

Math 243: Discrete Mathematics in Computer Science

Spring 2014, Class Number 82775

Instructor	Andrew Gillette agillette@math.arizona.edu Office: Mathematics 516 Office Phone: 520-621-6888 (no voicemail) Office Hours: Will be posted on website. Always available by appointment.																																				
Class Website	http://math.arizona.edu/~agillette/teaching/s14.html																																				
Class Times	MWF 1-2pm in Psych 204																																				
Exam Dates	Quiz: Feb 7, Mar 14, Apr 18. Test: Feb 21, Apr 4, May 2. Final: Monday May 12, 1-3pm																																				
Required Materials	<ul style="list-style-type: none">• “Discrete Mathematics” by Ross and Wright, 5th ed.• “Book of Proof” by Richard Hammack, available in digital format for free from http://www.people.vcu.edu/~rhammack/BookOfProof/																																				
Course Topics	Graphs and networks; set theory, logic, discrete structures; induction and recursion; techniques of proof. Course calendar on class website.																																				
Prerequisites	Concurrent registration in Math 129 or Math 250A.																																				
Grading Policy	<p>You can earn up to 1000 points in this course based on the rubric below. Grades will be determined by the number of points you accrue and will be set no lower than this:</p> <table><thead><tr><th></th><th>points</th><th>percent</th><th></th><th>points</th><th>percent</th></tr></thead><tbody><tr><td>participation</td><td>100</td><td>10%</td><td>A</td><td>900 - 1000</td><td>90 - 100%</td></tr><tr><td>homework</td><td>300</td><td>30%</td><td>B</td><td>800 - 899</td><td>80 - 90%</td></tr><tr><td>quizzes</td><td>150</td><td>15%</td><td>C</td><td>700 - 799</td><td>70 - 80%</td></tr><tr><td>tests</td><td>300</td><td>30%</td><td>D</td><td>600 - 699</td><td>60 - 70%</td></tr><tr><td>final</td><td>150</td><td>15%</td><td>E</td><td>0 - 599</td><td>0 - 60%</td></tr></tbody></table>		points	percent		points	percent	participation	100	10%	A	900 - 1000	90 - 100%	homework	300	30%	B	800 - 899	80 - 90%	quizzes	150	15%	C	700 - 799	70 - 80%	tests	300	30%	D	600 - 699	60 - 70%	final	150	15%	E	0 - 599	0 - 60%
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Exams	There will be three quizzes and three tests, administered during regular class time. Quizzes will take up <i>part</i> of a class period; tests will take up the entire class period.																																				
Missed exams	In general, if you miss an exam, you will receive a grade of 0 for that exam. However, in complex and unusual circumstances that are beyond your control, a make-up exam may be given on a case-by-case basis. This will require providing a detailed account of the situation and supporting documents. Approval in these cases is at the sole discretion of the instructor and/or the Dean of Students.																																				
Final	The final will be held Monday May 12 from 1-3pm in a room to be announced. It will cover all material in the course. Final policies will be posted on the class website before the exam.																																				

Group Work

You will be assigned to a group of 3 or 4 students starting the second week of class. During class, you should always sit with your group. When working on a problem as a group, everyone in the group must agree on the answer before moving on to the next problem. Be courteous and respectful to your group members as part of your grade depends on your collective effort. Groups will be reassigned after each test. If you have concerns about your group assignment, please let me know.

Written Homework

Written homework will be due almost every class day, always at the **beginning of class**. Groups will start work on homework problems (for the next class day) during class and complete the homework outside of class. Each group should turn in **one** assignment that was hand written or typeset completely by **one** member of the group.

Half of your homework grade (150 points) will be determined by the average of the scores of the submissions that your **group** prepares. The other half of your homework grade (150 points) will be determined by the average of the scores of the submissions that **you** prepare.

It is your responsibility to ensure that you write at least 7 homework assignments over the course of the semester with at least 2 before each test. Assignments, due dates, and additional policies will be posted on the class website.

Piazza

Piazza is an online discussion forum that allows you to ask questions using mathematical symbols and expressions. In the first week of class, you will receive an email inviting you to join the Piazza page for our course. Whenever you have a question about the course material, post it first to Piazza. You can ask questions about the homework such as “What does the term ‘cycle’ mean in question 4?” but you cannot ask simply “How do you do question 4?” Likewise, you are encouraged to respond to questions posted by your classmates, but you should avoid giving complete answers to homework problems.

Participation

The participation portion of your grade (100 points) will be based both on your activities in class and on Piazza. Daily class participation will be rated according to the following rubric:

- ✓+ Interacted with other students, participated in discussion, and asked / answered questions.
- ✓ Interacted with other students, but did not participate in discussion or ask / answer questions.
- ✓− Did not interact with others, participate in discussion, or ask / answer questions.

Your participation on Piazza will be rated according to the following rubric:

- ✓+ Regularly (at least once per week) posts constructive questions to Piazza or provides thoughtful replies to others’ posts.
- ✓ Occasionally posts constructive questions / replies to Piazza.
- ✓− Does not contribute constructively to Piazza discussions.

There is no penalty for posting something to Piazza that turns out to be incorrect, just like there is no penalty in class for giving an incorrect answer to a question. Mistakes are part of learning!

Panda Grader	Your exams will be graded with the assistance of an online service called PandaGrader. In the second or third week of class, you will receive an email inviting you to sign up for an account through PandaGrader. You must complete the enrollment process before the first quiz (Feb 7). There is no fee for the service; more information will be provided later. Any feedback, positive or negative, about PandaGrader is appreciated!
Academic Integrity	<p>The guiding principle of academic integrity is that a student's submitted work must be the student's own. Since your homework assignments are collaborative in nature, you are allowed and encouraged to submit homework based on discussions with your group members. Copying work during quizzes, tests, or as a Piazza submission, however, is considered cheating and violates the Student Code of Conduct and the Code of Academic Integrity. Students caught cheating will face an administrative sanction which may include suspension or expulsion from the university.</p> <p>If you feel that you are not on track to receive the grade you deserve, please contact me in person or by email before it becomes a larger issue.</p>
Cel Phones, Laptops, etc	Usually I will not allow the use of electronic devices of any kind during class. If you have a truly essential text, tweet, or post, please step outside of the classroom.
Attendance	Students are expected to attend every scheduled class and to be familiar with the University Class Attendance policy as it appears in the General Catalog. If you miss the first two class meetings or have 3 or more absences in the first month of the course, you may be administratively dropped. Please communicate with me in advance if you know you will have to miss any class, especially an exam.
Accommodation	If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If additional accommodations are necessary, you will need to register with Disability Resources at 520-621-3268 or drc.arizona.edu as soon as possible. Please inform me of your eligibility for reasonable accommodations by Friday January 24.
Syllabus Changes	Any changes to this syllabus will be announced in class and posted on the class website.