

## Syllabus for Math 355: Discrete Mathematics Fall 2014

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### Materials:

- *Discrete Mathematics MATH 355*. This is a custom book created from selections of the book *Discrete Mathematics and Its Applications*  
Text: ISBN 9781308199610  
Author: Kenneth Rosen  
Publisher: McGraw Hill
- McGraw Hill Connect online access. This is included with the text if you purchased it at the WOU bookstore. Online access may be purchased separately at [connect.mheducation.com](http://connect.mheducation.com). If you do not require a hardcopy version of the text, online access through Connect includes an electronic version of the text. The course website is <http://connect.mheducation.com/class/b-flesch-fall-2014>.
- Calculator – A graphing calculator is highly recommended for this course, namely a TI-83 or TI-84. Please see me if you are considering purchasing a new calculator.

### Schedule:

Time	Monday	Tuesday	Wednesday	Thursday	Friday
10:00	Office Hour				Office Hour
11:00	Math 355	Math 355	Math 355		Math 355
12:00			Office Hour		

Please feel free to drop by my office during my office hours for help. You do not need to make an appointment to come to office hours. At times other than my listed office hours you are welcome and encouraged to call or email me with questions about the course. If you have direct scheduling conflicts with my office hours and would like further help, please let me know.

**Course Description:** MTH 355 Discrete Mathematics (4)

Sets, relations, functions, enumeration, mathematical induction, graph theory. Prerequisite: MTH 253 with grade of C- or better. Recommended: MTH 280. (Offered every Fall quarter)

**Learning Outcomes:** This course is designed as an introduction to discrete mathematics. A student passing this course should understand the following:

- Basic Counting Rules, Combinations and Permutations
- The Relationship of Discrete Mathematics and the Binomial Theorem
- Pigeon Hole Principle
- Induction and Combinatorial Proofs
- Various Aspects of Graph Theory

**Moodle, Connect and Email:** Since this is a hybrid class, much will be online. There are two websites that will be used regularly, which are Moodle and Connect. Moodle is the main page for this class. It contains all the online resources and assignment due dates for the entire course. Moodle is also where

you will have your discussions and hand-in your written homework. Connect is where you will do your online homework and quizzes. If you need help with Connect Visit: [www.mhhe.com/support](http://www.mhhe.com/support) or Call: (800) 331-5094. Lastly, this class will frequently use communication through email, so you much regularly check your WOU email account.

**Online Homework:** Most weeks you will have two Connect online homework, which will be due on Monday and Thursday at midnight. In these homework assignments, you get 3 tries to get the problem correct. Furthermore, if you exhaust your 3 attempts or view the solution and it is not a multiple choice problem, you get 10 chances to retry a problem with new values. This gives you a total of 33 attempts to get numerical questions correct.

**Written Homework:** Weeks 2,4,6,8 and 10 you will have a written homework that is due on Friday at midnight. This homework **MUST** be completed using a LaTeX compiler. The homework is posted on Moodle, and you upload your completed pdf file to Moodle.

**Quizzes:** Weeks 1,3,5,7 and 9 you will have a quiz that is be completed by Friday at midnight. The quizzes will be completed on Connect. The problems will be a subset of the problems you completed for Connect homework (with perhaps different numbers), but you only get one attempt to get the answer correct on a quiz.

**Exams:** There will be two midterm exams and a final exam. These will all be in-class exams. Makeup exams are generally not given. If you must miss an exam due to a documented emergency or a documented university sanctioned absence from class please inform me ASAP. Cell phones may not be used as calculators during an exam and must be turned off.

**Discussion Forum:** There are two aspects of the ‘discussion’ portion of your grade, the weekly discussion question and general discussion.

- **Weekly Discussion Question:** Each week I will post a discussion question for you to answer by Friday. Your grade is based on the accuracy of your contribution. If it is a mathematical question, you must get it correct with a reasonable explanation to get full points (like a homework question). If you post a solution and then after viewing a classmates post, you decide to change your answer, that is fine. Thus you should be checking the discussion forum regularly to get full points.
- **General Discussion:** Because of the hybrid nature of the class, in-person office hours may not always be available to you. Thus you should ask questions in the “Questions Forum” on Moodle. Over the course of the class you must get a total of 15 general discussion points. Here is how the points are assigned:
  - 1 point: Asking a mathematical or logistical question in the Questions Forum.
  - 1 point: Incorrectly answering a mathematical or logistical question in the Question Forum.
  - 2 points: Correctly answering a logistical question in the Questions Forum.
  - 3 points: Correctly answering a mathematical question in the Questions Forum.

**Grade:** The standard grading scale will be used for this class.

Online Homework	20%
Discussion	10%
Written HW & Quizzes	20%
Midterm Exams	$15\% \times 2 = 30\%$
Final Exam	20%

**Class Structure:** This class will be broken into three modules: basic structures, counting, and graph theory. The first module will be taught traditionally, with in-class lecture and activities. The second module will be hybrid, with part of the module being taught with in-class lecture and activities and the other part being taught online, through videos and other resources. The third module will be taught almost completely online. However, this tentative

**Attendance:** Daily attendance is required for your success in this course. If you miss class, it is your responsibility to ask a classmate for notes on the material that you have missed.

**Connect Help:** If you have technical difficulties with Connect, you can seek help on their website <http://create.mheducation.com/wordpress-mu/success-academy/> or by calling them at 1-800-331-5094.

**Wolf Connection System Referral Program:** If I determine your performance in this class is placing you at academic risk, you may be referred to Jesse Poole, Western's Student Success Specialist. Jesse will offer to work with you to address issues and develop a student success strategy. Regardless of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course. If you would like to meet with Jesse regarding any academic struggles you are experiencing, please contact the Academic Advising and Learning Center at 503-838-8428.

**Appropriate Classroom Behavior:** You are ultimately responsible for your own attendance and performance. Proscribed Conduct for all students is described in the University Catalog.

**Incomplete Policy:** An Incomplete can only be granted for a student who is passing a class and has a documented emergency that prevents them from completing a small component of the course.

**Disabilities:** If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Services, APSC 405, or at 503-838-8250, as early as possible in the term. Students needing medical or mental health care can access the Student Health and Counseling Center by calling 503-838-8313, emailing at [health@wou.edu](mailto:health@wou.edu), or by walking in to schedule an appointment.

**Veterans and Active Military Personnel:** Veterans and Active Military Personnel with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.