Directed Self-Placement For Mathematics

To Incoming Students of UCNJ, Union College of Union County, NJ,

I would like to welcome you to UCNJ and the educational journey that you are about to begin. Please know that all the Faculty and Staff at UCNJ are committed to supporting your studies as you work towards your degree.

The first step of any journey is the most important one and thus we want to get all of you "off on the right foot." The courses you select for your first semester will be both challenging and rewarding and are the foundation for the rest of your studies.

To help you select the math course that is the best for your degree program, we have developed a Directed Self-Placement (DSP) process. DSP will help you determine which initial UCNJ math course is best for you based upon your math experience and future goals.

The DSP process consists of three simple steps:

- 1. Review Math Course Expectations and Course Descriptions;
- 2. Complete the Math Directed Self-Placement Questionnaire;
- 3. Select your preferred Math course(s).

The questionnaire will ask you about your previous math classes and your goals. All three of the above steps should take about 15 minutes to complete.

I would also like to take this opportunity to tell you that the College offers free tutoring services in the Academic Learning Centers that are located on all campuses.

Should you have any questions, please feel free to reach out to the STEM Division at (908) 709-7467 or STEMDivision@ucc.edu.

Again, welcome to UCNJ and sincere wishes for your academic success!

Dean William Dunscombe STEM Division UCNJ Union College of Union County, NJ



UCNJ Union College of Union County, NJ Academic Affairs College Placement for Mathematics

Multiple Measures Exemption	Score	Explanation		
High School GPA	3.0 or higher	Student took three years of mathematics		
SAT Mathematics score	530 or higher on previous SAT; 500 or higher on current SAT (March 2016 or later)			
ACT Score	20 or higher			
A.A./A.S. or B.A/B.S. degree				
Transfer credit for one semester of college-level mathematics				
Satisfactory completion of developmental courses in mathematics at another institution	Advisor will review transcript for equivalency			
Visiting student				
Qualifying Accuplacer scores		Previous or current (NextGen) test scores accepted		
Other Test Score Exemptions	Score	Explanation		
Advanced Placement scores	4 or 5 on AB Calculus placement into MAT 171 4 or 5 on BC placement into MAT 172			
PARCC Mathematics 11	4 or higher (raw score of 750)			
IB test scores	4 or higher on Mathematics SL for MAT 119; 4 or higher on Math (further) for MAT 125; 5 or higher on Mathematics HL for MAT 155; 6 or 7 on Mathematics HL for placement into MAT 171			
Other Exemptions	Score			
Direct Self Placement Survey Non-STEM / Non-Business	Student agrees/strongly agrees with #1-4 (developmental math recommended) Student agrees/strongly agrees with #1-5 and 7+8 and took and passed three years of math in high school (MAT 125 or 127 recommended) Student agrees/strongly agrees with #1-6 and took and passed three (3) years of math in high school (MAT 119 recommended)			
STEM / Business	Student agrees/strongly agree with #1-10 and took and passed 4 years of mathematics in high school (MAT 143 recommended) Student agrees/strongly agrees with #1-11 and has passed 4 years of math and has taken pre-calculus and passed with a B or better (MAT 155 recommended) Student strongly agrees with #1 – 12 and has taken calculus in high school and received a grade of C or better (MAT 171 recommended)			



Mathematics Course Expectations: Which is the best fit for you?

The sequence of these courses is appropriate for liberal arts majors (NON-STEM AND NON-BUSINESS)





Transforming Our Community... One Student at a Time

* Courses beginning with a 0 are part of the developmental course sequence and do not count towards degree requirements.

Mathematics Course Expectations: Which is the best fit for you? The sequence of these courses is appropriate for STEM and Business (AA) majors MAT 171 MAT 019* MAT 119 **MAT 143 MAT 155** • You have not You took 3 • You took 4 You have taken You agree with taken a math years of math in years of math and passed everything for high school in high school pre-calculus with MAT 155, and... class in more than 5+ years a B or better You took calculus and need a • You like math • You agree with • You agree with in high school math refresher everything for and earned a "C" everything for You can solve MAT 119, and... MAT 143, and... or better equations with • You are familiar • You would like two variables You can draw a • You do not need help with skill and are familiar parabola to use a graphwith derivatives development in with quadratic ing calculator and can apply basic math equations • You can solve them to solve real-• Add – You have operations equations with world problems a strong algebraexponents and • You are familiar ic background square roots with limits, asymp- You like the totes, extrema, You can work challenge of a and points of with relations, fast paced inflection domains, funccourse tions, and • You are familiar ranges with logarithmic functions and various graphing techniques



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Mathematics Course Descriptions: What will you learn in a specific course?

MAT 017*	MAT 019*	MAT 125	MAT 127	MAT 119	MAT 143	MAT 155	MAT 171
Introduction to Elementary Algebra	Introduction to Elementary Algebra for Advanced Math Students	Survey of Special Topics for Mathematics	Elementary Statistics	Algebra	Elementary Mathematical Analysis I	Elementary Mathematical Analysis	Unified Calculus I
5 credits	5 credits	4 credits	4 credits	4 credits	4 credits	5 credits	4 credits
This course is designed for non-STEM majors and covers introductory algebra and mathematical concepts to prepare students for MAT 125 or MAT 127.	This course is designed for STEM majors and covers introductory algebra and mathematical concepts to prepare students for MAT 119 and beyond.	This course is designed to give students an apprecia- tion of the beauty and utility of mathematics, and to provide a better idea of what mathe- matics is and where it can be applied. ALC hours are required for this course.	This course is an elementary course in descriptive statistics and statistical inference. ALC hours are required for this course.	This course is for students who have mastered basic alge- bra, to teach the students more complex algebra topics, and to prepare the students to take next level mathematics courses. ALC hours are required for this course.	This course introduces the concepts and techniques needed to proceed to more advanced mathematics and science courses, such as calculus.	This course is an accelerat- ed one semester Pre- Calculus course designed for students with sufficient mathematics background but in need of a review of material prior to taking Calculus.	This course is a college level study in Calculus.

STEP 2: Take the Directed Self-Placement Questionnaire

&

STEP 3: Select your preferred course placement.

Math Directed Self-Placement Questionnaire

By clicking the link below, you will be redirected to the Self-Placement Survey for Math. This Survey must be completed by the student.



The Directed Self-Placement may only be taken once per subject (math and English).



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Directed Self Placement for Mathematics: Basic Algebra, College Algebra, Liberal Arts Math, and Statistics

	Strongly Agree	Agree	Disagree	Strongly Disagree
1) I enjoy mathematics.				
 I can easily add, subtract, and multiply in my head. 				
 When I am shopping, I can easily figure out a 10% or 20% discount on items that are on sale. 				
4) I know how to solve a linear equation.				
5) I know how to graph linear equations.				
 6) I know how to solve equations using two variables. 				
7) I can solve for mean, median, and mode				
 8) I like games of chance and understand probabilities. 				

If student only agrees/strongly agrees with #1-4 (developmental math recommended) If student agrees/strongly agrees with #1 – 6 and took and passed three (3) years of mathematics in high school. (MAT119 recommended)

If student agree/strongly agrees with #1 – 5, 7-8 and took and passed three years of mathematics in high school (MAT 125 or MAT 127 recommended)

Directed Self-Placement Questionnaire

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Directed Self Placement for Mathematics: Pre-Calculus and Calculus

	Strongly Agree	Agree	Disagree	Strongly Disagree
1) I enjoy mathematics.				
 I can easily add, subtract, and multiply in my head. 				
3) When I am shopping, I can easily figure out a 10% or 20% discount on items that are on sale.				
4) I know how to solve a linear equation.				
5) I know how to graph linear equations.				
 6) I know how to solve equations using two variables. 				
7) I can draw a parabola.				
 I can solve equations with exponents and square roots. 				
9) I know how to work with functions, relations, domains, and ranges.				
10) I don't need to use a graphing calculator.				
11) I feel I have a strong algebraic background				
12) I took calculus in high school				

If student agrees/strongly agrees with #1-10 and took and passed four (4) years of mathematics in high school (MAT143 – Elementary Mathematical Analysis (Pre-Calculus recommended)

If student agrees/strongly agrees with #1-11 and has passed 4 years of math and has taken pre-calculus and passed with a B or better (MAT 155 – Accelerated Elementary Mathematical Analysis recommended)

If student strongly agrees with #1-12 and has taken calculus in high school and received a grade of C or better (MAT 171 – Unified Calculus recommended)

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