MATH 398 SYLLABUS: WINTER 2015
Discrete Mathematics for Elementary and Middle School Teachers

Professor: Dr. Matthew Ciancetta
Web: www.wou.edu/wp/ciancetm Phone: 503-838-8829
Office: MNB 125 Email: ciancetm@wou.edu

<table>
<tr><th colspan="6">OFFICE HOURS & SCHEDULE Winter 2015</th></tr>
<tr><th></th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th></tr>
<tr><td>8:00</td><td></td><td></td><td rowspan="2">MTH 212
MNB 104</td><td rowspan="8">Off Campus</td><td></td></tr>
<tr><td>9:00</td><td>MTH 212
MNB 104</td><td>MTH 212
MNB 104</td><td>MTH 212
MNB 104</td></tr>
<tr><td>10:00</td><td>Office Hour
MNB 125</td><td>Office Hour
MNB 125</td><td>Office Hour
MNB 125</td><td rowspan="2">MTH 396
MNB 103</td></tr>
<tr><td>11:00</td><td>MTH 396
MNB 103</td><td>Math Dept
Mtng</td><td>MTH 396
MNB 103</td></tr>
<tr><td>12:00</td><td></td><td>Meeting</td><td></td><td></td></tr>
<tr><td>1:00</td><td rowspan="2">MTH 398
MNB 104</td><td></td><td rowspan="2">MTH 398
MNB 104</td><td></td></tr>
<tr><td>2:00</td><td></td><td></td></tr>
<tr><td>3:00</td><td>Office Hour
MNB 125</td><td>Meetings</td><td>Office Hour
MNB 125</td><td></td></tr>
</table>

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.

PREREQUISITES
Math 211, 212 & 213; each with a grade of C- or better.

REQUIRED COURSE MATERIALS

- Coursepack: The Math 398 coursepack is available for purchase at the bookstore.
- Text: Discrete Mathematics and Its Applications Rosen, 7e–selected material mostly from Ch 2, 6 & 10 and minimal material from other chapters
  - Either and e-copy or a hard copy of the text is required – **not both**
  - E-copy available through McGraw-Hill's Connect website **- when purchasing access to the online homework, click on the "Connect Plus" button if you also need buy access to the e-book.**
  - Hard copy available at the WOU bookstore (New, Used, Rental**) - when purchasing access to the online homework, click on the "Connect" button if you do not want to buy access to the e-book.**
- **Online homework** will be assigned and assessed through McGraw-Hill's Connect website.
- Instructions for registration for McGraw-Hill's Connect website are clearly given on the log in page: http://connect.mheducation.com/class/m-ciancetta-math-398-w15
- A TI 83 or 84 calculator is highly recommended.

COURSE DESCRIPTION
Explores topics in discrete mathematics including set theory, enumeration and graph theory. Techniques in enumeration include the multiplication rule, combinations and permutations. Topics in graph theory include coloring, the traveling salesman problem and spanning trees.

CLASS STRUCTURE
Class will primarily be interactive problem solving sessions. You must bring your course pack to class every day. Your attendance and participation in class is crucial and required in this course. Many of the items in the course pack do not standalone; they need introductory comments and supportive questions that will be presented in class. All students will be expected to enthusiastically engage in group work and in whole class sharing discussions (including sharing work at the board or overhead).

LEARNING OUTCOMES
This course is designed for students planning to be elementary or middle school teachers. Our goals for this term are to:

- Improve problem solving skills by building upon and extending knowledge acquired in the foundational sequence;
- Introduce various topics in discrete mathematics, such as the pigeonhole principle, counting, graph theory, set theory, and Venn diagrams;
- Understand the importance of and methods of incorporating discrete mathematics into the elementary school classroom.

CLASS MOODLE PAGE
The Moodle page for this MTH 398 course will include links to my homepage (http://www.wou.edu/wp/ciancetm), office hours and other course resources such as the class schedule, homework assignments and due dates. The grade book feature will also be available for you to view anytime

YOUR STUDENT WOU GMAIL ACCOUNT
All official university and class business and announcements will be directed to your WOU student email account and you will be required to check this email daily during Math Buddy letter writing portions of the term. You must access the course Google Drive folders using your WOU Gmail account. Other options are not available.

ATTENDANCE
Daily attendance is required for your success in this course. Much of the learning in this course takes place during in-class activities and class discussions. If you miss class, it is your responsibility to ask a classmate for notes on the missed material. If you miss more than one class in a row, please contact your instructor ASAP.

HOMEWORK
Completing your homework in a timely fashion is integral to your success in any course. Exams and quizzes are based on homework problems and in-class activities. Online Homework via

McGraw-Hill's Connect will be assigned and graded. In these homework assignments, you get 3 tries at attempting to get the problem correct. Furthermore, if you exhaust your 3 attempts or view the solution, you get 10 chances to retry a problem with new values. Thus you will able to try each algorithmic (the multiple choice are different) question 33 times per assignment!

QUIZZES

Each quiz will have two portions: A take home portion and a short in-class portion. The dates and material for these quizzes will be posted on the website. The lowest two scores from your quizzes will be dropped. Makeup in-class quiz portions will not be given.

Late take-home quiz portions will not be accepted unless you have i) a documented emergency filed with the Student Affairs office (see http://www.wou.edu/student/ and their absence notification form) and my agreement, or ii) a documented University Sanctioned Absence from class which you have reviewed with me, and devised a plan for, in advance of the absence. You may always turn in your Homework early.

You are to answer each quiz question completely and include an explanation of your solution. Each question will be graded on the following rubric:

Category	Points
Question is completely answered and an appropriate strategy is used	1
Solution is explained so that another student could understand	1
Solution is accurate	1
TOTAL	3

EXAMS

There will be two midterm exams and one final exam. 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 [Note: i) a documented emergency needs to be filed with the Student Affairs office (see http://www.wou.edu/student/ and their absence notification form) and have my agreement, ii) a documented University Sanctioned Absence from class must be reviewed with me, and devised a plan for, in advance of the absence.]

Cell phones may not be used as calculators during an exam and must be turned off.

LESSON PROJECT

In groups you will complete a lesson project about a discrete math activity. The projects will contain four parts: Part 1 – Topic Proposal; Part 2 – Topic Description; Part 3 - Lesson Plan; Part 4 – Presentation. More details and timeline will be provided on the course Moodle page.

JOURNAL ARTICLE ASSIGNMENTS
You will be assigned to read journal articles that are related to discrete mathematics. A short in-class or Moodle based quiz related to each article will be given.

COURSE ASSESSMENT COMPONENTS

Component	%
Attendance	4
Connect Homework	15
Quizzes	20
Journal Article Quizzes	6
Midterm Exams	30 (15% x 2)
Final Exam	15
Final Project	10
Total	100

STANDARD GRADING SCALE (total % for the course, usual rounding rules apply)

% Range	Grade	% Range	Grade	% Range	Grade
93 –100	A	80 – 82	B-	60 – 69	D
90 – 92	A-	77 – 79	C+	Below 60	F
87 – 89	B+	73 – 76	C		
83 – 86	B	70 – 72	C-		

TIME SPENT ON MATH 398 OUTSIDE OF CLASS
It is a standard academic rule of thumb to spend two to three hours out of class for every hour in class while studying math. This is an upper division math class and the expectation is that you will spend 8 to 12 hours per week outside of class studying and working on the course content. Set up a regular schedule for yourself and stick with it. Success in math is often directly linked to effort and regular practice.

ELECTRONICS POLICY*
Electronic items such as cell phones, laptops, iPads, iPods and e-book readers should not distract you or your classmates during class. If you are distracting yourself or others, in any way, with an electronic item in class, you will be asked to step into the hall until you are done with the item. Unauthorized electronic items used on exams or quizzes will result in a score of 0 on that entire exam or quiz.

* If you are in an emergency situation in which you need to have your cell phone on quiet; please speak to me about it before class.

VETERANS AND ACTIVE MILITARY PERSONNEL with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor. For WOU Veteran resources; please see http://wou.edu/veterans/.

FOOD AND BEVERAGES IN THE CLASSROOM
You are welcome to have unobtrusive snacks in the classroom that leave you entirely free to fully participate in the class. Food items that smell (such as fast food) that you eat with silverware, that need peeling, etc. are distracting and should be consumed prior to or after class. You are welcome to have beverages in the classroom. If you bring food or a beverage to class then please be sure to leave a clean workspace at the end of class.

APPROPRIATE CLASSROOM BEHAVIOR
You are ultimately responsible for your own attendance and performance. Disruptive classroom behavior of any kind, such as talking during lecture or consistently coming to class late etc., is not appropriate. Proscribed Conduct for all students is described in the University Catalog. In particular for this course any student found cheating on an exam or copying from another student's exam paper will receive a zero score on that exam.

LEARNING DISABILITIES
It is University policy to provide, on an individualized basis, accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. If you have a disability for which you are or may be requesting an accommodation, you must contact both your instructor and the Office of Disability Services, APSC 405, or at 503-838-8250, as early as possible in the term.

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 the course.