

**Marshall University  
Syllabus**

|                     |   |
|---------------------|---|
| Course Title/Number | <b>MTH 121 – 213 Concepts and Applications (Quantways) CRN: 4261</b>  |
| Semester/Year       | Spring 2014   |
| Days/Time           | 5:00 – 6:15 TR  |
| Location            | CH 436  |
| Instructor          | Laura L. Stapleton  |
| Office              | Smith Hall 311B   |
| Phone               | 304-696-4334  |
| E-Mail              | <a href="mailto:stapleto@marshall.edu">stapleto@marshall.edu</a>  |
| Office/Hours        | 10:00 – 11:00 MW; 1:00 – 2:00 T; 1:00 – 3:00 R  |
| 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 <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/?page_id=802</a><br><br>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.

| <b>Course Student Learning Outcomes</b>   | <b>How students will practice each outcome in this Course</b> | <b>How student achievement of each outcome will be assessed in this Course</b> |
|---|---|--|
| Students will solve real-world problems using unit analysis.  | Homework, Group work, in-class discussions, Chapter reviews   | Homework and exams   |
| Students will interpret and analyze numbers that they will encounter in the real world.   | Homework, Group work, in-class discussions, Chapter reviews   | Homework 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   | Homework and exams   |
| Students will interpret and analyze statistical studies.  | Homework, Group work, in-class discussions, Chapter reviews   | Homework and exams   |
| Students will analyze and interpret statistical concepts such as measures of central tendency, measures of                                      | Homework, Group work, in-class discussions, Chapter reviews   | Homework and exams   |

|  |   |                    |
|--|---|--------------------|
| variation, and normal distributions.   |   |                    |
| Students will compare linear growth and exponential growth rates and their real-world applications.  | Homework, Group work, in-class discussions, Chapter reviews | Homework and exams |
| Students will demonstrate a proficiency in the fundamentals of probability including expected value. | Homework, Group work, in-class discussions, Chapter reviews | Homework and exams |
| Students will demonstrate an ability to analyze arguments and construct fallacies.                   | Homework, Group work, in-class discussions, Chapter reviews | Homework and exams |

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

1. **TEXTBOOK COMPONENT:** The textbook is a free resource to you and will be provided during the first or second week.
2. Scientific Calculator
3. Notebook
4. Access to a computer with Internet Access

### Course Requirements / Due Dates

1. **Exam 1** (Chapters 2 – 3) week of **Feb 3, 2014**.
2. **Exam 2** (Chapters 4 – 5) week of **Mar 3, 2014**.
3. **Exam 3** (Chapters 6 – 7) week of **Apr 7, 2014**.
4. **Module 4** (Chapters 1 and 8) week of **Apr 28, 2014**.
5. The **Final** (Chapters 1 – 8) is to be completed by **May 5, 2014 at 5:00 pm – 7:00 pm**.

**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 **two classes** will result in a reduction of one letter grade for the semester; unexcused absences from **four or more** classes will result in an F.

To obtain an excused absence, please go to the Dean of Student Affairs 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 (with excused absences) 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 in each of the following categories:

| Category                      | % of Grade  |
|-------------------------------|-------------|
| In-Class Exams (4 @ 10% each) | 40%         |
| Comprehensive Final Exam      | 25%         |
| Online Homework Tool          | 25%         |
| Classroom Activities          | 5%          |
| Attendance/Participation      | 5%          |
| <b>Total:</b>                 | <b>100%</b> |

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 |

**QUANTWAY:** MyQuantway.org is a free online homework tool that we will use during the class. Students are required to have access to a computer and internet outside of class.

**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.

**CALCULATOR:** A calculator should be used only when you are instructed to do so. The TI-83/TI-83 plus or similar graphing calculator is recommended for students continuing into MTH 225 and other higher level courses. A scientific calculator is recommended for students continuing into MTH 121. Students may not utilize cell phones as calculators during tests.

**FINAL EXAM:** The final will be comprehensive and will be administered during exam week on Monday, May 5, 2014 at 5:00 pm – 7:00 pm.

## 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](http://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>

**SCHEDULE (Subject to Change):**

| <b>Week of:</b>            | <b>Tuesday</b>      | <b>Thursday</b>      |
|----------------------------|---------------------|----------------------|
| <b>Jan 13<sup>th</sup></b> | Syllabus, 5.1       | 5.2                  |
| <b>Jan 20<sup>th</sup></b> | 5.3                 | 5.4                  |
| <b>Jan 27<sup>th</sup></b> | 5.6                 | 5.7                  |
| <b>Feb 3<sup>rd</sup></b>  | 5.8                 | 5.9                  |
| <b>Feb 10<sup>th</sup></b> | 5.10                | <b>Module 5 Exam</b> |
| <b>Feb 17<sup>th</sup></b> | 6.1                 | 6.2                  |
| <b>Feb 24<sup>th</sup></b> | 6.3                 | 6.4                  |
| <b>Mar 3<sup>rd</sup></b>  | 6.6                 | 6.6                  |
| <b>Mar 10<sup>th</sup></b> | 6.7                 | 6.8                  |
| <b>Mar 17<sup>th</sup></b> | <b>Spring Break</b> |                      |
| <b>Mar 24<sup>th</sup></b> | 6.9                 | <b>Module 6 Exam</b> |
| <b>Mar 31<sup>st</sup></b> | 7.1, 7.2            | 7.2, 7.3             |
| <b>Apr 7<sup>th</sup></b>  | 7.3, 7.4            | 7.4, 7.6             |
| <b>Apr 14<sup>th</sup></b> | 7.7                 | <b>Module 7 Exam</b> |
| <b>Apr 21<sup>st</sup></b> | 8.1, 8.2            | 8.2, 8.3             |
| <b>Apr 28<sup>th</sup></b> | 8.3, 8.4            | <b>Module 8 Exam</b> |