

MTH 305 — FUNCTIONS AND CALCULUS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS

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Lectures: 1:00-2:20 Tue & Thus Ernst Bessey Hall 113

Office Hours: 2:30-3:30 Tue & Thus C318 Wells Hall
(subject to change) 9:00-10:00 Wed C318 Wells Hall

Zoom information: For the first three weeks of class (Jan 10-28) we will be meeting over Zoom.

<https://msu.zoom.us/j/92830141619>

Meeting ID: 928 3014 1619

Materials:

- (i) *Developing Essential Understanding of Functions* by Cooney, Beckmann, and Lloyd
- (ii) *The Art of Mathematics: Ideas of Calculus* by Fleron, Hotchkiss, and Renesse

The Art of Mathematics is a digital text available for download at:

<https://www.artofmathematics.org/books/ideas-of-calculus>

Course description: The primary goal of MTH 305 is to discuss functions and calculus needed for understanding connections between topics of calculus and the mathematics taught in middle school.

Prerequisites: Successful completion of MTH 304 or equivalent courses at another institution.

Attendance: All students are expected to attend and participate in each class, discussion session, and exam. A student who misses a class meeting is responsible for any assignments and/or announcements made.

Assessments: We will have 2 in class exams, a take home calculus review exam, a cumulative final exam, and weekly quizzes.

PARTICIPATION / GROUPWORK:	150 points
WEEKLY ACTIVITIES:	100 points
PROJECT:	150 points
QUIZZES:	100 points
TAKE HOME CALCULUS REVIEW EXAM:	100 points
2 IN-CLASS EXAMS, 100 POINTS EACH:	200 points
FINAL: MAY 4TH, 10:00 - 12:00	200 points

Attendance on these dates is compulsory; otherwise, a grade of zero will be recorded. Any student who has an excused, documented conflict with an exam time must inform their instructor **within the first two weeks of the semester** when possible. Late requests will either be denied or will result in an automatic deduction from the exam score.

Grades:

The following table gives a minimum grade for each score. For example, an overall score of 830 is guaranteed to earn at least a B grade.

Grade	A	A-	B+	B	B-	C+	C	C-	D
Score (total points)	930	900	870	830	800	770	730	700	600

Sources of help: All students are encouraged to come to *office hours* to discuss homework questions or material from class. If the advertised times do not suit you, please email me for an appointment.

Academic integrity: All students are expected to abide by the university's Conduct Code. Academic sanctions for dishonesty may include receiving an F in the assignment or receiving an F in the class. There may be additional administrative sanctions.

<https://ombud.msu.edu/resources-self-help/academic-integrity>

Classroom policies: Please refrain from using electronic items, including calculators, cell phones, music players, tablets, laptops, etc., during class, except for note-taking. Please arrive, be seated and ready to start each class on time. If you have a valid reason to leave early, please sit near the exit to minimize disruption.

Resource Center for Persons with Disabilities (RCPD): I am happy to work with you and the RCPD Program, if you need course accommodations due to a disability. RCPD is located in Bessey Hall (<https://www.rcpd.msu.edu/services>). All course modifications must be arranged through RCPD. You are encouraged to start this process as early as possible.