

Marshall University course Syllabus

Important Notice:

- Course begins on online (**Blackboard** and **MyMathLab**) on **September 6** and ends on **December 18**.
- All exams (except Pre-Exams) will be proctored by a third party online proctoring software called "Respondus" (via a webcam on your own computer) or in person by the instructor in a campus computer lab. Details later in the syllabus.
- Another option for students is to arrange (at their own cost) to take the exams at a place like a "Sylvan Center" in their area. Must obtain the instructor's permission for this.
- Students will do homework on MyMathLab. Students will buy a special version of the textbook (details below) that comes with an access code to MyMathLab (use the course code: **aluthge40324**). **Homework counts for 40% of the grade**.
- Students will take exams on Blackboard (MUOnline).
- There are seven exams (practice exam, three pre-exams and three (real) exams), all on Blackboard. **Exams count for 60% of the grade**.

Course Title/Number	MTH 122 – Plane Trigonometry – Sec 111– CRN 5223 – (3 credits)
Semester/Year	Fall 2016
Days/Time	Online class. No face-to-face meetings
Location	On the WEB at www.marshall.edu/muonline & www.mymathlab.com
Instructor	Dr. Ari Aluthge (Pronounced: A-luth-gay)
Office	Smith Hall 714
Phone	(304) 696 3050
E-Mail	aluthge@marshall.edu (your name and "MTH 122 – Online" in the subject line) Prefer to communicate on MUonline (Blackboard) with the "Internal Mail" tool.
Office/Hours	Office hours by appointment only. No scheduled office hours.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description From Catalog: A study of the trigonometric functions, graphs of the trigonometric functions, identities, equations, inverse trigonometric functions, vectors, complex numbers, and applications.

PR: ACT Math 22 or equivalent or MTH127 or MTH130. *3 hours*

Course Objectives:

- To give students a solid understanding of trigonometric functions and their applications.
- To help prepare students for a course in calculus with analytic geometry. Students should also take college algebra before attempting calculus
- To help prepare students for study in areas such as physics, engineering, biology, chemistry, pharmacy, geology, medicine, and safety technology.

Course Contents: Most of the topics from chapters 1 through 8 in the textbook

- Right Triangular Ratios
- Trigonometric/Circular Functions
- Graphs of Trigonometric/Circular Functions
- Trigonometric Identities
- Inverse Trigonometric/Circular Functions and Trigonometric Equations
- Applications (Law of Sines, Law of Cosines, Vectors)
- Complex Numbers and Polar Coordinates.

Learner Outcomes: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course. Upon completion of this course, students will have an understanding of the concepts of trigonometric functions and their properties. They will be able to apply these concepts to solve real world applications. In particular,

Course Student Learning Outcomes	How students will practice each outcome in this Course	How achievement of each outcome will be assessed in this Course
Students will analyze, compare, evaluate, and graph the six trigonometric functions.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.

Students will analyze, compare, evaluate, and graph the six inverse trigonometric functions.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.
Students will use trigonometric functions to solve real-world applications involving triangles and vectors.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.
Students will use the definition of radian measure to solve application problems involving linear and angular speed	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.
Students will apply trigonometric identities and solve trigonometric equations in other mathematics courses such as calculus.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.
Students will apply trigonometric functions to multiply and divide complex numbers and find the powers and roots of complex numbers.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.
Students will apply trigonometry to find polar coordinates and graph polar equations.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams.

Required Texts, Additional Reading, and Other Materials:

- A special three-hole- punched, loose-leaf version of the textbook, *Trigonometry, 11th Edition* (by Lial, Hornsby, and Schneider) that comes with an access code to [MyMathLab®](http://www.mymathlab.com) at www.mymathlab.com or (<http://www.pearsonmylabandmastering.com/northamerica/>).
- **ISBN: 9780134306025**. More details about [MyMathLab®](http://www.mymathlab.com) later in syllabus.

- The book can be ordered online at [The Marshall University Bookstore](#) or directly from Pearson publishing at www.pearsonhighered.com. (At MU Bookstore, the book costs about \$180 and it costs about \$177 from the publisher according to respective websites).
- Students will use the course code: **aluthge40324** and register on MML to do their homework.
- **Caution:** Please do not buy used books or any other version of the book without MML access code. The MML access code alone can cost over \$100.
- **Caution:** Face-to-face MTH 122 classes on campus use a different textbook. Make sure to buy the correct textbook (with MML access code).
- **Recommended:** A graphing calculator (will be allowed during tests and homework). **Cell phones or any other electronic devices will not be allowed in place of a calculator.**
- There is a page containing links to several online guides (on calculators). See the "Online Calculator guides" icon on the home page of the course.
- There is also a page containing some links for online resources. See the "Online Resources" link.

Course Requirements / Due Dates:

1. Course is divided into three units as follows. Each unit is 5 weeks long.
 - Unit 1 = Chapters 1, 2, and 3.
This unit runs from September 6 to October 2.
 - Unit 2 = Chapters 4 and 5.
This unit runs from October 3 to November 6.
 - Unit 3 = Chapters 6, 7, and 8. Skip sections 6.4, 7.5, and 8.6.
This unit runs from November 6 to December 18.
 - There's no comprehensive final exam in this class.
2. There is a homework assignment on MyMathLab at the end of each section of the textbook.
So, in total there are 36 HWs. This means, on average, students must complete three HWs per week.

The homework deadlines are posted online in the "Semester Schedule" on the homepage of the course.

There's an Orientation HW on MML to help student learn how to enter answers including graphs. Counts for grade.

Different HWs have different values ranging from 5 points to 6.5 points.

Most HWs are NOT multiple-choice. On MML, homework grades will range from 50 to 65 points. But they will be divided by 10 before entering on Blackboard.

Each HW will have some "media items" such as "video clips" and "PowerPoints". Students must first view those media items before they can answer the real questions. Students will earn points for Media Items.

3. There is a Practice Exam (syllabus quiz) which contains 10 non-math questions about the course. So students must read the syllabus before taking the Practice Exam. Actually, the primary goal of the Practice Exam is to help students become familiar with the test taking process using Respondus at home via a webcam. So the practice exam should be taken on your own computer using Respondus and a webcam.
4. All exams are found in the "Quizzes and Exams" folder on the left column of the homepage of the course.
5. At the end of each unit, there are two exams. They are called Pre-Exam 1 and (real) Exam 1 (after Unit 1), etc.
For each unit, the Pre-Exam and the (real) Exam are similar (made from the same pool of questions).
The purpose of the Pre-Exams is to help students prepare for the (real) Exams. They both count for the grade.
Both Pre-Exam and the (real) Exam ARE multiple-choice. Each contains 21 questions from that unit.
6. Students will take each Pre-Exam on their own computer, directly on Blackboard, without going through Respondus (no proctoring here).
After taking each Pre-Exam, students can print a copy of the exam and study (correct their mistakes) to prepare for the (real) Exam.

7. To print any Pre-Exam (after the student has taken and “submitted” it), go to “My Grades”, click on the particular Pre-Exam, and then click on the grade (score) for that exam. It will open the Pre-Exam student tool.
8. But students must go through Respondus Lockdown Browser to take each (real) Exam.
 - At home, students can download Respondus Lockdown Browser. Students will also need a webcam. Details are given in a separate file on the home page under the title “Taking Exams at Home (Proctored)”
 - But students can also come to campus and take each (real) Exam in a computer lab where the instructor will proctor the exam. One three-hour period will be available for each exam. Details are given in a separate file on the homepage under the title “Taking Exams on Campus (Proctored)”.
 - Another option for students is to arrange (at their own cost) to take the exams at a place like a “Sylvan Center” in their area. Must obtain the instructor’s permission for this.
 - Deadlines for Pre-Exams and (real) Exams are given in the “Semester Schedule” file.
9. There will be NO comprehensive final exam. Exam 3 will be the last exam of the class. Class ends December 18.

Grading Policy:

1. Homework assignments (including Orientation HW) are worth 205 points. On MML, HW scores will range from 50 to 65 points. But those scores will be divided by 10 before copying to Blackboard. So on Blackboard, HW grades will range from 5 to 6.5 points. But Orientation HW = 1.3 points.
2. For each unit, Pre-Exam = 21 points (1 pt for each question) and (real) Exam = 84 points (4 pts for each question) Total for two exams for each unit = 105 points. Total for all exams for three units = 315 points.

3. The Practice Exam (Syllabus quiz) = 5 points (0.5 point for each question).
4. Total possible points = 525 (205 + 5 + 315)
5. Letter grades: **A = 450 – 525**, **B = 400 – 449**, **C = 350 – 399**, **D = 300 – 349**, **F = 0 – 299**
6. **Students must concentrate on the points total, not the percentage.**

Attendance Policy: There's NO attendance requirement for this class. This is a 100% online class. Students will learn material on their own. But if students have any questions, they must contact the instructor for help.

Technical Requirements:

For minimum hardware/software requirements please see:

http://www.marshall.edu/muonline/computer_requirements.asp

Be sure to run the free web browser tune-up:

<http://www.marshall.edu/muonline/hardwaresoftwarecheck.asp>

You will need to have several plug-ins (software) installed on your computer. These plug-ins are all free. You will need **Real Player** and **Flash Player** to experience the streaming video and audio clips that are part of the course. You can easily check your computer to see if you have these programs (and if you don't install them for free), by clicking on this link:

http://www.marshall.edu/muonline/computer_requirements.asp

If you have technical problems, please go to the Help Desk:

<http://www.marshall.edu/ucs/cs/helpdesk/>

FAQ – Frequently Asked Questions

<http://www.marshall.edu/muonline/technicalfaq.asp>

Students will need a webcam for their computer if they decide to take the tests on their own computer. (But they can come to campus and take the test on a campus computer in a computer lab).

Students will need to download Respondus Lockdown Browser.

Marshall University Computer HELP DESK PHONE NUMBERS:

(304) 696-3200 (Huntington, WV), (304) 746-1969 (Charleston, WV),
(877) 689-8638 (Toll free)

Some Helpful Hints:

- **For each section, I have included the following in separate files in this order:**
 - Detailed lecture notes with hundreds of worked out problems.
 - A PowerPoint presentation.
 - A page containing a video link or playlist (for most sections)
(If you have difficulty with videos, please contact me)
 - Solutions to exercise problems #3, 7, 11, etc.
 - PowerPoint presentations and videos are also available on MyMathLab and students are required to view these media as a part of their homework.
- **I suggest the following approach:**
 - Read the syllabus and take the syllabus quiz on Blackboard (counts for the grade)
 - The course is divided in to three units. Each unit consists of several chapters.
 - Begin reading the text for each section of the textbook.
 - Next read my lecture notes including worked out examples.
 - Then view the PowerPoint presentation.
 - Next go and view the video (if there is a video for that section)
 - Do the HW on MML
(<http://www.pearsonmylabandmastering.com/northamerica/>.
Course code: **aluthge40324**)
 - If you need to study more, check the [online resources](#) page from the home page.
 - Take the “MTH 122 Practice Exam (Syl Quiz)” to become familiar with test taking process before taking Pre-Exam 1
 - At the end of each unit, take the unit exam on Blackboard (proctored by via a webcam). But students can also take the exam by coming to a campus computer lab. Details below.
 - At the end of the semester, take the final exam on Blackboard (proctored online or on campus).

▪ **Getting Help From The Instructor:**

- If you need help, please do not hesitate to contact me.
- It is my job to help my students.
But you have to ask, if you need help.
- Contact me through "Internal Mail", or at aluthge@marshall.edu or (304) 696 3050.

MyMathLab Instructions

To register for Fall 2016 - MTH 122 - Sections 107 & 111 (Aluthge) on :

1. Go to www.pearsonmylabandmastering.com
2. Under Register, click **Student**.
3. Enter your instructor's course ID: **aluthge40324**, and click **Continue**.

Please understand that there are so many math courses registered under my name "Aluthge," on MyMathLab. So be careful and make sure to enter the correct course code **aluthge40324** and register for the correct course.

4. **Sign in with an existing Pearson account or create an account:**
 - If you have used a Pearson website (for example, MyMathLab, or MyPsychLab), enter your Pearson username and password. Click **Sign in**.
 - If you do not have a Pearson account, click **Create**. Write down your new Pearson username and password to help you remember them.
5. **Select an option to access your instructor's online course:**
 - Use the access code that came with your textbook or that you purchased separately from the bookstore.
 - If not, buy access using a credit card or PayPal. Actually, just the MML access code may be sufficient. Once you are on MML, you have access to Textbook pages, Videos, and PowerPoints. You are supposed to view those media as a part of each homework. Those things and detailed lecture notes are provided on MUonline also.
 - **If available, get 14 days of temporary access** (Look for a link near the bottom of the page).

6. Click **Go To Your Course** on the Confirmation page. Under MyLab & Mastering New Design on the left, click **Fall 2016 - MTH 122 - Sections 107 & 111 (Aluthge)** to start your work.

Retaking or continuing a course?

If you are retaking this course or enrolling in another course with the same book, be sure to use your existing Pearson username and password. You will not need to pay again.

To sign in later:

1. Go to www.pearsonmylabandmastering.com
2. Click **Sign in**.
3. Enter your Pearson account username and password. Click **Sign in**.
4. Under MyLab & Mastering New Design on the left, click **Fall 2016 - MTH 122 - Sections 107 & 111 (Aluthge)** to start your work.
5. **Do the Orientation HW**: Do this first to learn how to enter your answers including graphs. **Counts for grade.**

Additional Information:

See **Students > Get Started** on the website for detailed instructions on registering with an access code, credit card, PayPal, or temporary access.

Notes:

- Students will have **unlimited time** and **unlimited number of attempts** on each HW (as long as they finish the HW by the deadline and before it is closed).
- I am leaving HW open for the entire five-week period for each unit. The penalty below will apply only during the last week of each unit. See the "semester schedule" for more details.
- During that period, the point value students can earn will decrease by 3% per day. This applies only for the questions student attempt after the original due date

Using LockDown Browser and a webcam (Respondus Monitor) for Online Exams:

- This course requires the use of LockDown Browser for taking online exams.

- The computer used for taking exams must also have a built-in or external webcam.
- The LockDown Browser software prevents a user from accessing other applications or going to other websites during an exam.
- The webcam (sometimes called Respondus Monitor) records you during the exam to ensure you're only using resources that are permitted.
- Together, these tools make it possible for students to take online exams from any location, and at times that are convenient.
- It also creates a fair testing environment for everyone in the course.
- **Watch the following video for more information:** [Overview for Students](#) (video)
- You will need to download and install LockDown Browser to your computer and use it to take tests (instead of using your normal browser.) The download URL is:
<http://www.respondus.com/lockdown/installinfo.pl?ID=323615594>
See the video under "Additional Resources" below for instructions for downloading.
- **Caution: Don't download a copy of LockDown Browser from elsewhere on the Internet; those versions won't work for Marshall University.**
- **Review this list before taking an exam with LockDown Browser and Respondus Monitor:**
 - Ensure you are in a location where you won't be interrupted
 - Turn off all mobile devices, phones, etc.
 - Clear your desk of all external materials – books, papers, other computers, or devices
 - No one else should be in the room with you
 - Remain at your desk or workstation for the duration of the test
 - **Start LockDown Browser. Select the first option "Blackboard Learn Production" from the dropdown menu. It will take you to Blackboard (MUonline) page. Log onto MUonline. Then select this course and the exam you are taking. Click "BEGIN". Then select the first option (Taking the exam using a webcam). Then follow the instructions. The second option is if you are taking the exam in a lab.**

- If an interruption occurs during the exam, explain what happened by speaking directly to your webcam
- You cannot exit the exam until all questions are completed and submitted for grading.

- **Practice Exam (Syllabus Quiz):**

Please take the "MTH 122 Practice Exam (syllabus quiz)" to become familiar with test taking process before taking Pre-Exam 1 and Exam 1. It contains 10 questions about the course from the syllabus.

- **Additional Resources:**

- (pdf) [Student Quick Start Guides](#)
- (video) [How to Download & Use LockDown Browser](#)

Campus Computer Lab Schedule For Exams:

If a student wants to take a test in a campus lab, he/she can do by coming to a campus computer lab.. See below for the schedule. Please come early so that you will have enough time to finish the exam. **Bring your ID, textbook, and calculator.** ~~Most students take exams at home.~~

Exam	Lab	Date	Time
(real) Exam 1	Smith Hall 624	Friday, September 23	1 PM — 4 PM
(real) Exam 2	Smith Hall 624	Friday, October 28	1 PM — 4 PM
(real) Exam 3	Smith Hall 624	Wednesday, December 14	1 PM — 4 PM

Notes:

- Pre-Exams are taken at home without Respondus, directly on Blackboard, **no proctoring involved.**
- **There's no comprehensive final exam for this class.**
- **(real) Exam 3 is the last exam for this class.**

Note: Another option for students is to arrange (at their own cost) to take the exams at a place like a "Sylvan Center" in their area. Students must obtain the instructor's permission for this. In this event, the instructor will contact the proctoring center and mail the paper exams **to be proctored there.**

2016 Fall Semester Schedule – MTH 122 (for Homework on **MyMathLab** and Exams on **Blackboard**)

Homework or Exam	Open at 12:00 AM on		Regular Due: by 11:59 PM on	Close (late due HW) at 11:59 PM on (HW)
			Earn 100% of possible points on HW	3% a day penalty during late period.
Orientation HW	Saturday, August 20, 2016		Sunday, September 11, 2016	Sunday, September 18, 2016
Practice Exam & Syllabus quiz	Take the MTH 122 Practice Exam to become familiar with test taking using Respondus by September 25, 11:59 PM. It contains 10 non-math questions related to the course from the syllabus. Counts for grade (5 points).			
Unit 1 (Chapters 1, 2 & 3) work starts here.				
HW 1.1	Saturday, August 20, 2016		Sunday, September 11, 2016	Sunday, September 18, 2016
HW 1.2	Saturday, August 20, 2016		Sunday, September 11, 2016	Sunday, September 18, 2016
HW 1.3	Saturday, August 20, 2016		Sunday, September 11, 2016	Sunday, September 18, 2016
HW 1.4	Saturday, August 20, 2016		Sunday, September 11, 2016	Sunday, September 18, 2016
HW 2.1	Saturday, August 27, 2016		Sunday, September 18, 2016	Sunday, September 25, 2016
HW 2.2	Saturday, August 27, 2016		Sunday, September 18, 2016	Sunday, September 25, 2016
HW 2.3	Saturday, August 27, 2016		Sunday, September 18, 2016	Sunday, September 25, 2016
HW 2.4	Saturday, August 27, 2016		Sunday, September 18, 2016	Sunday, September 25, 2016
HW 2.5	Saturday, August 27, 2016		Sunday, September 18, 2016	Sunday, October 2, 2016
HW 3.1	Saturday, September 3, 2016		Sunday, September 25, 2016	Sunday, October 2, 2016
HW 3.2	Saturday, September 3, 2016		Sunday, September 25, 2016	Sunday, October 2, 2016
HW 3.3	Saturday, September 3, 2016		Sunday, September 25, 2016	Sunday, October 2, 2016
HW 3.4	Saturday, September 3, 2016		Sunday, September 25, 2016	Sunday, October 2, 2016
Pre-Exam 1 (real) Exam 1	Opens, Sep 3	Closes Sep 28	Take at home directly on Blackboard by Sep 28. Good practice for (real) Exam 1. 21 points.	
	Opens, Sep 3	Closes Oct 2	Take via Respondus at home by Oct 2 or come to Smith 624 on Sep 23, 1–4 PM. 84 points	
Unit 1 work ends here. And Unit 2 (Chapters 4 & 5) starts here.				
HW 4.1	Saturday, September 10, 2016		Sunday, October 9, 2016	Sunday, October 16, 2016
HW 4.2	Saturday, September 10, 2016		Sunday, October 9, 2016	Sunday, October 16, 2016
HW 4.3	Saturday, September 10, 2016		Sunday, October 9, 2016	Sunday, October 16, 2016
HW 4.4	Saturday, September 17, 2016		Sunday, October 16, 2016	Sunday, October 23, 2016
HW 4.5	Saturday, September 17, 2016		Sunday, October 16, 2016	Sunday, October 23, 2016
HW 5.1	Saturday, September 17, 2016		Sunday, October 16, 2016	Sunday, October 23, 2016
HW 5.2	Saturday, September 24, 2016		Sunday, October 23, 2016	Sunday, October 30, 2016
HW 5.3	Saturday, September 24, 2016		Sunday, October 23, 2016	Sunday, October 30, 2016
HW 5.4	Saturday, September 24, 2016		Sunday, October 23, 2016	Sunday, October 30, 2016
HW 5.5	Saturday, October 1, 2016		Sunday, October 30, 2016	Sunday, November 06
HW 5.6	Saturday, October 1, 2016		Sunday, October 30, 2016	Sunday, November 06
Pre-Exam 2 (real) Exam 2	Opens Oct 1	Closes Nov 2	Take at home directly on Blackboard by Nov 2. Good practice for (real) Exam 2. 21 points.	
	Opens Oct 1	Closes Nov 6	Take via Respondus at home by Nov 6 or come to Smith 624 on Oct 23, 1–4 PM. 84 points	
Unit 2 work ends here. And Unit 3 (Chapters 6, 7 & 8) starts here.				
HW 6.1	Saturday, October 8, 2016		Sunday, November 13	Sunday, November 20
HW 6.2	Saturday, October 8, 2016		Sunday, November 13	Sunday, November 20
HW 6.3	Saturday, October 8, 2016		Sunday, November 13	Sunday, November 20
HW 7.1	Saturday, October 15, 2016		Sunday, November 20	Sunday, December 4
HW 7.2	Saturday, October 15, 2016		Sunday, November 20	Sunday, December 4
HW 7.3	Saturday, October 15, 2016		Sunday, November 20	Sunday, December 4
HW 7.4	Saturday, October 22, 2016		Sunday, December 4	Sunday, December 11
HW 8.1	Saturday, October 22, 2016		Sunday, December 4	Sunday, December 11
HW 8.2	Saturday, October 22, 2016		Sunday, December 4	Sunday, December 11
HW 8.3	Saturday, October 29, 2016		Sunday, December 11	Sunday, December 18
HW 8.4	Saturday, October 29, 2016		Sunday, December 11	Sunday, December 18
HW 8.5	Saturday, October 29, 2016		Sunday, December 11	Sunday, December 18
Pre-Exam 3 (real) Exam 3	Opens Oct 29	Closes Dec 14	Take at home directly on Blackboard by Dec 14. Good practice for (real) Exam 3. 21 points.	
	Opens Oct 29	Closes Dec 18	Take via Respondus at home by Dec 18 or come to Smith 624 on Dec 14, 1–4 PM. 84 points	
Final Exam?	NO comprehensive final exam here. (real) Exam 3 is the LAST exam. Semester ends on Dec 18, 11:59 PM.			
Please print and post this schedule near your desk or download it to your smart phone or laptop or desktop.				