

**Syllabus for MATH 327: Discrete Mathematics
Spring 2018**

Lecture time and place: Sec. 01: MWRF 11:00 am - 11:50 am, OW 141.

Instructor: Dr. Dibyajyoti Deb (I go by Dr. Deb or Deb).

Instructor Office: OW 115

Instructor Email: dibyajyoti.deb@oit.edu

Course Webpage: <http://math.oit.edu/~debd> (Click on Teaching).

Phone: (541)-885-1978.

Office Hours: MWRF - 1:00 pm - 2:00 pm. However, you can drop by my office at anytime and I will help you if I am there. You can also email me to set up an appointment for a different time.

Prerequisites: MATH 252 or MATH 111 with grade "C" or better and junior standing.

Required materials: Graphing calculators such as TI-83/84 is recommended, but not required. However TI-89 (or equivalent) is not allowed in the course.

Text: *Discrete Mathematics with Applications*, S. Epp, 4e.

Attendance: Attendance is essential for success in the course. You are expected to be present in every lecture.

Resources: Peer consulting is provided by the Peer Consulting Services at LRC 233 (<http://www.oit.edu/current-students/student-support/tutoring>). Please check their website for hours of operation.

Course Objectives: After completing this course, you will be able to

1. Construct proofs.
2. Prove statements about sets.
3. Establish and use properties of relations.
4. Apply number theory to perform computations and construct proofs about integers.
5. Perform computations with sequences and series.

Homework Assignment and Quizzes: Homework assignments will be posted on my webpage and they will be due on Monday of each week in class. They will cover problems from chapters that we cover the previous week. There will be a total of **10 assignments** and the **best 7** will count toward your grade. Each assignment will be out of 20 points. 10 points will be given for submission and if substantial amount of work is shown in majority of the problems. I will select few random problems to grade for everybody and the remaining 10 points will be assigned to those. I strongly encourage group work while doing assignments, however, what I don't encourage is copying someone else's work while submitting the assignment. The important thing for you is to understand how to do a problem.

Just like the homework assignments, there will be a total of **5 quizzes**. There will be a quiz on some Mondays during the final 10-15 minutes of class. Each quiz will consist of 2 problems selected from the homework problems that are due that same day. Hence, doing your own homework assignment is essential. My plan is to return the graded quizzes by Friday of that week. My plan is to return the graded homeworks and quizzes by Friday of that week.

Various Policies:

- Except in cases of documented emergencies, there will be **no makeups** of exams and quizzes.

Grading: Course grades will be determined using

- Assignment - 20%.
- Quiz - 10%.
- Exam 1, Exam 2, Exam 3 - 15% each.
- Final exam - 25%.

and the following scale: $A = 90 - 100$, $B = 80 - 89$, $C = 70 - 79$, $D = 60 - 69$, $F = 0 - 59$ etc.

Drop/Withdrawal: The last day to drop the course without a "W" is April 13, 2018. The last day to withdraw from this course is May 18, 2018.

Academic dishonesty and disrupting the academic environment: Any act of academic dishonesty as defined by the OIT policy on academic dishonesty (found at http://www.oit.edu/libraries/student_handbook/student_academic_integrity_policy.pdf) will result in an F on the item in question, subject to the determination of the instructor. Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other institutional activities, including the Institution's public service functions or other authorized activities on institutionally owned or controlled property is strictly prohibited by Oregon Tech's code of student conduct and may result in disciplinary action.

Statement of recording lectures and In-class discussions: Please be advised that this class may be recorded. If you would like permission to record this class you must speak with me.

Students with Disabilities: Students with a documented disability who require assistance or academic accommodations should contact the office of Disability Services immediately to discuss eligibility. Disability Services staff are located on both the Klamath Falls and Wilsonville campuses and arrangements can be made to meet with students on any campus. Meetings are by appointment only, so please contact the Disability Services office by calling Drew Tessler, the Disability Services Specialist at (541) 851-5227 or emailing him at drew.tessler@oit.edu. Specific information and Disability Services forms can be found at www.oit.edu, then go to Academics and click on Student Success Center and then Disability Services. This link leads to the departments website: <http://www.oit.edu/academics/ssc/disability-services>

Tentative Lecture Schedule:

Week 1 - 1.1, 1.2, 1.3.
Week 2 - 2.1, 2.2, 3.1.
Week 3 - 3.2, 4.1, **Exam 1**.
Week 4 - 4.2, 4.3, 4.4.
Week 5 - 4.5, 4.6.
Week 6 - 5.1, 5.2.
Week 7 - **Exam 2**, 5.6, 5.7.
Week 8 - 6.1, 6.2.
Week 9 - 8.1, 8.2.
Week 10 - 8.3, **Exam 3**.
Week 11 - **Final Exam, June 12, 12:00 pm - 2:00 pm.**

Important Dates:

No classes on May 28, 2018.
Apr. 9, 2018 - HW 1 due (1.1, 1.2, 1.3), Quiz 1.
Apr. 16, 2018 - HW 2 due (2.1, 2.2, 3.1), Quiz 2.
Apr. 20, 2018 - **Exam 1**.
Apr. 23, 2018 - HW 3 due (3.2, 4.1, 4.2).
Apr. 30, 2018 - HW 4 due (4.3, 4.4).
May 7, 2018 - HW 5 due (4.5, 4.6), Quiz 3.
May 14, 2018 - **Exam 2**.
May 14, 2018 - HW 6 due (5.1, 5.2).
May 21, 2018 - HW 7 due, (5.6, 5.7).
May 30, 2018 - HW 8 due (6.1, 6.2), Quiz 4.
Jun. 4, 2018 - HW 9 due (8.1, 8.2), Quiz 5.
Jun. 8, 2018 - **Exam 3**.
Jun. 8, 2018 - HW 10 due (8.3).
Jun. 12, 2018 - **Final Exam, 12:00 pm - 2:00 pm**