

Marshall University
Syllabus

Course Title/Number	MTH 121B – 205 Concepts and Applications CRN: 3904
Semester/Year	Spring 2018
Days/Time	1:00 – 1:50 MTWR
Location	CH 436
Instructor	Laura L. Stapleton
Office	Smith Hall 720
Phone	304-696-4334
E-Mail	stapleto@marshall.edu
Office/Hours	2:00 pm – 3:00 pm MTWR
University Policies	By enrolling in this course, you agree to the University Policies listed at: http://www.marshall.edu/academic-affairs/?page_id=802
Disability Policy:	Marshall University is committed to equal opportunity education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disability Services (ODS) in Prichard Hall 117 (304.696.2467) to provide documentation of their disability. Following this, the ODS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experience, outside assignment, testing, and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, access the website for the Office of Disabled Student Services: http://www.marshall.edu/disabled .
Philosophy	To provide a supportive learning environment so that each learner can build on their strengths and to be an active participant in their own education. The success of my course depends directly on you recognizing that you are an indispensable part of every class session.

Course Description

Critical thinking course for non-science majors that develops quantitative reasoning skills. Topics include logical thinking, problem solving, linear modeling, statistics and probability, exponential and logarithmic modeling, and financial concepts.

This course carries a Critical Thinking (CT) designator and students who complete MTH 121 receive 4 hours of CT credit towards their general education requirements.

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 outcomes will be practiced:	How outcomes will be assessed:
Students will analyze real-world problems quantitatively, formulate plausible estimates, assess the validity of visual representations of quantitative information, and differentiate valid from questionable statistical conclusions. Students will apply the quantitative thinking skills that they learn to analyze problems dealing with finance and exponential growth and decay.	Interactive in-class lectures, homework, Group work, in-class discussions, Critical thinking activities	In-class quizzes, activities, exams, out of class homework assignments and Critical Thinking activities
Using metacognitive thinking , students will evaluate the effectiveness of their project plan or strategy to determine the degree of their improvement in knowledge and skills.	Interactive in-class lectures, homework, Group work, in-class discussions, Critical thinking activities	In-class quizzes, activities, exams, out of class homework assignments and Critical Thinking activities
When students apply integrative thinking , they will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations.	Interactive in-class lectures, homework, Group work, in-class discussions, Critical thinking activities	In-class quizzes, activities, exams, out of class homework assignments and Critical Thinking activities
Students will formulate focused questions and hypotheses, evaluate existing knowledge, collect and analyze data, and draw justifiable conclusions as they apply inquiry-based thinking .	Interactive in-class lectures, homework, Group work, in-class discussions, Critical thinking activities	In-class quizzes, activities, exams, out of class homework assignments and Critical Thinking activities
Students will demonstrate their communication fluency skills to present their research to specific audiences. Each student will work on short projects on a variety of topics to be determined by the instructor.	Interactive in-class lectures, homework, Group work, in-class discussions, Critical thinking activities	In-class quizzes, activities, exams, out of class homework assignments and Critical Thinking activities

Required Texts, Additional Reading, and Other Materials

1. Jeffrey O. Bennett and William L. Briggs, **Using and Understanding Mathematics**, Sixth Edition. ISBN# 9780321914620.
2. Students are required to be able to use a scientific or graphing calculator for the course.
3. Students will access supplemental course materials using MUOnline/Blackboard.
4. Access to a computer with Internet Access

ATTENDANCE: Students are expected to attend each class. Attendance is taken by a daily “sign-in” sheet. 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. Students must obtain a **University excused absences** in order to receive the opportunity to turn in work past the due date or take a make-up test. Missing assignments and tests will be recorded in the gradebook as a 0.

Students who miss one or two class periods can turn in the excuse directly to their instructor. If the absence is 3 or more days, 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 who have an excused absence for a test either outside of class time or during the last week of the semester at the convenience of the instructor.

CRITICAL THINKING ACTIVITIES: Students will complete Critical Thinking (CT) Activities focusing on their ability to synthesize Information Literacy with Quantitative thinking. Due dates will be announced. Students will submit a paper copy for hand grading AND possibly an electronic version to be checked for plagiarism.

BASIC SKILLS QUIZZES: Students will take 5 - 6 quizzes that focus on the mathematics required to understand the focus of each section. These include Basic Math, Fractions, Scientific Notation, Exponents, and Probability/Statistics.

IN-CLASS ACTIVITIES: Students will engage one another during class by completing worksheet activities that help them discover the concepts in each section.

HOMEWORK EXERCISES: Students will be assigned textbook problems that relate to the lecture and activity. We will review these at the beginning of the next class. Selected problems will be submitted on the day that you take each test. **You must show all of your work on the homework in order to receive credit.**

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

Category	% of Grade
In-Class Exams (4 at 12%)	48%
Attendance	7%
Basic Skills Quizzes	10%
CT Activities	10%
Activities/Homework	10%
Final	15%
Total	100%

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

90.00 – 100	=	A
80.00 – 89.99	=	B
70.00 – 79.99	=	C
60.00 – 69.99	=	D
Below 60.00	=	F

CLASSROOM ETIQUETTE: During class, cell phones must be turned off and out of sight. Please make the instructor aware ahead of time if you need access to these devices. 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.

EXAMS: Students will take four in-class exams covering approximately five - six sections each from the textbook. See the Calendar for approximate exam dates. You cannot use a cell phone calculator on exams/final.

FINAL EXAM: Students must take the MTH 121B Comprehensive Final Exam in order to complete the class and receive a letter grade. The final will be comprehensive and will be administered during exam week on May 4, 2018 at 12:45 am – 2:45 pm in our classroom.

Tutoring Facilities

- The Department of Mathematics offers a free tutoring lab for Marshall students enrolled in mathematics courses. The tutors can help with all classes up to MTH 231. No appointment is necessary; just stop in and ask for a tutor. The lab location and tutoring hours are:

Smith Hall 625: Monday through Thursday - 10am to 4pm and 5:00pm to 6:30pm. Friday - 10am to noon. The lab will open on the second week of classes, beginning August 28 and running through the end of the semester. The lab is not open during finals week.

- The University College Tutoring Center in the Communications Building (second floor Smith Hall) has tutors who are available for free, by appointment. Additional information can be found at <http://www.marshall.edu/wpmu/uc/tutoring-services>

Schedule of Course (All Dates are approximate and are subject to change)

Week	Week of:	Sections Covered
1	1/8/18	Basic Skill Quiz 1 Review, 2A, 2B
2	1/15/18	Fractions Quiz Review, 3A, 3B
3	1/22/18	Scientific Notation Quiz Review, 3C, 3D
4	1/29/18	Exponent Quiz Review, Exam 1 , CT #1, 4A
5	2/5/18	4B, 4C
6	2/12/18	4D, 4E
7	2/19/18	5C and Exam 2
8	2/26/18	6A, 6B, CT #2
9	3/5/18	6C, 7A
10	3/12/18	Statistics Quiz Review, 7B, 7C
11	3/19/18	Spring Break – No Classes
12	3/26/18	Probability Quiz Review, 7E
13	4/2/18	Exam 3 , 8A, 1A
14	4/9/18	1B, 1C
15	4/16/18	1D, and Exam 4
16	4/23/18	Review for Final
Finals Week	4/30/18	Final Exam – May 4th at 12:45 pm – 2:45 pm in CH 436