

Marshall University MTH 160 (CT) Syllabus

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| Course Title/Number | Applied Mathematical Reasoning (CT) MTH 160 - Section 203 - CRN 4133 - Credits 5 |
| Semester/Year | Spring 2017 |
| Days/Time | MW 2:00 pm - 2:50 pm and TR 2:00 pm - 3:15 pm |
| Location | Smith Hall 509 |
| Instructor | Dr. JiYoon Jung |
| Office | Smith Hall 742D |
| Phone | (304) 696-3285 |
| E-Mail | jungj@marshall.edu |
| Office Hours | 12:45 - 02:00 pm on Mon Tue Wed Thu or by appointment I am always happy to answer questions or talk about the course material any time. Just send me an email or stop by my office, Smith Hall 742D. |
| Tutoring Services | In addition to office hours, there are three free tutoring options for students in Math 160. The math tutoring lab will be open this semester during the following hours: - Smith Music 115: Monday-Thursday 10am-4pm, Friday 10am-12noon - Smith Hall 620: Monday-Thursday 5:00pm-6:30pm http://www.marshall.edu/math/tutoringlab.asp . The University College offers appointment-based tutoring in in the Communications Building. Please consult their web page for additional information. http://www.marshall.edu/math/tutoringlab.asp . |
| 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 www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/ . Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Dismissal/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment |

Course Description: From Catalog

A critical thinking course in applied mathematical reasoning. Topics include logic, problem solving, linear modeling, beginning statistics and probability, exponential and logarithmic modeling, formula use.

PR: SAT Mathematics (Before Mar. 16) 460, or ACT Math 19, or SAT MATH SECTION SCORE 500, or MTH099, or MTH102, or MTH102B

Required Texts, Additional Reading, and Other Materials

- Applied Mathematical Reasoning, second edition, published by Cengage (ISBN: 978-1-305-75805-6)
- You should bring your calculator, paper, and a pen or pencil to every class meeting.
- Students are required to have a scientific or graphing calculator during the course.
- Students will be required to use Excel and Word. Microsoft Mathematics is optional.
- You must have internet access at your residence. Check your official MU email account daily.

MU Online: It is important to visit MU Online regularly for up-to-date information about the course. It hosts all the course materials including announcements, handouts, assignments, and reading materials. Although I will make my best effort to announce everything in class, it is your responsibility to keep up to date with assignments on MU Online.

Attendance Policy

Students are expected to attend each class. **Every three unexcused absences will be subject to a full letter downgrade until a student reaches an "F".** There will be no credit for the daily quiz you missed unless you have an excused absence. 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. Makeup exams will be given to students outside of class time at the convenience of the instructor.

Course policies

Cheating or plagiarism is a serious offense and will not be tolerated. It will be thoroughly investigated, and might lead to failure in the course or even to expulsion from the university. **If you are late to class,** if you leave class early, if you are disruptive, if you are sleeping, reading the newspaper, working on other homework, **surfing the internet** or for any other reason are not actively engaged in activities related to math class, **you will not receive credit for participating in class that day.** I expect that you will not only attend class, but that you will participate in class. If you do not respect yourself, other students, or the instructor during class, you may be asked to leave class.

Objectives of Course: The table below shows the following relationships: How each student learning outcome 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 |
|---|--|---|
| 1: Integrative Thinking: Students will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations. | Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews | Class Project |
| 2: Quantitative Thinking: 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. | Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews | In Class Exam based on Quizzes |
| 3: Inquiry Based Thinking: Students will formulate focused questions and hypotheses, evaluate existing knowledge, collect and analyze data, and draw justifiable conclusions. | Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews | In Class Exam based on Quizzes |
| 4: Metacognitive Thinking: Students will evaluate the effectiveness of a project plan or strategy to determine the degree of their improvement in knowledge and skills. | Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews | Class Project |
| 5. Communication Fluency: Students will develop cohesive oral, written, and visual communications tailored to specific audiences. | Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews | In Class Exam based on Quizzes |

Course Schedule/Course Requirements/Due Dates

January 09 – February 10: Sec. L 1.1 – 1.5, L 2.1 – 2.5, and L 3.1 – 3.6

February 13– March 17: Sec. A 1.1 – 1.4, A 2.1 – 2.3, A 3.1 – 3.5, A 4.1 – 4.6, and A 5.2

March 20– March 25: Spring Break – Classes dismissed

March 27– April 28: Sec. S 1.1 – 1.3, S 2.1 – 2.3, S 3.1 – 3.3, S 4.1 – 4.2, S 5.1 – 5.2, and S 6.1 – 6.4.

- **Exam 1** on Monday, January 30, 2016 from 02:00 until 02:50 pm
- **Logic Project** due on Monday, February 20, 2016 by 00:01 am
- **Exam 2** on Monday, February 20, 2016 from 02:00 until 02:50 pm
- **Algebra Project** due on Monday, March 13, 2016 by 00:01 am
- **Exam 3** on Monday, March 13, 2016 from 02:00 until 02:50 pm
- **Statistics Project** due on Monday, April 10, 2016 by 00:01 am
- **Exam 4** on Monday, April 10, 2016 from 02:00 until 02:50 pm
- **Final** on Monday, May 01, 2016 from 12:45 until 01:45 pm

Grading Policy

You will be able to obtain a maximum of 600 points in this class, divided as follows:

- Exams (400 points): There will be four in-class exams and one final exam (80 each). These exams will focus on the topics discussed in class and in the homework. **Homework will be assigned on MU Online after each lecture session.** You can bring questions about homework problems to class, office hours, or the tutoring lab. **The Final exam will be comprehensive.**
- Projects (100 points): There will be three projects (33 each) during the semester, one on each of the three main topics of the course. These projects will require you to write prose responses of a modest length (2 pages), and create additional documents using Excel. Detailed instructions will be provided for each project. The due dates are listed above. You will submit your projects electronically using MU Online, and **you will be required to upload one of your projects to a website for Marshall's quality review program.** More details will be given during the semester.
- Participation Quizzes (100 points): There will be five participation Quizzes (20 each). These daily quizzes will focus on the topics discussed in class. You will be graded on a credit / no-credit basis, with credit for completing the quiz with a reasonable effort.
- The **total number of points you earn** will be divided by the **total number of points possible** to determine your final percentage. At the end of the semester, your overall letter grade will be assigned on the following scale:
A: 90 – 100% B: 80 – 89% C: 70 – 79% D: 60 – 69% F: Below 60%