Syllabus

Introduction to Discrete Mathematics
MATH A261
Fall 2019

When, Where, Who

Class Times	Monday and Wednesday 11:30 a.m. - 12:45 p.m.
Classroom	SSB 251
Instructor	Dr. Mark Fitch
Office	SSB 154P
Office Hours	Monday-Thursday 10:00-11:15 a.m. See http://www.math.uaa.alaska.edu/~afmaf/classes for additional available times.
Phone	786-1656
Email	mafitch@alaska.edu
Online	All class materials can be found on Blackboard at http://blackboard.uaa.alaska.edu/. If Blackboard is not accessible the materials may also be found at http://www.math.uaa.alaska.edu/~afmaf/classes/.

Resources

Textbook	*Discrete Mathematics and Its Applications* 7th edition by Kenneth Rosen (required) Other editions may be accepted, check before purchasing.
Web access	You may find it useful to have a laptop or other device in class for accessing Blackboard and displaying PDF files.
Resources	Office hours: come by at your convenience or send email any time.

Content and Goals

Topics	The course covers concepts of discrete mathematics including graph theory, enumeration, and relations along with prerequisite topics including sets, logic, and mathematical proof.
Outcomes	By the end of the appropriate sections you should be able to • Read and understand definitions, statements of theorems, and simple proofs • Identify and use appropriate models for discrete phenomena • Identify properties of graphs, evaluate simple counts, and identify properties of relations.

Instruction

Daily Lesson	Purpose	During class the instructor will guide you in groups through problems that illustrate and explain the material. Students may present their results, and the instructor will confirm your conclusions and summarize material. Additional time will be used to practice skills. The in-class materials are available before class.
	Assignment	Read the in-class assignment before class noting definitions and ensure you understand the initial questions. The materials are found online on Blackboard. Related sections in the book will be noted, though you are

		not required to read those sections before class. In class ask for clarification on questions and work with your group to solve the problems.
	Due	Reading must be completed by the beginning of class.
	Feedback	Questions on the lesson will be addressed during class.
	Grading	Your group's work and presentation will be graded for completeness and presentation. Additional points are possible for correctly discovering concepts and connections.
Practice	Purpose	Problems from the textbook and from the instructor provide the opportunity to practice skills. Note that exam questions are written by the instructor and will therefore look more like problems worked in class than those in the textbook.
	Assignment	Complete the problems assigned on Blackboard. Questions on practice problems can be asked during office hours or asked by email.
	Due	Homework is due at the beginning of class on the due date.
	Feedback	Selected problems will be graded based for accuracy and presentation. At the end of the semester an allowance will be made for missed homework.
Quizzes	Purpose	Quizzes check your grasp of the material and therefore provide you with feedback on your progress. They typically require recognition of patterns, not necessarily identical in appearance to homework problems. They may also point out nuances.
	Assignment	At the beginning of some class periods a short (approximately 5 minute) quiz over recent material will be given.
	Feedback	If incorrect, the first, major wrong step in a problem will be noted with a note about the correct step if possible.
	Grading	Your work will be graded for accuracy and presentation. At the end of the semester an allowance will be made for missed quizzes.
Exams	Purpose	Exams provide you with an opportunity to demonstrate your mastery of mechanical skills and your understanding of the concepts. The latter are weighted more heavily in the grading.
	Assignment	Exams will be given on the dates specified on Blackboard or at http://www.math.uaa.alaska.edu/~afmaf/classes/math261/schedule.html.
	Feedback	If incorrect, the first, major wrong step in a problem will be noted with a note about the correct step if possible. Grading symbols, explained online, will be used to identify error types. Full solutions will be provided in an answer key posted on Blackboard.
	Grading	Your work will be graded for accuracy and presentation.

Evaluation

Grading

Your grade will reflect your knowledge of the topics, your ability to work problems, and your grasp of the concepts. Communicating correctly is as important as remembering and solving. Specific criteria are provided below and with individual assignments as required.

Your grasp of topics at the end of the semester must be sufficient to move on to other courses and use the material in life. As a result, your grade will be split into two portions. The first are points accrued from daily work such as lessons and homework. This accounts for 20% of your grade.

The second will be accrued from problems on exams. This accounts for 80% of your grade. To pass the course you must accrue 70% of the points in each of the categories: graph theory, enumeration, relations, sets, logic, and proofs. A detailed list of topics and points will be provided.

Each exam will have problems from every category covered prior to that time. If you have already earned enough points in a category you will not need to attempt problems from that category in later exams.

Assessments

Quizzes, Lessons, Practice	20%
Exams	80%

The final exam will be on December 11th from 10:00 a.m. - 12:45 p.m.

Please contact me directly with any concerns or specific needs you have. Please contact Disability Support Services (DSS) to arrange for disability related accommodations. The DSS office is in Rasmuson Hall 112. Their phone number and e-mail address are available on their website, at www.uaa.alaska.edu/dss.

Scale

A	90-100	Grades of C or higher indicate preparedness to progress
B	80-89	to courses for which this is a prerequisite. A grade of B or
C	70-79	higher indicates an ability to explain procedures. A grade
D	60-69	of A indicates the ability to extrapolate from these skills to
F	0-59	solve related problems.

Policies

Instructions / Clarification

If you do not understand any instruction or a question, please ask before the work is due. You will need to provide a specific description of the difficulty. Instructors cannot read your mind.

Corrections

If you discover a mistake in any graded work, please bring it to the attention of the instructor as soon as possible.

Attendance

Daily attendance is vital to success in this course. Because the instruction involves work in groups and explanations during class and some material is not covered in the textbook nor online materials, missing class means missing some material.

If you will be required to miss class for university business, including but not limited to athletics, music, or debate, please inform the instructor at the beginning of the semester or session.

Failure to attend for more than 4 class periods may be regarded as withdrawal and a faculty initiated withdrawal may be processed. Attendance is recorded by submission of daily work. Should the last date of your class attendance be required, it will be determined by the last date of any material submitted by you for recording in the class grade record. If you have evidence that your date of last attendance is otherwise, you must inform your instructor of such prior to the assignment of your final grade. The date of last attendance may impact financial aid.

Most graded assignments are returned at the beginning of class. If you miss this, you will need to come to the instructor's office to obtain the assignment. All assignments not collected by the final exam will be destroyed as required by FERPA.

Late Work

Lessons, homework, and quizzes not turned in on time receive no credit.

Please arrange excused absences for exams before the exam if possible. If you cannot make arrangements before the exam, then you will have to earn points on the remaining exams. If the university is closed for an emergency on an exam day, the exam will be given the next class session.

Courtesy

Courtesy in the classroom is important for learning. Remember students and instructors come from varied cultures and backgrounds: be mindful of others and patient with others as you interact.

Academic Honesty

Use of any communication device during an assessment is prohibited. The instructor will note when accessing the internet, calculation devices or other technology is needed for class. Audio devices may not be worn during any assessment.

Students are expected to know and follow the Student Code of Conduct (https://www.uaa.alaska.edu/students/dean-of-students/student-conduct/code.cshtml). If the instructor has reason to believe that plagiarism, cheating, or academic dishonesty, as defined in the Student Code of Conduct, has occurred, the matter will be referred to the Office of the Dean of Students. If there is a finding from the Dean of Students that plagiarism, cheating, or academic dishonesty has occurred, the student will receive a grade of zero for that assignment.

Non-Academic Assistance

The mission of the UAA CARE Team is to promote a safe and productive learning, living and working environment by addressing the needs of students. If you, or someone you know, needs support, is distressed, or exhibits concerning behavior, help by making a referral to the CARE Team. Contact the CARE Team by: filling out a referral on http://www.uaa.alaska.edu/CareTeam; E-mail your concern to Care@uaa.alaska.edu; or call the Care Team phone number: 786-6065; if an emergency—call UPD or 911.