

Dr. Charles Rocca Higgins Hall 101D roccac@wcsu.edu http://sites.wcsu.edu/roccac MAT 151 - 01: Mathematics Seminar II On Ground: Higgins 117, M 3:30-4:45pm Credits: 0.5 credit Grading: Standard A-F



Office Hours:

Office hours are on ground for the Spring 2024 Semester. If you need to meet virtually we can make an appointment to do so via my WebEx Virtual Office: Higgins 101-DV (https://wcsu.webex.com/meet/roccac)

- Monday, Tuesday, Thursday, & Friday: 12:45pm 1:45pm
- Tuesday & Thursday: 3:30pm 4:30pm
- or by appointment

Course Materials:

(These are all on reserve in the library.)

- "101 Careers in Mathematics" Edited by Andrew Sterrett
- "50 Mathematical Ideas You Really Need to Know." by Tony Crilly

Course Description & Objectives:

Description: In this course students will investigate for themselves the breadth of ideas that fall under the umbrella of mathematics. They will also practice communicating the results of their investigations to peers. Along the way they will need to utilize resources available to them through the university

Student Learning Outcomes: In this course students will demonstrate an ability to:

- Utilize university resources to support research,
- Become acquainted with the variety of opportunities available to math majors,
- Investigate for themselves the breadth of topics which fit under the category of mathematics, and
- Demonstrate an ability to orally communicate mathematical content to their peers.

Grading:

Class Participation	20%
Automathography	10%
50 Ideas Talks	15%
Literature Review Presentation	15%
Article Presentation	15%
Career Exploration	5%
Career Talk	10%
Job Application Practice	10%

- **Class Participation:** Your class participation grade will be based on your attendance, on your submission of peer evaluation forms, and on your ability to give your talks when you are scheduled to give them.
- **Automathography:** Write a short, about one page, essay describing your experiences with mathematics. Be sure to discuss what sort of math you have learned/studied. Reflect on what you have liked and what you have not. Include why you are a math major and what you want to do in the future.
- 50 Ideas Talk: For this talk you need to present a chapter from 50 Mathematical Ideas You Really Need to Know. You are not required to have more than one source for this talk. This talk must be between 15 and 25 minutes.
- *Literature Review Presentation:* For this talk you need to find four articles related to the topic you covered in your previous talk. For each article you should tell us where/how you found it, briefly what it is about, and why you found it interesting. This talk will be 10 to 20 minutes.
- Article Presentation: For your final talk you will read one of the four articles you found and give a detailed presentation on that article alone. This talk will be 15 to 25 minutes.
- **Career Exploration:** For this assignment you need to complete a personal assessment using the tools available to you through the Career Success Center. In particular you will use PathwayU and you will need to accept your Handshake account. We will meet at the Career Success Center on the 29th of January to learn more about these.
- *Career Talk:* For this talk you need to research a career in mathematics. Your presentation on a career should tell us what sort of work you would expect to do, how much you might get paid, how in demand the job is, and what sort of math you need to do it. You must have more than one resource and I expect you to make contact with the Career Success Center. (https://www.wcsu.edu/careersuccess/students/). This talk must be between 15 and 25 minutes.
- Job Application Practice: Visit the Career Success Center (https://www.wcsu.edu/careersuccess/) or attend a workshop to get help on how to write a resume and cover letter, then write a resume and cover letter as if you are applying for a job in either the Math Clinic or Math Emporium. (Job descriptions can be found here: http://sites.wcsu.edu/roccac/math-tutor-job-descriptions/.)
- **General Comments:** For all of your presentations you will need to turn in electronic copies of your slides and they should include a bibliography slide at the end. You also need to get the topics approved by me ahead of time so that there is no overlap. The grades for your presentations will always be between 70% and 100% as long as you do them.

Course Calendar:

Monday	
1/22	1
Syl., Intro., and What makes a good presentation?	
1/29	2
Meet at the Career Success Center on the Westside Campus	
2/5	3
Crash Course in LAT_EX - Presentation	
2/12	4
Rocca - Probability Chapter Talk, & Automathography is Due	
2/19	
Presidents Day - No Class	
2/26	5
Looking for Journal Articles	
3/4	6
Chapter Talks: Purr, O'Brien, Scholl	
3/11	
Spring Break - No Class	
3/18	7
Progress Toward Lit. Review?	
3/25	8
Rocca - Literature Review	
4/1	9
Lit. Reviews: Purr, O'Brien, Scholl	
4/8	10
Progress Toward Career Talk?	
4/15	11
Career Talks: Purr, O'Brien, Scholl	
4/22	12
Rocca - Article Talk	
4/29	13
Article Talks: Purr, O'Brien, Scholl	

You and Your Grades:

• "A" (Exceptional) range 90% to 100%:

The student has demonstrated significant mastery of the appropriate knowledge and skills relevant to the course. The student is able to solve standard formulaic exercises and most nonstandard problems which require deeper insight.

- "A" $\iff 92.5\% \le Grade \le 100\%$

- "A-" $\iff 90\% \leq Grade < 92.5\%$

• "B" (Good) range 80% to 90%:

The student has demonstrated mastery of the appropriate knowledge and skills relevant to the course. The student is able to solve standard formulaic exercises and some nonstandard problems which require deeper insight.

- "B+" $\iff 87.5\% \leq Grade < 90\%$
- "B" $\iff 82.5\% \leq Grade < 87.5\%$
- − "B-" $\iff 80\% \leq Grade < 82.5\%$
- "C" (Adequate) range 70% to 80%:

The student has demonstrated adequate mastery of the appropriate knowledge and skills relevant to the course. The student is able to solve most standard formulaic exercises but struggles with nonstandard problems which require deeper insight.

- "C+" \iff 77.5% \leq Grade < 80%
- "C" \iff 72.5% \leq Grade < 77.5%
- "C-" $\iff 70\% \le Grade < 72.5\%$
- "D" (Inadequate) range 60% to 70%:

The student has demonstrated inadequate or incomplete mastery of the appropriate knowledge and skills relevant to the course. The student is able to solve some standard formulaic exercises but few if any nonstandard problems which require deeper insight.

- "D+" $\iff 67.5\% \le Grade < 70\%$
- $\text{"D"} \iff 62.5\% \le Grade < 67.5\%$
- − "D-" $\iff 60\% \le Grade < 62.5\%$
- "F" (Unacceptable) below 60%:

The student has demonstrated essentially no mastery of the appropriate knowledge and skills relevant to the course. The student is unable to solve most standard formulaic exercises and essentially no nonstandard problems which require deeper insight.

End User Agreement:

General Expectations: As a student in this class you are expected to:

- attend class and take notes,
- actively read material in each section, taking notes,
- review your notes on a regular basis,
- check your university email every day,
- check the class site *at least* every other day,

- begin studying for exams in a timely fashion,
- ask questions early and often,
- attend office hours,
- seek help in the math clinic or tutoring center, and
- complete assignments and readings on time.

Assignment Guidelines: (These apply to all out of class work.)

- Work handed in must always look neat, legible, and professional. Work must be very neatly written or preferably typed. The quality of your work will be factored into your grade, up to 10%, in extreme cases work may be rejected and then counted as late.
- Answers on all assignments should be given in complete sentences. I should be able to tell what your answer means without re-reading the problem. This does not mean you simply rewrite the question.
- An assignment is considered late after I have handed it back or gone over it in class. Late assignments are accepted but may receive at most 75% credit. Late assignments go to the absolute bottom of the stack of papers to be graded; *all on time work is graded before any late work.*
- If you work on an assignment as part of a group, then there may be no more than three individuals in the group and all your names must be on the assignment. You should hand in only one copy of the work.
- All work must be submitted in the manner directed.
- Email Etiquette Guidelines: When sending an email you must include the course number and semester in the subject line. For example, if you are taking MAT 314 in Fall 1592 then the the subject line should begin with "[MAT 314 Fall 1592]." Also, you should always begin with a salutation such as "Dear Dr. Rocca" and end with a closing such as "Sincerely, I. Newton."
- **Exam Makeup Policy:** To qualify for a makeup exam you must have a valid reason for missing the exam and, if at all possible, let me know ahead of time that you are missing the exam. You will need to meet with me in order to arrange a time for the make up exam. If you do not have a valid reason, do not give prior notice when possible, or simply do not show up for an exam, you are not entitled to a makeup and will not be given one. If you fail to show up for your makeup exam, you will not be given a second opportunity.
- The 2% Exception: Any quiz or class work which is ultimately worth no more then 2% of your final grade can not be made up.
- **Time on Task:** As a 0.5 credit class you should expect to average 1 to 3 hours of work a week including class time. Some weeks you may get away with less and some may require more.
- Attendance: There is no specific policy for attendance in this course. However, if you have *three consecutive unexcused absences* within the first half of the semester I am required to report to the University that you have *stopped attending*.
- Academic Honesty: If on any assignment, quiz, or exam you turn in someone else's work, regardless of the source, as if it were your own you will receive a zero on that assignment, quiz, or exam. If you are caught doing this three times you will receive an F in the course and the Dean will be informed of your academic dishonesty.
- (https://www.wcsu.edu/faculty-handbook/2019-2020/policies-pertaining-to-students/academic-honesty-policy/)
- Accommodations: If you have need of an accommodation for testing or note taking, please visit AccessAbility Services, located in the HAAS Library room 406 (http://www.wcsu.edu/accessability).