Marshall University
Syllabus

Course Title/Number	**MTH 121 Syllabus – Concepts and Applications**
Semester/Year	Spring 2014
Days/Time	Online
Location	Web
Instructor	Laura L. Stapleton
Office	Smith Hall 311B
Phone	304-696-4334
E-Mail	stapleto@marshall.edu
Office/Hours	By Appointment
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

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, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams
Students will interpret and analyze numbers that they will encounter in the real world.	Homework, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams
Students will demonstrate a proficiency in utilizing formulas from basic financial concepts such as loan payments, credit cards, and mortgages.	Homework, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams
Students will interpret and analyze statistical studies.	Homework, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams
Students will analyze and interpret statistical concepts such as measures of central tendency, measures of variation, and normal distributions.	Homework, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams

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

Required Texts, Additional Reading, and Other Materials

1. Jeffrey O. Bennett and William L. Briggs, Using and Understanding Mathematics, Fifth Edition. ISBN# 9780321706065.
2. Scientific Calculator
3. Access to a computer with Internet Access

Course Requirements / Due Dates

1. **Module 1** (Chapters 2 – 3) homework assignments, critical thinking activities, and exam are to be completed by **Feb 10, 2014**.
2. **Module 2** (Chapters 4 – 5) homework assignments, critical thinking activities, and exam are to be completed by **Mar 10, 2014**.
3. **Module 3** (Chapters 6 – 7) homework assignments, critical thinking activities, and exam are to be completed by **Apr 14, 2014**.
4. **Module 4** (Chapters 1 and 8) homework assignments, critical thinking activities, and exam are to be completed by **May 5, 2014**.
5. The **Final** (Chapters 1 – 8) is to be completed by **May 9, 2014**.

Grading Policy

A student's grade is assessed by the following percentages earned from each of the categories below:

Category	% of Grade
Module Exams (4 @ 15%)	60%
Homework	15%
Comprehensive Final	15%
Critical Thinking Activities	10%
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

Attendance Policy

There is absolutely no requirement that you come to campus. You can communicate with me via email. All exams are timed and taken online.

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

Technical Requirements/Support

For minimum hardware/software requirements please see:
http://www.marshall.edu/muonline/hardwaresoftwarecheck.asp

- Be sure to run the free web browser tuneup: http://www.marshall.edu/muonline/support/tuneup.asp
- You will need to have several plugins (software) installed on your computer. These plugins 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/support/plugin.asp
- If you have technical problems, please go to the Help Desk:

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

TECHNICAL SUPPORT: Marshall University offers the following technical support for its students who take either traditional or online classes:

SERVICE DESK HOURS – Located in Drinko Library on the Main MU Campus
Monday - Thursday: 24 Hours
Friday: 8:00AM - 6:00PM
Saturday & Sunday: On Call Only (Calls received will be returned within 4 hours)

HELP DESK CONTACT INFO:
(304) 696-3200 Huntington calling area
(304) 746-1969 Charleston calling area
(877) 689-8638 Toll free, outside the Huntington/Charleston calling areas
http://www.marshall.edu/inforesources
itservicedesk@marshall.edu

NEED HELP WITH MyMathLab?

- Visit www.mymathlab.com/get-registered for:
  - Helpful videos
  - Frequently Asked Questions
  - System Requirements
  - Other Helpful "getting started" info.
- Or, visit their 24/7 Technical Support site at http://247pearsoned.custhelp.com.

Course Schedule

Week of	Suggested guideline as to what you should be working on during the week listed. Please complete in the order shown.
1/13	• Go to **Start Here** (on the left side of the screen) in Blackboard • Read the Syllabus, Schedule. • **Send the instructor an email indicating that you have successfully logged into the course and have read the syllabus.** • Read **MyMathLab Login Instructions** and log in to **MyMathLab. Explore!** • Read the **Prologue** in the textbook or eText • Read Section 2A in the textbook or eText • Read Section 2A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 2A Instructor Notes** (found under eText and Section Notes>Chapter 2) • Watch **Video on Conversion Factors** (in eText and Section Notes>Chapter 2>Section 2A) • Watch **Section 2A Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 2A Homework** (in **MyMathLab** under **Homework**)
1/20	• Read Section 2B in the textbook or eText • Read Section 2B material in **Students Study Guide and Solutions Manual** (found under eText

	and Section Notes) and **Section 2B Instructor Notes** (found under eText and Section Notes>Chapter 2) • Watch **Video on Metric System** (in eText and Section Notes>Chapter 2>Section 2B) • Watch **Section 2B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 2B Homework** (in **MyMathLab** under **Homework**) • Read Section 3A in the textbook or eText • Read Section 3A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes). • Watch **Section 3A Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 3A Homework** (in **MyMathLab** under **Homework**)
	• **Do: CT Assignment - Math Background Paper (found in Blackboard)**
1/27	• Read Section 3B in the textbook or eText • Read Section 3B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 3B Instructor Notes** (found under eText and Section Notes>Chapter 3) • Watch **Section 3B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 3B Homework** (in **MyMathLab** under **Homework**) • Read Section 3C in the textbook or eText • Read Section 3C material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 3C Instructor Notes** (found under eText and Section Notes>Chapter 3) • Watch **Section 3C Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 3C Homework** (in **MyMathLab** under **Homework**)
2/3	• **Do: CT Assignment - Chapter 3 Activity – Nuclear Fusion (info found in Blackboard)**
	• **Complete Module 1 Practice Exam (**under **Module Exams)** to determine if you've mastered the material. Note: This is just for practice, not for a grade. • **Module 1 Exam in MyMathLab** (under **Module Exams**)**, CT Activities and homework – due date Monday, February 10th at 11:59 p.m.**
2/10	• Read Section 4B in the textbook or eText • Read Section 4B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 4B Instructor Notes** (found under eText and Section Notes>Chapter 4) • Watch **Section 4B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 4B Homework** (in **MyMathLab** under **Homework**) • Read Section 4C in the textbook or eText • Read Section 4C material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 4C Instructor Notes** (found under eText and Section Notes>Chapter 4) • Watch **Section 4C Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 4C Homework** (in **MyMathLab** under **Homework**)
2/17	• Read Section 4D in the textbook or eText • Read Section 4D material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 4D Instructor Notes** (found under eText and Section Notes>Chapter 4)

	• Watch **Section 4D Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 4D Homework** (in **MyMathLab** under **Homework**) • Read Section 4E in the textbook or eText • Read Section 4E material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 4E Instructor Notes** (found under eText and Section Notes>Chapter 4) • Watch **Section 4E Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 4E Homework** (in **MyMathLab** under **Homework**)
2/24	• **Do: CT Assignment - Chapter 4 Activity – Dow Jones Industrial Average (info found in Blackboard)**
	• Read Section 5C in the textbook or eText • Read Section 5C material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 5C Instructor Notes** (found under eText and Section Notes>Chapter 5) • Watch **Section 5C Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 5C Homework**
3/3	• **Do: CT Assignment - Chapter 5 Activity – Cell Phones and Driving (info found in Blackboard)**
	• **Complete Module 2 Practice Exam (**under **Module Exams)** to determine if you've mastered the material. Note: This is just for practice, not for a grade. • **Module 2 Exam in MyMathLab (**under **Module Exams), CT Activities and homework - due date Monday, March 10th at 11:59 p.m.**
3/10	• Read Section 6A in the textbook or eText • Read Section 6A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 6A Instructor Notes** (found under eText and Section Notes>Chapter 6) • Watch **Video on Mean, Median and Mode** (found in eText and Section Notes>Chapter 6>Section 6A • Watch **Section 6A Media Homework**(in **MyMathLab** under **Homework**) • Complete **Section 6A Homework** (in **MyMathLab** under **Homework**) • Read Section 6B in the textbook or eText • Read Section 6B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 6B Instructor Notes** (found under eText and Section Notes>Chapter 6) • Watch **Section 6B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 6B Homework** (in **MyMathLab** under **Homework**)
3/17	• Spring Break – Enjoy!
3/24	• Read Section 6C • Read Section 6C material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 6C Instructor Notes** (found under eText and Section Notes>Chapter 6) • Watch **Video on Normal Distribution** (found in eText and Section Notes>Chapter 6>Section 6C) • Watch **Section 6C Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 6C Homework** (in **MyMathLab** under **Homework**) • Read Section 7A

	• Read Section 7A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 7A Instructor Notes** (found under eText and Section Notes>Chapter 7) • Watch **Video on Basic Probability** (in eText and Section Notes>Chapter 7>Section 7A) • Watch **Section 7A Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 7A Homework** (in **MyMathLab** under **Homework**)
3/31	• **Do: CT Assignment - Chapter 6 Activity – Computing Standard Deviation (info found in Blackboard**
	• Read Section 7B • Read Section 7B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 7B Instructor Notes** (found under eText and Section Notes>Chapter 7) • Watch **Video on Combining Probabilities – AND OR** (in eText and Section Notes>Chapter 7>Section 7B) • Watch **Section 7B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 7B Homework** (in **MyMathLab** under **Homework**) • Read Section 7E • Read Section 7E material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 7E Instructor Notes** (found under eText and Section Notes>Chapter 7) • Watch **Section 7E Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 7E Homework** (in **MyMathLab** under **Homework**)
4/7	• **Do: CT Assignment - Chapter 7 Activity – Project: Three Coin Experiment (found in Blackboard)**
	• **Complete Module 3 Practice Exam (**under **Module Exams)** to determine if you've mastered the material. Note: This is just for practice, not for a grade. • **Module 3 Exam in MyMathLab (**under **Module Exams), CT Activities and homework – due date Monday, April 14th at 11:59 p.m**
4/14	• Read Section 8A • Read Section 8A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 8A Instructor Notes** (found under eText and Section Notes>Chapter 8) • Watch **Section 8A Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 8A Homework** (in **MyMathLab** under **Homework**) • Read Section 8B • Read Section 8B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 8B Instructor Notes** (found under eText and Section Notes>Chapter 8) • Watch **Section 8B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 8B Homework** (in **MyMathLab** under **Homework**)
4/21	• Read Section 1A • Read Section 1A material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 1A Instructor Notes** (found under eText and Section Notes>Chapter 1) • Watch **Section 1A Media Homework** (in **MyMathLab** under **Homework**)

	• Complete **Section 1A Homework** (in **MyMathLab** under **Homework**) • Read Section 1B • Read Section 1B material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 1B Instructor Notes** (found under eText and Section Notes>Chapter 4) • Watch **Section 1B Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 1B Homework** (in **MyMathLab** under **Homework**)
4/28	• Read Section 1D • Read Section 1D material in **Students Study Guide and Solutions Manual** (found under eText and Section Notes) and **Section 1D Instructor Notes** (found under eText and Section Notes>Chapter 1) • Watch **Section 1D Media Homework** (in **MyMathLab** under **Homework**) • Complete **Section 1D Homework** (in **MyMathLab** under **Homework**)
	• **Complete Module 4 Practice Exam (**under **Module Exams)** to determine if you've mastered the material. Note: This is just for practice, not for a grade. • **Module 4 Exam in MyMathLab (**under **Module Exams) and homework – due date Monday, May 5th at 11:59 p.m. (Note: there are no CT Activities assigned in this module.)**
5/5	• **Final Exam must be completed by Friday, May 9th at 11:59 p.m.**