

Instructor: Brendan Healy

Email: healyb@uwm.edu

Office: E447 EMS

Office Hours: Monday and Wednesday, 9:30-11:00 am and by appointment

Course Meeting Times: Monday and Wednesday: 12:30 pm - 1:45 pm, PHY 230

Text: The Art of Proof, by Beck, Matthias and Geoghegan, Ross

Prerequisites: Math Placement Level 40, which is earned by any of the following: (a) Level 40 on Math Placement Test; (b) grade of C or better in Math 115; (c) grade of C or better in both Math 116 and Math 117; (d) grade of C or better in both Math 211 and Math 117; (e) grade of C or better in Math 116 and Level 36 on Math Placement Test; (f) grade of C or better in Math 211 and Level 36 on Math Placement Test; (g) grade of C or better in Math 117 and Level 35 on Math Placement Test; or (h) score of 61 or higher on the CLEP Precalculus Exam.

Note: you meet this requirement if you have taken Math 231.

Important Dates:

- Tuesday, January 21 First day of classes
- Monday, January 27 MathSci Department's last day to add a class
- Monday, February 3 University last day to add, last day to change to/from cr/no cr/audit status
- Monday, February 17 Last day to drop without a "W" (Withdrawn) on record
- Sunday, April 5 Last day to drop
- March 15-22 Spring Recess
- Thursday, May 7 Last day of classes
- Friday, May 8 Study day
- May 9 and 11-16 Final examination period

Academic Honesty: Any student found violating the University standards on academic honesty policy will receive discipline in accordance with University guidelines, up to and including an F in the course and possible expulsion. More information on these policies can be found at <http://uwm.edu/academicaaffairs/facultystaff/policies/academic-misconduct/>. This includes verbatim copied homework or solutions.

Attendance: Attendance in this class is considered mandatory. If you miss class, it is *your responsibility* to identify and make up any material you may have missed. Missed quizzes and exams will not be available for retake except in cases of religious observance, military service, or documented medical emergency.

Grading: Your course grade will be based on 3 factors: homework, class participation and attendance, and 'solution books'. Homework will consist of attempted proofs of propositions listed in the source material and other statements made in class. Collaboration is allowed, and indeed expected, for homework sets, though verbatim copying of other students work will not be accepted. Homework will be graded on a good faith effort basis, and not entirely on correctness. In-class participation consists of presenting ones proposed solutions to the class, as well as discussion and critiques of other student solutions. Solution books will be due periodically through the course (with exact dates depending on the speed at which the class works through the material), and are to be finalized and correct proofs of propositions from the class. These will be graded on both correctness and neatness - typing of solutions is encouraged, but not strictly required if neat handwriting is used. *Rough drafts will not be accepted.* A weight of 25% to the first and second items and 50% to the sum total of the solution books will comprise the final grade.

Incompletes: In order to qualify for a grade of “incomplete”, *all* of the following conditions must be met:

1. You are already passing the course with the work that has been completed.
2. You have only a ‘little’ work to be finished
3. You can give substantiation of unusual, non-academic circumstances beyond your control that have prevented you from completing the course on time.

Time Investment: This class assumes a significant investment of time spent outside of the class mastering the material. One should assume that in addition to the 3 hours a week in class, a *minimum* of the following hours per week is suggested: 2 hours studying the source material and other auxiliary materials, 4 hours attempting homework and preparing presentable mathematics, 2 hours on solution books (it is recommended that one prepares this while going through the material, and not all before the book is due). Including class time, this sums to 165 hours.

Other Important Points:

- The communication of mathematics is one of the primary goals of this class. For this reason, it is not only the written mathematics that carries a grade, but also its presentation and the constructive critique of other work in class.
- Students with disabilities or who have an Eligibility Letter/Student Accommodation Plan should contact me early in the semester to discuss the assistance they may need.
- Missed material will be allowed to be made up in the case of religious observance.
- Room changes and cancellations are valid only if posted outside the classroom door on Math Department letterhead and sent via email.
- Cell phone use is prohibited during class.
- Students attempting to repeat a Mathematical Sciences course for the second time (third taking) will need permission of the student’s academic deans’ office.
- Other important university policies can be found here:
<http://uwm.edu/secu/wp-content/uploads/sites/122/2016/12/Syllabus-Links.pdf>