MATH 100-01, Introductory Seminar in Math (1 hour), Fall 2021
M 1:00-1:50pm, Academic Center 345

Instructor: Dr. Amy DeCelles

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Course Description: A topical seminar course for freshman mathematics and mathematics education majors. An overview of mathematics and its various branches, as well as the integration of the Christian faith with mathematics, are discussed.

Course Co-requisite: MATH 131 (Calculus I) must be taken with a grade of C- or better.

Course Materials and Resources:

- Ian Stewart, *Letters to a Young Mathematician*, Basic Books, ISBN 0-465-08231-9

- Hal Hellman, *Great Feuds in Mathematics*, Wiley Publishing, ISBN 0-471-64877-9

- James Bradley and Russel Howell, *Mathematics Through the Eyes of Faith*, ISBN 978-0-06-202447-3

- Selected articles to read or videos to watch will be posted on Canvas.

Course Objectives: Upon successful completion of this course, students will be able to articulate answers to the following questions:

- What is mathematics?

- What are the different areas of math?

- How are math and the Christian faith related, if at all?

- What is my mission and what role does math play in that mission? How can a formative mission statement deliver clarity on a potential career?

These objectives correspond to the program learning objectives M5, M6, ME5, ME6.

Course Structure: This course is designed to help you move beyond superficial answers to the four questions mentioned above, in order to articulate well-considered and sincere convictions, which will guide you as you make decisions in the future. This class is a seminar, which means that our class meetings will consist primarily of discussion, rather than lecture or other activities. The assigned readings and reading questions will help you prepare for class discussion. To hear more perspectives on the four main questions, you will interview people with expertise in mathematics or related fields, e.g. other faculty, working professionals, and/or upper-division students. You will also write about each of the four questions and prepare a resume for a job that interests you. I recommend that you start thinking about what type of job you are interested in

and how you would prepare a resume for that position. The due dates for assignments are on the course schedule; detailed instructions for each assignments will be provided later in the semester.

Attendance: Attendance in class is expected, and a portion of the final grade comes from preparation for and participation in class. Absences for official university functions will be excused, provided that the instructor is notified in advance. Absences due to qualifying family or medical emergencies will also be excused, though the instructor reserves the right to ask for verification. In the case of an excused absence, it is the student's responsibility to contact the instructor in a timely fashion and, if desired, make arrangements for an assignment to compensate for the missed discussion participation.

Late Work: Late work is typically not accepted. The lowest reading questions/discussion score will be dropped at the end of the semester. Extensions on other assignments may be granted if requested before the due date, and work may certainly be submitted before the due date, if arrangements have been made with the professor in advance.

Final Course Grade: The overall score for this course will be computed as outlined below.

- Preparation and Discussion (10%): reading questions, discussion participation

- Projects (80%): four projects, equally weighted

- Resume and Career Research (10%)

Final letter grades will be determined from the overall score as follows:

A	93-100	B+	87-89	B-	80-82	C	73-76	D+	67-69	D-	60-62
A-	90-92	B	83-86	C+	77-79	C-	70-72	D	63-66	F	0-59

Learning Commons: Located on the lower level of the Miller/Moore Academic Center (AC), the Learning Commons offers in-person and online tutoring services to all Bethel students, including help with any sort of writing projects, from conception to completion. Tutors are trained to give thoughtful feedback and advice on a variety of study skills, understanding concepts pertaining to relevant coursework, and overall writing concerns.

DEI: Bethel University respects the dignity of all God's image-bearers, and stands against racism, prejudice, and discrimination. Because Christ calls us to love our neighbor as ourselves, Christian discipleship includes pursuing the good of those who suffer injustice due to their color, race, or ethnicity. Therefore, we aim to continually transform our classrooms into safe and hospitable spaces where we listen to one another with mercy, learn from and value each other with tenacity, and commit to pursuing justice for the most vulnerable in our community.

Accessibility and Accommodations: Bethel University strives to make learning experiences accessible to all participants. If you anticipate or experience physical or academic barriers based on disability, please contact the Center for Academic Success to discuss options. To schedule an appointment, email `rachel.kennedy@betheluniversity.edu` or call 574-807-7460.

Academic Dishonesty: The student handbook (p. 156) states: "Any act of deceit, falsehood or stealing by unethically copying or using someone else's work in an academic situation is strictly prohibited.

1. A student found guilty of plagiarism or cheating will receive an "F" (zero) for that particular paper, assignment or exam. Should this occur, the professor will have an interview with the student and will submit a written report of the incident to the academic dean.

2. If a second offense should occur, the student will be asked to appear before the professor, the academic dean and the vice president for student development.

The student should realize that at this point continuation in a course and even his/her academic career may be in jeopardy. In the event of a recommendation for dismissal, the matter shall be referred to the Student Development Committee."

Cell Phones: Cell phones must be turned off and stowed in book bags during class. Any student using a cell phone for any reason (without permission) will be asked to leave the class and an unexcused absence will be recorded. Students using cell phones during exams or graded activities may be cited for cheating (at professor's discretion). In the case of expected emergencies, students may seek permission from the professor to leave their cell phones on during class, but the phone must remain in the book bag. Professors reserve the right to have operational cell phones in class.

Covid-19: Students are expected to follow current Bethel University policies (e.g. re: masking); students not in compliance may be asked to leave the classroom and be recorded as absent.

Disclaimer: This syllabus is not a legal contract, but serves as a general outline for the semester. The professor reserves the right to announce in advance necessary adjustments to the course as the need arises.

Tentative Schedule *No class on Mon Sep 6, Labor Day.*

Class Date	Topic	Assignments Due
Aug 23	Syllabus, Introduction	None
Aug 30	What is math?	Read "Letters," Ch. 1-7.
Sep 13	Mathematical Subjects: Analysis	Read "Feuds," Ch. 3.
Sep 20	Mathematical Subjects: Algebra	Read "Feuds," Ch. 1.
		Rough draft for Project 1 due.
Sep 27	Mathematical Subjects: Geometry	Read "Feuds," Ch. 2.
		Project 1 due.
Oct 4	Mathematical Subjects: Logic & Foundations	Read "Feuds," Ch. 6.
Oct 11	Mathematical Subjects: Statistics	Read article (posted online).
Oct 18	Mathematical Subjects: Applied Math	Read "Feuds," Ch. 5.
Oct 25	Mathematical Subjects: Other	Read "Feuds," Ch. 10.
		Rough draft for Project 2 due.
Nov 1	Academics, Careers, and God's Kingdom	Read MTTEOF, Ch. 1-3
		Project 2 due.
		Math jobs research due.
Nov 8	Faith/Math Integration	Rough draft of resume due.
Nov 15	Faith/Math Integration	Read MTTEOF Ch. 4.
		Interviews with students, profs.
Nov 22	Personal Mission	Project 3 due.
Nov 29	Conclusions	Project 4 and resume due.