Marshall University
MTH 121B Syllabus

Course Title/Number	**Concepts and Applications of Mathematics with Algebra Review (CT)/MTH 121B**
Semester/Year	Fall/2017
Section/CRN	104/3099
Days/Time	MTWR/9:00 am – 9:50 am
Location	SH 334
Instructor	Alaa Elkadry
Office	ML 106
Phone	(304) 696-3047
E-Mail	elkadry@marshall.edu
Office/Hours	MW 10:00am – 11:30 am, TR 1:30 pm – 2:30 pm or by appointment.
University Policies	http://www.marshall.edu/academic-affairs/?page_id=802

Course Description: From Catalog

A quantitative reasoning skills course for non-science majors. Topics include logical thinking, problem solving strategies, beginning statistics and probability, exponential and logarithms modeling, formula use, with basic algebra review. **4 hrs**.

Required Texts, Additional Reading, and Other Materials

1. Using and Understanding Mathematics: A Quantitative Reasoning Approach by Jeffrey Bennett and William Briggs, 6th Ed.
2. Students will be required to create a critical thinking project using a **computer or other approved medium**.
3. Students are required to be able to use a **scientific or graphing calculator** for the course.
4. Students may access supplemental course materials using **MUOnline/Blackboard.**

Course Student Learning Outcomes	How students will practice in this Course	How students will be assessed in this Course
Students will show mastery of basic Algebra Skills.	interactive in-class lectures, group discussions, low-stakes writing, and out-of-class homework exercises and project rough drafts	quizzes, exams, and final project draft
Students will demonstrate an ability to analyze arguments and construct fallacies.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will solve real-world problems using unit analysis.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will interpret and analyze numbers that they will encounter in the real world.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will demonstrate a proficiency in utilizing formulas from basic financial concepts such as loan payments, credit cards, and mortgages.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will interpret and analyze statistical studies.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will create tables and graphs from statistical data.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will analyze and interpret statistical concepts such as measures of central tendency, measures of variation, and normal distributions.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will demonstrate a proficiency in the fundamentals of probability including expected value.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will compare linear growth and exponential growth rates and their real-world applications.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft
Students will apply techniques employing common logarithms to solve equations.	lecture and group discussions, low-stakes writing assignments and homework exercises, classroom activities and project rough drafts	quizzes, exams, and final project draft

Attendance Policy

Students are expected to attend each class. Only **University excused absences** warrant missed assignments to be turned in past the original due date or an opportunity to take a make-up test. Missing assignments and tests will be recorded in the gradebook as a 0.

Course Requirements / Due Dates

Skills Quizzes – Students will take 5 to 10 quizzes (time permitting) that focus on specific arithmetic and algebraic topics that are useful throughout the text. Quiz dates will be announced in class.

Activities/Homework – Students will complete in-class activities to engage that day's material, complete textbook problems that relate to the lecture/activity.

Critical Thinking Project – Students will complete a Critical Thinking Project focusing on their ability to synthesize Information Literacy with Quantitative Thinking and present their thoughts using Communication Fluency. See the Calendar for approximate draft due dates.

Semester Exams – Students will take four in-class exams covering about six sections each from the textbook. See the Calendar for approximate exam dates.

Final Exam - Students must take a comprehensive MTH 121B Final Exam to complete the course and receive a grade.

Grading Policy

Skills Quizzes	10%
In class Activities	10%
Project*** (rough and final drafts)	20%
Semester Exams (4 exams @ 10% each)	40%
Final Exam* (1 exam @ 20%)	20%
Total	100%

A student's final letter grade will be determined on the following scale:

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

*Students must take the MTH 121B Comprehensive Final Exam which is scheduled for Friday, December 15th, 2017 at 8:00 am – 10:00 am in SH 334.

***Students are required to submit an artifact before the end of the semester. More information will be provided.