Test 3	100 pts.	(13%)
<u>Comprehensive Final Exam</u>	<u>200 pts.</u>	<u>(25%)</u>
Total Points Possible	800 pts.	

Grading Scale:

89.5% -100% (720 pts. or more)	A
79.5% - 89.4% (640 to 719 pts.)	B
69.5% -79.4% (560 to 639 pts.)	C
59.5% - 69.4% (480 to 559 pts.)	D
<59.5% (Below 479 pts.)	F

Prerequisite Skills Quiz: This paper and pencil in-class quiz over most of the material in Chapter 1 provides quick and early feedback to you on your proficiency with the skills needed for this course. Unlike other quizzes, you have one attempt, and it can not be dropped.

Participation: Since much of the learning in this course occurs interactively during class time, to earn your participation credit in class meetings I expect you to stay until class ends as well as contribute to the learning environment of the class. If you are blatantly not participating in class - such as on your phone for matters other than MA 16500 without advance permission, doing homework for other classes, being disruptive, contributing to a choral “premature departure book bag zip”, or anything to lower the class morale, you will not earn your participation points for that day. In addition to your active participation in class meetings (15 pts), you can earn participation points by posting your self-introduction on Brightspace (5 pts) and completing the *Getting to Know You* survey (5 pts).

If you receive credit for each class meeting, you would have 100% participation and thus a score of 15 out of 15. If you were only 90% participating, your score would be 13.5 out of 15, and so on. If you miss a class, use Brightspace to check what you missed so you come prepared the next period. Earn back one missed day of class by attending five one hour tutoring visits to [Math MALL](#) (Math Assistance Learning Center) in KT G38. Ways to earn +1 Rhino bonus toward your participation score: attach a photo to your self-introduction on Brightspace, earn a perfect score on your MML *Syllabus Scavenger Hunt*, or post to the [Piazza Discussion Board](#) in a way that helps others learn. Please reach out to me for help if your life is disrupted for any reason.

I am here to help.

Absences due to illness or isolation or quarantine are excused. If you have any of [these symptoms of the coronavirus](#), you may have been exposed, so please do not attend class. To accommodate anyone who must isolate (if you’ve tested positive for COVID-19) or quarantine (if you’ve come in contact with someone who has tested positive), I will have class recordings posted on Brightspace. You can also participate live in class through Zoom. Please reach out to me for help if your life is disrupted for any reason. I am here to help!

MML Assignments: Online homework will be assigned using **My Math Lab**. Due dates are indicated by each assignment.

Once the due date is passed, you may continue to work on the assignment, but a 10% penalty will be applied. Note: all MML assignments will close at **11:59 PM, Sunday, April 28**. In addition to being better prepared for the in-class quizzes, there is a special incentive for earning 90% or higher on My Math Lab homework. See the section on **Chapter Tests** for more info.



TIP: You have **unlimited attempts** until the due date and the highest score is taken. The average score of all your MML scores is converted to a percentage and taken out of 100 points.



MML 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 you will be awarded double points for that question.

Quizzes: Occasional paper and pencil quizzes worth 25 pts. will be given in class, usually on Thursday. To help make quizzes a learning experience, you can **drop all but the top four quizzes** (other than the first Prerequisite Skills quiz, which can not be dropped) Quizzes serve as “dress rehearsals” for the big performance (the chapter tests), so high performing students find that even after earning four perfect scores, it is most beneficial to dedicate their best effort on quizzes to prepare for exams. Research shows that students who do this retain the material better for quizzes and tests. Since I take only the sum of the top four quizzes, there are no make-up quizzes.

Rhino Perfect Quiz Score Perk: For each perfect quiz score you earn after the first four scores of 25, you will receive 2 bonus points added to your final exam.



Chapter Tests: Test 1 and 3 (100 pts. each) will be online through Mylab. You are able to use your notes, but expected to work on your own. Test 2 (150 pts.) will be paper/pencil proctored.



Rhino Re-do Perk: If you earn a 90% or higher on the MML Homework Assignments associated with the test before the date the first attempt of the test is given, you may take another version of this exam, keeping your highest score.

Final Exam: The comprehensive paper and pencil final is **Tuesday, April 30, 8:00 a.m. - 10:00 a.m.**

Student Support: I want you to be successful. Please reach out 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:	Contact:	Contact Information:
General Needs	Academic Services, Technology Services, Health and Wellness, and Support from Administrative Offices	See the Student Support Services Website
PFW account/password/ Brightspace Support	Information & Technology Services (ITS) Help Desk	Call: 260-481-6030 Email: helpdesk@pfw.edu See the ITS Website
Purchasing Pearson MML	Pearson Customer Support	See their Website . 
Tutoring	Online HERE and Face to Face tutoring in KT G19. I will put a schedule in Brightspace once it is available.	
Graphing Calculator Rental	Student Government	Walb 225 or call: 260-481-6586 See the Calculator Rental Website
Short-term Counseling (Free)	Campus Health Clinic	Call the 24 hour Hotline: 800-342-5653 See their Website .
Withdrawing from the class	Student Success & Transitions	Call: 260-481-0404, E-mail: withdraw@pfw.edu See the Student Success & Transitions Website .
How to succeed in MA 16500	Students enrolled in previous math classes with me	 See the tips they wrote to students like you!
If you don't know where else to turn for resources, then contact...	... the CARE team	See their Website or call: 260-481-6601
Accommodations for students with disabilities (See below*)	Disability Access Center (DAC)	Walb 113, 260-481-6658, See their Website .

***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 the Disability Access Center (Walb Union, Room 113, telephone number 481-6658) as soon as possible to work out the details. Once the Director has provided you with a letter attesting to your needs for modification, bring the letter to me. For more information, please visit the [Web site for Disability Access Center](#) (DAC) and refer to the [DAC Student Handbook](#).

I am committed to creating a course that is inclusive. If you encounter barriers, please let me know immediately so that we can determine if there is an adjustment that can be made or if an accommodation might be needed. I am always happy to consider creative solutions. I welcome feedback that will assist me in improving the usability and experience for all students at Purdue Fort Wayne.

Mark Your Calendar with these Important Dates!

- Departmental Prerequisite Skills Quiz: Thursday, January 18*
- No Class Meeting Martin Luther King Day: Monday, January 16*
- Spring Break: Monday, March 4 - Friday, March 8*
- Last Day to Withdraw for IUFW Students with a Grade of W: Sunday, March 10*
- Last Day to Withdraw for PFW Students with a Grade of W: Friday, March 15*
- All past-due MML Assignments close: 11:59 PM, Sunday, April 30*
- Comprehensive Final Exam: Tuesday, April 30, 8:00 a.m. - 10:00 a.m.*

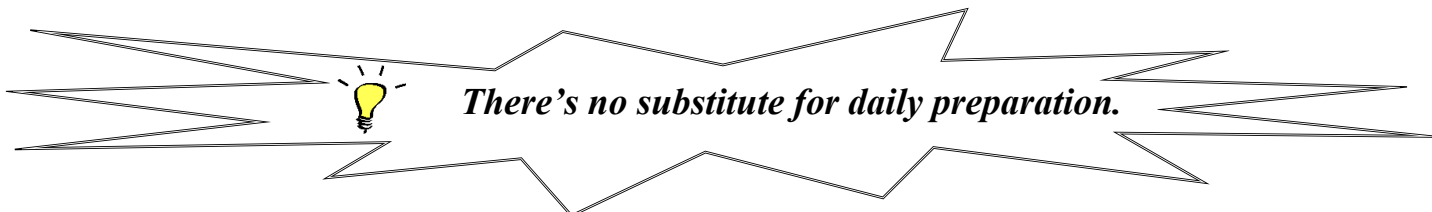


There are several ways you can keep track of deadlines in this course.

- Use the calendar on Brightspace.
- Use the Brightspace [Pulse App](#) to receive notifications. (Directions on acquiring this are [here](#), and in the checklist in the **Start Here** module in our Brightspace course.)
- View the due dates on the Brightspace Assignment page.
- View the due dates on the My Math Lab Assignment page

Advice So You Do Not Get Overwhelmed

Take this advice to heart that was given to me by my Calculus I professor when I took the course more than 40 years ago:



In other words, work on this course every day, rather than saving it for the last minute before the deadline. Do not confuse the due date with the do date. More tips are found [HERE](#).

Advice In Case You Do Get Overwhelmed

Please reach out to me or others for help. I want you to succeed. If you get to the point that you have found that you are in the wrong class and you need to drop the course, below is the fee remission schedule.



Drop/Add Refund Schedule	PFW Students	IUFW Students
Sunday, January 14	100% refund	100% refund
Sunday, January 21	60% refund	75% refund
Sunday, January 28	40% refund	50% refund
Sunday, February 4	20% refund	25% refund
Last day to withdraw with a grade of W (0% refund)	Friday, March 15	Sunday, March 10

If you do decide to drop the class, please make sure you officially process your withdrawal rather than simply stop attending. To officially process a withdrawal, log in to go.pfw.edu, click on the **Enrollment** tab, and submit the form titled **Course Withdrawal (After Full Refund Period)**. This would only put a grade of W on your record instead of a grade of F.

Whether or not you withdraw from the course, if you want to take a refresher class, note that I am teaching an 8 week online MA 15300 as well as an 8 week online MA 15400. Each course begins March 11, 2024.

You have reached the end of this syllabus, and I am grateful that you took the time to read it. Thank you! In gratitude, click on the image of the rhinoceros in this document for something cool. I look forward to having an awesome semester together.