Marshall University Syllabus

Course Title/Number	**Mathematical Concepts and Applications (CT) MTH 121 – 106 CRN 3003**
Semester/Year	Fall 2015
Days/Time	TR 8:00 – 9:15 am
Location	SH 514
Instructor	Ms. Tracy Marsh
Office	SH 526A
Phone	304 696-3016
E-Mail	marsh9@marshall.edu
Office/Hours	SH 526A M – W 10 am – 11 am
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

Course Description: From Catalog

Critical thinking course for non-science majors that develops quantitative reasoning skills. Topics include logical thinking, problem-solving, linear modeling, beginning statistics and probability, exponential and logarithmic models, formula use, and financial concepts.
PR: MTH 099 or ACT 19 or above. 3 *credit hours*

The table below shows 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 develop strong critical and logical thinking skills to navigate the media and be an informed citizen	Class work, discussion, homework	In-class activity, projects, exam questions
Students will have a strong number sense and be proficient in estimation so they can put numbers from the news into a context that makes them understandable	Classwork, discussion, homework	In-class activity, projects, exam questions
Students will be able to read news reports of statistical studies in a way that allows them to evaluated them critically and decide whether they should affect their personal beliefs	Classwork, discussion, homework	In-class activity, projects, exam questions
Students will be familiar with basic ideas of probability and risk, and be aware of the impact on their lives	Classwork, discussion, homework	In-class activity, projects, exam questions
Students will possess the mathematical tools needed to make basic financial decisions	Classwork, discussion, homework	In-class activity, projects, exam questions
Students will understand how mathematics helps them study important social issues, such as the growth of populations, the depletion of resources, and the extermination of flora and fauna	Classwork, discussion, homework	In-class activity, projects, exam questions

Required Texts, Additional Reading, and Other Materials

1. **Text:** Using and Understanding Mathematics, A Quantitative Reasoning Approach, 6th Edition, by Bennett and Briggs
2. **Homework:** For all sections covered, do all of the odd numbered problems and check your answers in the back of the book. This homework will not be collected but is assigned for your benefit.
3. **Take home assignments and projects** will be assigned and are expected to be completed by the given due date. One of these assignments will be uploaded as an artifact into the university's GEAR assessment website as part of the CT requirement for the class. These assignments will be discussed in class and will be collected. The general due date for Projects 1 – 4 will be on Thursday.
4. **Scientific calculator** with a [y^x] or [^] , [e^x] or [$e\hat{}x$], and [LOG] and [LN] keys. I suggest TI 30X IIS (you can see the operations on the screen). Students may not utilize cell phones as calculators during tests.

Course Requirements / Due Dates

1. **OUTSIDE CLASSROOM REQUIREMENTS:** Students will need to work at least 2-4 hours outside of class for every 1 hour spent in class, studying notes and the textbook, and completing projects assigned in class.
2. **CLASSROOM ETIQUETTE:** During class, cell phones must be turned off and out of sight. Please make the instructor aware ahead of time if access to these devices is needed. If I determine that cell phones or other electronic devices are becoming a problem during class time, I will give the class a quiz over all recent topics daily until cell phone use is no longer an issue. If the issue persists, the person will be asked to leave the class.
   All conversations during class time should be on topic. If personal conversations become distracting to the class or myself, those students will be asked to leave the class to continue their conversations elsewhere. If this becomes a regular problem, the student will be asked not to return future classes.
3. **TUTORING FACILITIES:** Marshall University provides multiple options for free on-campus tutoring. The Mathematics Department tutoring lab is located in Smith Music Hall 115. The current schedule can be found at www.marshall.edu/math/tutoringlab.asp. The University College has a tutoring lab on the first floor of Laidley Hall. It is the student's responsibility to take advantage of these facilities in addition to utilizing office hours.

Grading Policy

The following point totals will assure the accompanying letter grade:

90% A 80% B 70% C 60% D Below 60% F

The grading scale is rigid. Students will receive the grade that they earn from the work that they do.

Category	% of Grade
In-Class Exams and Final	65%
Critical Thinking Projects	35%

Attendance Policy

1. **Attendance:** Students are expected to attend and participate in each class. Unexcused absences from **three** classes will result in a reduction of one letter grade for the semester; unexcused absences from **five or more** classes will result in an **F**. **To obtain an excused absence**, please go to the Dean of Students' Office in the MSC.

2. **Make-up exams:** Students must notify the instructor in person or by e-mail prior to an exam if they cannot take a scheduled exam. Students must present a university excused absence before scheduling a make-up exam. Makeup exams will be given to students **outside of class time** at the convenience of the instructor (Monday through Friday) within one week after the regularly scheduled exam. *After one week absences are not excusable for make-up exams.*

Schedule is subject to change

Week	Sections
1	Prologue, 1A
2	1B, 1D
3	2A, 2B **Project 1 Due**
4	2C Exam 1
5	3A, 3B
6	3C, 4B **Project 2 Due**
7	4B, 4C
8	4D Exam 2
9	5C, 6A **Project 3 Due**
10	6A, 6B
11	6C Exam 3
12	7A, 7B **Project 4 Due**
13	8A, 8B
14	8B
15	
12/10	**Thursday Final Exam 8 am – 10 am**