MTH 132 Sec 105
Fall 2014

Course Title/Number	Pre-calculus MTH 132 Sec 105 (CRN 3235)
Semester/Year	Fall 2014
Days/Time	Monday, Wednesday from 6:30-7:20pm and Tuesday, Thursday 6:30-7:45pm
Location	SH 516
Instructor	Dr. Michael Otunuga
Office	Morrow Library 103
Office Hours	Monday, Tuesday, Wednesday, Thursday from 2:00pm to 4:00pm
Phone	304 696-3049
E-Mail	otunuga@marshall.edu
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be 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

See the University Academic Calendar (http://www.marshall.edu/calendar/academic/) for course withdrawal dates. |

Course Description

Precalculus with Science Applications. 5 hrs.
Functions used in calculus including polynomial, rational, exponential, logarithmic, and trigonometric. Systems of equations and inequalities, conic sections, polar parametric equations, sequences and series. Binomial Theorem. (PR: Math ACT 24 or above, or C or better in MTH 127 or C or better in MTH 130)

How each student learning outcome will be practiced and assessed in the course

MTH 132 Student Learning Outcomes	How students will practice each outcome in MTH 132	How student achievement of each outcome will be assessed in MTH 132
Students will employ quantitative methods to solve problems drawn from basic algebra and geometry.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapters P, 1, and 2	Students will take quizzes after completing homework assignments.
Students will demonstrate the ability to work with functions symbolically,	Students will attend class, work on homework, participate in class	Students will take quizzes after completing homework

visually, and numerically.	discussions, and ask questions. Chapter 2	assignments.
Students will analyze, evaluate, and graphically represent quadratic functions, polynomial functions, rational functions, radical functions, exponential functions, and logarithmic functions.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapters 2, 3, 4, and 5	Students will take quizzes after completing homework assignments.
Students will demonstrate the ability to work with equations and inequalities symbolically, visually, and numerically.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapters 1, 2, and 9	Students will take quizzes after completing homework assignments.
Students will analyze, compare, and evaluate the six basic trigonometric functions and their inverses.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapters 6 and 7	Students will take quizzes after completing homework assignments.
Students will apply the Law of Sines and/or the Law of Cosines to determine missing data in triangles.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 8	Students will take quizzes after completing homework assignments.
Students will employ vectors to solve real-world problems.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 8	Students will take quizzes after completing homework assignments.
Students will demonstrate an ability to represent certain equations in trigonometric form.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 8	Students will take quizzes after completing homework assignments.
Students will demonstrate an ability to analyze systems of linear equations using matrices and their operations to solve real-world problems.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapters 9 and 10	Students will take quizzes after completing homework assignments.
Students will evaluate arithmetic and geometric series for convergence and employ counting techniques to analyze probabilities.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 11	Students will take quizzes after completing homework assignments.
Students will use the Principle of Mathematical Induction to prove mathematical statements.	Students will attend class, work on homework, participate in class discussions, and ask questions. Chapter 11	Students will take quizzes after completing homework assignments.

Required Texts, Additional Reading, and Other Materials

Algebra and Trigonometry, 9th Edition, by Ron Larson
ISBN: 978-1-133-95974-8

Course Requirements / Due Dates

1. Exam 1 on September 15
2. Exam 2 on October 6
3. Exam 3 on October 27
4. Exam 4 on November 10
5. Exam 5 on November 20
6. Cumulative Final Exam on Monday, December 8 from 6:30 to 8:30 p.m.

Grading Policy

Each examination (five in-class exams and a final exam) will be worth 80% of the semester grade. Homework and/or quizzes will be worth 20% of the semester grade. The grading scale is rigid.

90.00 – 100	A
80.00 – 89.99	B
70.00 – 79.99	C
60.00 – 69.99	D
Below 60.00	F

Attendance Policy

Students are expected to attend each class. Unexcused absences from **five** classes will result in a reduction of one letter grade for the semester; unexcused absences from **six or more** classes will result in an F. To obtain an excused absence, please go to the Dean of Students' Office in the MSC. Students **must** notify the instructor by phone or e-mail **prior to** an exam if they cannot take a scheduled exam. Students must present a serious reason for missing any exam. Makeup exams will be given to students outside of class time at the convenience of the instructor.

Course Schedule

Week	Date	Section		Week	Date	Section
1	8/25	Chapter P		8	10/13	6.5
	8/26	1.1 – 1.3 (briefly), 1.4			10/14	6.6
	8/27	1.5			10/15	6.6 (continued), 6.7
	8/28	1.6-1.7			10/16	7.1-7.2
2	9/1	Labor Day – no class		9	10/20	7.2(continued)-7.3
	9/2	1.8			10/21	7.3(continued)-7.4
	9/3	2.1, 2.2			10/22	7.5
	9/4	2.2 (continued)-2.3			10/23	Review
3	9/8	2.3(continued)-2.4		10	10/27	Exam 3
	9/9	2.5-2.6			10/28	8.1-8.2
	9/10	2.6(continued)-2.7			10/29	8.2(continued)-8.3
	9/11	2.7 & Review			10/30	8.4-8.5
4	9/15	Exam 1		11	11/3	8.5(continued), 9.1
	9/16	3.1-3.2			11/4	9.2, 9.3
	9/17	3.2(continued)-3.3			11/5	9.3 (continued)
	9/18	3.3-3.4			11/6	Review
5	9/22	3.4 (continued), 3.5 (brief)		12	11/10	Exam 4
	9/23	4.1			11/11	10.1-10.2
	9/24	4.1 (continued), 4.2			11/12	10.2(continued)-10.3
	9/25	4.2 (continued)-5.1			11/13	10.4-11.1
6	9/29	5.2		13	11/17	11.1(continued)-11.2
	9/30	5.3-5.4			11/18	11.2(continued)-11.3
	10/1	5.4(continued)-5.5			11/19	Review
	10/2	5.5(continued) & Review			11/20	Exam 5
						Fall Break
7	10/6	Exam 2		14	12/1	11.4
	10/7	6.1-6.2			12/2	11.5
	10/8	6.2(continued)-6.3			12/3	4.3
	10/9	6.3(continued)-6.4			12/4	4.3 (continued), Review
				15	12/8	Final Exam 6:30 – 8:30 p.m.

Plagiarism Policy

Plagiarism (stealing) will not be tolerated in any way, shape, or form. Students who plagiarize will receive a zero for that assignment.

Computers

Students will be required to use MUOnline.

Calculators

Students are required to have graphing calculator during the course.

Class Policies

- Cell phones and computers should be off during class.
- All assignments must be submitted by the stated due dates.
- Students are expected to treat all in the class with respect.