# Marshall University Syllabus

Course Title/Number	MTH 121B – 104 Concepts and Applications CRN: 3106
Semester/Year	Fall 2015
Days/Time	12:00 – 12:50 MTWR
Location	CH 436
Instructor	Laura L. Stapleton
Office	Smith Hall 720
Phone	304-696-4334
E-Mail	stapleto@marshall.edu
Office/Hours	1:00 – 2:00 M (in Smith Hall 620) and T (in Smith Hall 720)
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 <a href="http://www.marshall.edu/academic-affairs">www.marshall.edu/academic-affairs</a> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/?page_id=802">http://www.marshall.edu/academic-affairs</a>
	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 quantitative reasoning skills course for non-science majors, this course meets a Core I/Critical Thinking requirement and a Core II/Social Sciences requirement. Topics include logical thinking, problem solving strategies, beginning statistics and probability, exponential and logarithms modeling, formula use, with basic algebra review. 4 hrs. PR: ACT Math 17 - 18, OR permission of University College.

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, Group work, in-class discussions, 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, Group work, in-class discussions, 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, Group work, in-class discussions, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams
Students will interpret and analyze statistical studies.	Homework, Group work, in-class discussions, Chapter reviews, Critical thinking activities	Homework, Critical Thinking activities and exams

Students will analyze and interpret	Homework, Group work, in-class	Homework, Critical Thinking
statistical concepts such as measures	discussions, Chapter reviews, Critical	activities and exams
of central tendency, measures of	thinking activities	
variation, and normal distributions.		
Students will compare linear growth	Homework, Group work, in-class	Homework, Critical Thinking
and exponential growth rates and	discussions, Chapter reviews, Critical	activities and exams
their real-world applications.	thinking activities	
Students will demonstrate a	Homework, Group work, in-class	Homework, Critical Thinking
proficiency in the fundamentals of	discussions, Chapter reviews, Critical	activities and exams
probability including expected value.	thinking activities	
Students will demonstrate an ability to	Homework, Group work, in-class	Homework, Critical Thinking
analyze arguments and construct	discussions, Chapter reviews, Critical	activities and exams
fallacies.	thinking activities	

# **Required Texts, Additional Reading, and Other Materials**

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

### **Course Requirements / Due Dates**

- 1. Exam 1 (Chapters 2 3) week of September 21, 2015.
- 2. Exam 2 (Chapters 4 5) week of October 12, 2015.
- 3. Exam 3 (Chapters 6 7) week of November 9, 2015.
- 4. Module 4 (Chapters 1 and 8) week of November 30, 2015.
- 5. The Final (Chapters 1 8) is to be completed by December 11, 2015 at 10:15 12:15.

Note: All dates (except the Final) are tentative and subject to change.

#### Attendance Policy

**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. Unexcused absences from **four 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 (illness with a doctor's excuse, death in the family, university excused absence, etc.). Makeup exams will be given to students during the last week of the semester at the convenience of the instructor.

### **Grading Policy**

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

Each exam (**four in-class exams**) will be worth 12.5% of the semester grade. **Critical Thinking Activities** will be worth 10% of the semester grade. **Basic skills assessments** will count as 10% of the semester grade. **Online Homework** will count as 10% of the semester grade. **Attendance** will count as 5% of the semester grade. The **Final Exam** will count for 15% of the grade.

Category	% of Grade	
In-Class Exams	50%	
Online Homework	10%	
Attendance	5%	
Basic Skills Assessments	10%	
CT Activities	10%	
Comprehensive Final	15%	

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

90 – 100	=	Α
80 – 89	=	В
70 – 79	=	С
60 - 69	=	D
Below 59	=	F

**CRITICAL THINKING ACTIVITIES:** Students will complete various Critical Thinking (CT) Activities during the semester. Each project should contain at least two pages of text, along with any supporting tables and graphs. Students will submit a paper copy for hand grading AND possibly an electronic version to be checked for plagiarism.

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

**FINAL EXAM:** The final will be comprehensive and will be administered during exam week on Dec 11, 2015 at 10:15 am – 12:15 pm in our classroom.

**Online Homework:** You will complete homework in MyMathLab for each of the sections that we cover in class. The homework will have a due date and will need to be completed by that deadline. Failure to do so will result in a grade of 0 unless you have a valid excused absence. With an excused absence, you will be given three days to complete the late homework for full credit.

# **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 **NEED HELP WITH MyMathLab?** 

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

Week of:	Topic(s) Covered	Week of:	Topic(s) Covered
Aug 24	Syllabus Review, Basic Skills Material	Oct 19	6A, Statistics Review and
	and Quiz		Quiz, 6B
Aug 31	Fraction Review and Quiz	Oct 26	6C, 7A, Probability Review
			and Quiz
Sep 7	2A, 2B, Exponent Review and Quiz	Nov 2	7B, 7E
Sep 14	3A, 3B, Scientific Notation Review	Nov 9	Exam 3, 8A
	and <b>Quiz</b>		
Sep 21	3C, <b>Exam 1</b>	Nov 16	8B, Logarithm Review and
			<b>Quiz</b> , 1B
Sep 28	4B, Equation Review Material and	Nov 23	Thanksgiving Break – No
	Quiz, 4C		Classes
Oct 5	4D, 4E	Nov 30	Exam 4 and Review for Final
Oct 12	5C, <b>Exam 2</b>	On Dec 11	Final (10:15am – 12:15pm)

#### SCHEDULE (Subject to Change):