

Nebraska Wesleyan University
Math 4980: Senior Seminar
Spring 02019

Instructor: Austin Mohr
Text: A Walk Through Combinatorics
Third Edition
Mikós Bóna
Website: AustinMohr.com/seminar
Time: WF 3:00 pm - 4:15 pm
Room: Olin 110
Office: Olin 109D
Office Hours: MWF 2:00 pm – 3:00 pm (or by appointment)
Email: amohr@nebrwesleyan.edu
Cell: 803-543-8735
Drop Deadline: Friday, March 29 at 5:00 pm
Final Exam: Thursday, May 9 at 2:00 pm

Course Description

We will practice speaking and writing about advanced mathematics through fundamental ideas in combinatorics. Speaking projects include mini-lectures and a conference-style presentation. Writing projects include homework proofs and a guided research paper.

Grading Scale

Grade cutoffs for A, B, C, and D are 90%, 80%, 70%, and 60%, respectively. The additional “+” and “-” grades will be awarded according to the following example: B+ (87-89%), B (83-86%), B- (80-82%).

Assignments

Daily Preparation	1 point total	~ 8% overall grade total
Drafts and Critiques	1 point total	~ 8% overall grade total
Board Presentations	1 point each (two presentations total)	~ 8% overall grade each
Conference Presentation	3 points	~ 25% overall grade
Homework	1 point each (two assignments total)	~ 8% overall grade each
Paper	3 points	~ 25% overall grade

Daily Preparation

Before most meetings, you will be expected to complete a short reading and/or writing assignment. These are graded pass-fail based on your willingness to attempt them (not on correctness). For exercises that you cannot complete, you should instead write specific questions to ask during our meeting that will help you improve your understanding. Allow yourself one hour for each daily preparation. Once you have reached that point, write down your remaining thoughts and stop for the day. You may completely skip up to three daily preparations without negatively affecting your grade.

Drafts and Critiques

You will be given a “pass” each time you submit a homework draft on time, submit a homework critique on time, or come prepared to an individual final paper meeting. Your overall participation score is the percent of “passes”.

Presentations

Board presentations are short (10 – 15 minutes) in-class lectures chosen from a list of available topics. For the conference presentation, you will explore a topic in combinatorics not covered during the course and develop a 15 – 20 minute summary of your findings. You will meet several times individually with the professor for guidance in constructing the presentation. A first draft will be delivered at the Doane Symposium on Undergraduate Mathematics. The final graded draft will be delivered at the Nebraska Wesleyan Student Symposium.

Homework

Homework assignments consist of writing proofs for four propositions chosen from the course material. A draft of the proofs must be submitted for professor and peer review. The drafts are then revised to incorporate feedback and resubmitted for final grading.

Paper

The final paper is written treatment of the topic chosen for the conference presentation. It will achieve greater depth by providing details that were too technical for the conference setting. You will meet several times individually with the professor for guidance in constructing the paper. A rough draft will be submitted for professor and peer review. The draft will then be revised to incorporate feedback and resubmitted for final grading.

Accommodations

Nebraska Wesleyan University seeks to maintain a supportive academic environment for students with disabilities. To ensure their equal access to all educational programs, activities, and services, federal law requires that students with disabilities notify the university, provide documentation, and request reasonable accommodations. If you need accommodation in this course, please notify me so that I can verify that the required documentation is filed with the Academic Affairs Office and that your accommodation plan is in place. You should also meet with Prof. Sandy McBride, the Services for Students with Disabilities Coordinator (Old Main 126, 465-2346, smcbride@nebrwesleyan.edu).

Academic Integrity

Academic integrity is one of the basic principles of a university community. Nebraska Wesleyan University encourages and expects the highest standards of academic honesty from all students. The Student Code of Conduct states that “cheating, plagiarism, or other forms of academic dishonesty” are subject to disciplinary action. Refer to the Student Code of Conduct for additional information. Academically dishonest students may receive penalties up to and including receiving an F in the course.

Title IX Resources

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a reporting responsibility under The Title IX Educational Act of 1972, which prohibits violence, harassment, and discrimination based on sex and gender. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, for the sake of NWU students safety and welfare, I am required to share information regarding sexual misconduct or information about a crime that may have occurred on NWUs campus with Title IX coordinator or Deputy Title IX Coordinator. Confidential assistance is also available for students. If you or someone you know has been harassed, assaulted, or discriminated against because of sex or gender, the following resources are available:

On-Campus Confidential Resources

- Campus Victim Advocate: Lindsay Spaulding (lindsay@voicesofhopelincoln.org or 402.465.2533)
- Campus Minister: Eduardo Bousson (ebousson@nebrwesleyan.edu)
- Counseling Center: 402.465.2224

Off-Campus Confidential Resources

- 24-hour Crisis Line 402.475.7273
- Voices of Hope (Relationship violence, sexual assault, and abuse support center) 2545 N Street; Lincoln, NE 68510; Office: 402.476.2110

Title IX Resources

- Title IX coordinator: T.J. McDowell (tmcdowe2@nebrwesleyan.edu or 402.465.2149)
- Deputy Title IX Coordinator: Dr. Susan L. Wortmann (swortman@nebrwesleyan.edu or 402.465.2305)