

**College of Science and Health
Department of Mathematics
Course Syllabus**

1. Title of Course, Course Number and Credits:
Contemporary Math – Math 1100 3 credits

 2.
 - Department Telephone number: 720-2158
 - Department E-mail address: math@wpunj.edu

 3. Semester: **Winter Session 2022**

 4.
 - **Faculty Name:** Dr. David Nacin
 - **Room number:** Science East Hall #3042
 - **E-mail address:** nacind@wpunj.edu
 - **Office hours:** TBA

 5. **Required Text:**

C. Miller, V. Heeren, J. Hornsby, C. Heeren, *College Algebra & Trigonometry (w/MyMathLab Access Card) 14th edition*, Pearson

A print copy is NOT needed. You only need the e-book with MyMathLab Access Card. You can purchase this through blackboard using the methods I describe in the introductory videos there. The code for this class once you enroll though MyMathLab will be given soon.

 6. **Description of Course:**
This course is intended to provide a wide-ranging exposure to mathematical ideas expected of a liberal arts undergraduate. Topics include Sets, Logic, Statistics, Probability, Number Systems and Problem Solving. The course is designed for students not majoring in business, the sciences or math.

 7. **Course Prerequisites:**
Successful completion of Math Basic Skills Requirements.

 8. **Course Objectives:**
Students are introduced to the basic mathematical concepts that play an important role in everyday life. Students learn a wide array of problem solving and mathematical reasoning techniques.

 9. **Grading and other Assessment Methods:**
Five Exams: 10% Each
Combined Homework Average: 30%
Final: 20%
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10 **Class Schedule:**

Due Date	Assignment Due
December 13	Purchase MyLab, Intro Videos
December 15	2.1-2.2 Readings, Videos, and Homework
December 17	2.3-2.4 Readings, Videos, and Homework
December 20	Chapter 2 Exam
December 23	3.1-3.2 Readings, Videos, and Homework
December 26	3.3-3.4 Readings, Videos, and Homework
December 29	Chapter 3 Exam
January 1	10.1-10.2 Readings, Videos, and Homework
January 3	10.3-10.4 Readings, Videos, and Homework
January 6	Chapter 10 Exam
January 9	11.1-11.2 Readings, Videos, and Homework
January 12	Chapter 11 Exam
January 15	12.1-12.2 Readings, Videos, and Homework
January 18	Chapter 12 Exam
January 21	Final Exam

For our tight winter schedule, we have packed assignments so that they are mostly 3 days apart, aside from the first week. This allows for maximal time between assignments, but students must pay careful attention to which day of the week assignments become due. Please refer to this chart often.

11. **Student Learning Outcomes:**

UCC Area SLOs students will meet upon the completion of this course:

Area Three: Ways of Knowing, Quantitative Thinking SLOS
Students will be able to:

- 3e1. Interpret and evaluate quantitative or symbolic models such as graphs, tables, units of measurement, and distributions.

In the Probability and Statistics sections, students learn how mathematical operations can be expressed algebraically, graphically and numerically (via tables). They study the role of sets in computing probabilities and tables and graphs to analyze sample data. Here they also study various distributions and learn to interpret results. In section of Number Systems, students are acquainted with development of the number systems and its role in quantitative thinking.

(Meets UCC Program SLOs 2 and 4)

3e2. Perform algebraic computations and obtain solutions using equations and formulas.

In the Probability and Statistics section, students learn various counting and computational techniques. They use equations and functions to obtain results and interpret them. They further learn to obtain meaningful results using tables. In the Problem Solving sections, students will perform algebraic computations to obtain solutions using equations.

(Meets UCC Program SLOs 2,4 and 5)

3e3. Acquire the ability to use multiple approaches - numerical, graphical, symbolic, geometric and statistical - to solve problems.

In the Sets and Logic sections, student acquires the ability to use multiple approaches to model and solve real life problems. They are introduced to using symbols to prove the validity of logical statements. They also learn to extend results from simple problems to more general settings. Similarly, in Statistics section, they see the interplay between theoretical concept of probability and what the sample data provides.

(Meets UCC Program SLOs 5 and 8)

3e4. Develop mathematical thinking and communication skills, including knowledge of a broad range of explanations and examples, good logical and quantitative reasoning skills, and facility in separating and reconnecting the component parts of concepts and methods.

The sections of Sets, Logic and Other Mathematical Systems are ideally directed to address this outcome. These develop mathematical thinking with broad range of explanations and examples together with development of logical and quantitative reasoning skills. Section on Statistics improves their ability to extract and analyze information to obtain meaningful results.

(Meets UCC Program SLOs 1 and 5)

Other Course Specific SLOs students will meet upon the completion of this course:

Students will be able to:

a. Understand application of mathematics in problem solving via Sets. Also, develop reasoning skills and use of symbolic representation and proving validity of logical statements. Appreciate how mathematics can help in analyzing such problems systematically

(Meets UCC Program SLOs 3, 4 and 5)

- b. Apply critical thinking skills by using sets, basic probability theory and statistics to reformulate and solve real life problems.
(Meets UCC Program SLOs 2, 3 and 5)
- c. Understand the Number system, its historical development and its role in mathematical thinking.
(Meets UCC Program SLOs 2 and 6)

Covid Protection Guidelines

William Paterson University seeks to ensure the health and welfare of all in our community. A facial covering in class is optional at this time for vaccinated persons, although invited, and may be required at certain large attendance campus events or activities or in specific university spaces. A facial covering with weekly testing is required anywhere on campus for those who received an approved vaccination exemption as described on the University's [COVID website](#). The University provided me a list of any student(s) in my classes who are required to use one.

A required facial covering is one that protects or blankets your nose and mouth, fitting snugly and covering your chin per CDC guidelines. If you do not come wearing one, or remove it during class for a reason other than a quick drink or snack, you will be asked to put one on. If you do not comply, you will be asked to leave and are subject to disciplinary action by the Office of Student Conduct to whom I report an infraction. Sanctions for non-compliance can result in suspension and dismissal from the University.

The only exception to the above requirement for a student with an exemption of a facial covering is for a student who receives an Accessibility Resource Center (ARC) accommodation to be able to wear another form of face covering such as a face shield given specific breathing or other health related need.

Students who are sick or who are engaging in self-quarantine or isolation should not attend in person classes. Any student directed to quarantine or isolate by the Counseling Health and Wellness Center (CHWC) should:

- Notify the instructor in advance of the absence if possible;
- Report your symptoms or exposure to CHWC at COVIDCHWC@wpunj.edu.
- You will receive a note excusing you from in-person classes from CHWC. You must submit this note to me. CHWC will not send the notes on your behalf.
- Keep up with classwork as they are able; and
- Work with their instructors to try to reschedule assignments and exams, labs, and other critical academic activities.
- Return to campus only when cleared to do so by the CHWC. You will receive a note clearing you to return to in-person class. You are not to return to campus until YOU submit this note to me.

Adhering to the guidelines above are a matter of public health and community integrity, and the WP community views the adoption of these practices as a mark of good citizenship and respectful care for fellow classmates as well as WP faculty and staff. For more information, see the University's [COVID website](#).