# **Discrete Math**

# MATH2200 401

## **Course Description**

Fundamentals of logic, set theory, order, relations, functions. Elementary number theory, modular arithmetic. Combinatorics; counting permutations, generating functions, matrix operations. Basic algebraic structures; groups, rings. Discrete probability. Introduction to graphy theory, trees, search optimization problems. Boolean algebra.

Pre-Requisite: Within the last year, MATH 1220 w/C grade or better or instructor permission.

Semester: Fall & Spring

### **Course Prerequisites**

MATH 1220 w/C grade or better (recommended within last year) or instructor permission

## **Communication Plan**

I will respond to email within within 24 hours.

I will offer feedback on exams within 1 week and homework within 2 weeks.

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

#### **Required Text or Materials**

Title: Mathematical Proofs Subtitle: A Transition to Advanced Mathematics Authors: Chartrand, et al.

#### Edition: Fourth Edition

For more information on textbook accessibility, contact Accessibility & Disability Services at <u>ads@slcc.edu</u>.

#### Brief Description of Assignments/Exams

**Homework:** The main goal of the homework assignments is to assure you are making a legitimate attempt to learn and practice the material. Each assignment will be out of 10 possible points based on effort and completeness. All appropriate work must be shown on homework. Assignments will be accepted up to one class meeting late with a 1-point penalty and a 2-point penalty after that.

**Regular Exams:** There will be four in-class examinations (not including the final). Your lowest exam grade will be dropped. You will not only be graded on whether you arrive at the right answer, but on all steps as well. You must show all appropriate work and justification.

**Final Exam:** The final exam will follow the same guideline as the regular exams, but will be cumulative.

- Homework 15%
- Regular Exams 60% (20% each)
- Final Exam 25%

#### Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Exam 1	Assignment	100
	<u>Exam 1 Review</u> <u>Materials</u>	Assignment	
	Exam 2	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	<u>Exam 2 Review</u> <u>Materials</u>	Assignment	
	Exam 3	Assignment	100
	<u>Exam 3 Review</u> <u>Materials</u>	Assignment	
	Exam 4	Assignment	100
	<u>Exam 4 Review</u> <u>Materials</u>	Assignment	
	Final Exam	Assignment	100
	Final Review Materials	Assignment	
	Homework 3	Assignment	10
	Homework 4	Assignment	10
9/10	Homework 1	Assignment	10
10/8	Homework 2	Assignment	10

## Grading Scale

- A 93 100 % C 73 76 %
- A- 90 92 % C- 70 72 %
- B+ 87 89 % D+ 67 69 %
- $\mathsf{B}\; 83 86\;\% \qquad \mathsf{D}\; 63 66\;\%$
- B- 80 82 % D- 60 62 %
- C+ 77 79 % E 0 59 %

#### **Institutional Policies**

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>

## Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

## Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <u>https://slcc.instructure.com/courses/530981/pages/institutional-</u>

<u>syllabus</u>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

#### Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar