

**Marshall University
Syllabus**

Course Title/Number	MTH 121-214 – Concepts and Applications
Semester/Year	Spring 2015
Days/Time	TR 5:00 pm – 6:15 pm
Location	CH 436
Instructor	Laura L. Stapleton
Office	Smith Hall 311B
Phone	304-696-4334
E-Mail	stapleto@marshall.edu
Office/Hours	8:00 am – 10:00 am TR; 6:15 pm – 6:45 pm TR
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 critical thinking course for non-majors that develops quantitative reasoning skills. Topics include logical thinking, problem solving strategies, linear modeling, beginning statistics and probability, exponential and logarithmic modeling, formula use, financial concepts.

The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this Course	How student achievement of each outcome will be assessed in this Course
Students will solve real-world problems using unit analysis.	Homework	Homework, Critical Thinking activities, review quizzes and exams
Students will interpret and analyze numbers that they will encounter in the real world.	Homework, Critical thinking activities, In Class Activities	Homework, Critical Thinking activities, review quizzes and exams
Students will demonstrate a proficiency in utilizing formulas from basic financial concepts such as loan payments, credit cards, and mortgages.	Homework, Critical thinking activities	Homework, Critical Thinking activities, review quizzes and exams
Students will interpret and analyze statistical studies.	Homework, Chapter reviews	Homework, review quizzes and exams
Students will analyze and interpret statistical concepts such as measures of central tendency, measures of	Homework, Critical thinking activities, In Class Activities	Homework, and exams

variation, and normal distributions.		
Students will compare linear growth and exponential growth rates and their real-world applications.	Homework, Critical thinking activities, In Class Activities	Homework and exams
Students will demonstrate a proficiency in the fundamentals of probability including expected value.	Homework, Critical thinking activities, In Class Activities	Homework exams
Students will demonstrate an ability to analyze arguments and construct fallacies.	Homework	Homework exams

Required Texts, Additional Reading, and Other Materials

1. Jeffrey O. Bennett and William L. Briggs, *Using and Understanding Mathematics*, Fifth Edition. ISBN# 9780321652799.
2. Scientific Calculator
3. Access to a computer with Internet Access

Course Requirements / Due Dates

1. **Exam 1** (Chapter 2- 3) will be the week of Feb 9th, 2015.
2. **Exam 2** (Chapters 4 – 5) will be the week of March 2nd, 2015.
3. **Exam 3** (Chapters 6 – 7) will be the week of March 30th, 2015.
4. **Final** (Chapters 1, 8 and selected chapters from above) will be Tuesday, May 5th, 2015.

Tutoring Policy

Marshall University provides multiple options for free on-campus tutoring. It is the student's responsibility to take advantage of these facilities in addition to utilizing office hours.

The Mathematics Department tutoring lab is located in in Smith Music Hall 115. The current schedule can be found at www.marshall.edu/math/tutoringlab.asp. Schedules for the new semester are usually posted during the second week of classes.

The University College has a tutoring lab on the first floor of Laidley Hall. Information regarding this facility can be found at <http://www.marshall.edu/wpmu/uc/tutoring-services>.

ATTENDANCE: Students are expected to attend each class. Attendance is taken by daily "sign-in" sheets. If you do not sign, then you will be counted as absent; and this "absence" cannot be corrected after the class has dispersed for the day. It is expected that each student shows up on time and is prepared for class. Attendance is necessary for the successful completion of this course. A student may have an absence officially excused at The Office of Student Affairs, Memorial Student Center MSC 2W38. Students must present a serious reason for missing any exam (illness with a doctor's excuse, death in the family, university excused absence, etc.). Any unexcused absence on the day of an exam will result

in a score of zero. Only an excused absence will warrant a make-up exam to be scheduled during Dead Week.

Grading Policy

GRADE CALCULATION: Since there are multiple ways in which students learn, knowledge and understanding will be assessed with multiple tools. A student's grade is assessed by the following percentages earned from each of the categories below:

Category	% of Grade
Module Exams (3 @ 20%)	60%
Skill Quizzes	10%
Comprehensive Final	15%
Critical Thinking Activities	10%
Attendance/In-Class Activities	5%
Total	100%

The Mathematics Department uses the following grade scale for its classes:

90 – 100	=	A
80 – 89	=	B
70 – 79	=	C
60 - 69	=	D
Below 59	=	F

CRITICAL THINKING ACTIVITIES: Students will complete several Critical Thinking (CT) Activities. If a paper is assigned, then care should be given to be grammatically correct with good spelling. Supporting tables and graphs, may be necessary. Students will submit a paper copy for hand grading AND possibly an electronic version to be checked for plagiarism. Students will upload one document into the GEAR assessment website.

SKILLS QUIZZES: You will be given approximately five skill quizzes throughout the semester on topics such as order of operations/basic math, fractions, exponents, scientific notation and algebra. See the attendance policy above on how to get an absence officially excused. Any unexcused absence will result in a score of zero. Only an excused absence will warrant a make-up quiz that will be scheduled during Dead Week.

CLASSROOM ETIQUETTE: During class, cell phones must be turned off and out of sight. **Any student seen using, viewing or texting on their cell phone will result in a pop quiz for the entire class.** Please make the instructor aware ahead of time if you need access to these devices.

FINAL EXAM: The final will be held on Tuesday, May 5th, at 5:00 pm – 7:00 pm. It will be in our classroom.