



# MATH PATHS for INCOMING FRESHMEN

New freshmen in all majors must complete a math course in their first year at UMBC

UMBC  
AN HONORS  
UNIVERSITY  
IN MARYLAND

## MATH PATHS for **STEM** MAJORS

### Majors:

Biology (BA) or  
Information Systems

Biochemistry,  
Chemistry, Computer  
Science, Engineering,  
Math, and Physics

### Summer Session

**MATH106\***  
COLLEGE ALGEBRA

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COLLEGE ALGEBRA

**MATH150**  
PRE - CALCULUS

\*Does **NOT** fulfill a GEP requirement for any major but prepares you to take a GEP math course

### Fall Semester

**MATH155**  
APPLIED CALCULUS

**MATH151**  
CALCULUS/ANALYTICAL  
GEOMETRY I

### Subsequent Semesters

Additional  
math courses  
specific to  
intended major

For many STEM degrees, students must take or test out of MATH150 **BEFORE** they can take required subject courses for their major. Only introductory math courses are shown here - most STEM degree programs will require additional math courses.

## MATH PATHS for **ARTS & HUMANITIES** and **SOCIAL SCIENCES** MAJORS

### Sample Majors:

Visual Arts, Media  
& Communication  
Studies, Philosophy

Psychology (BA),  
Political Science,  
Sociology, History

Psychology (BS),  
Economics,  
Financial Economics

### Summer Session

**MATH104\***  
QUANTITATIVE  
LITERACY

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**MATH106\***  
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### Fall Semester

**MATH120**  
CONTEMPORARY MATH

**STAT121**  
INTRO TO STATISTICS

**MATH155**  
APPLIED CALCULUS

### Spring Semester

A GEP math course  
must be completed  
in spring if not  
fulfilled in fall.

## MATH PATHS for **UNDECIDED** MAJORS

Incoming students who are unsure about their intended major should talk to an advisor to determine which math path is most appropriate for their potential academic and degree plans.

# UMBC MATH REQUIREMENTS

Math course requirements vary by major. For some majors, one math course taken in the first year fulfills the graduation requirement. For students pursuing a STEM degree, multiple math courses are required, including math courses which must be taken prior to or in conjunction with other subject courses in their major.

	WHAT?	WHO?	REQUIREMENTS
All Majors	<b>MATH104</b> Quantitative Literacy  <i>Recommended for Arts &amp; Humanities/Social Sciences Majors</i>	Students pursuing an Arts & Humanities or Social Sciences major who haven't had a math course in recent years or who need to "brush up" on their math skills.  Students who place into <b>MATH104</b> but want to take <b>MATH120</b> or <b>STAT121</b> in the fall.	<b>LRC99</b> - minimum grade of "C" - OR - Milestone level: <b>1</b> or <b>2</b> on placement exam
	<b>MATH106</b> Algebra & Elementary Functions  <i>Recommended for STEM Majors</i>	Students pursuing a STEM major who haven't had a math course in recent years or who need to "brush up" on their math skills.  Students who placed into <b>MATH106</b> but want to take <b>MATH150</b> or <b>MATH155</b> in the fall.	<b>LRC99</b> - minimum grade of "C" - OR - Milestone level: <b>2</b> or <b>3</b> on placement exam
STEM Majors	<b>MATH150</b> Pre-calculus	Students who did not place into <b>MATH151</b> , but who need <b>MATH151</b> in the fall to stay on track in their major.	<b>MATH106</b> or <b>MATH106Y</b> - minimum grade of "C" - OR - Milestone level: <b>4</b> or <b>5</b> on placement exam
	<b>MATH151</b> Calculus and Analytical Geometry I	Students who have not previously satisfied this requirement, or those who need <b>MATH151</b> as a pre- or co-requisite for a fall science, engineering or math course.	<b>MATH150</b> - minimum grade of "C" - OR - Milestone level: <b>5</b> on placement exam
STEM, Arts and Humanities and Social Sciences	<b>MATH155</b> Applied Calculus	This course meets the general education math requirement and is an option for biology (BA) majors as well as several other majors.	<b>MATH106</b> or <b>MATH106Y</b> - minimum grade of "C" - OR - Milestone level: <b>4</b> or <b>5</b> on the placement exam
Arts, Humanities, and Social Sciences	<b>MATH120</b> Intro to Contemporary Mathematics	This course meets the general education math requirement and is often taken by Arts & Humanities majors.	<b>MATH104/MATH106</b> or <b>MATH104Y/MATH106Y</b> - minimum grade of "C" - OR - Milestone level: <b>3, 4</b> or <b>5</b> on placement exam
	<b>STAT121</b> Intro to Statistics for the Social Sciences	This course meets the general education math requirement and is often taken by Social Sciences majors.	<b>MATH104/MATH106</b> or <b>MATH104Y/MATH106Y</b> - minimum grade of "C" - OR - Milestone level: <b>3, 4</b> or <b>5</b> on placement exam

\*This chart is not intended as a substitute for academic advising. Regardless of AP credits and/or college level math credits, all incoming freshmen **MUST** take the Math Placement Exam. During UMBC's Summer Orientation, you will meet with an academic advisor to review the math requirements and course sequence for your intended major. Your advisor will recommend your first math course, which you may take through the Summer Bridge program.

## Get on Track for the Fall!

Get started this summer. UMBC's **Summer Bridge Program** offers **MATH104**, **MATH106**, & **MATH150** in a six week summer session. Participants in the Summer Bridge Program receive individualized academic support in a small classroom setting, as well as extensive advising during their transition to UMBC and throughout their first year. To learn more, go to [umbc.edu/summerbridge](http://umbc.edu/summerbridge).

For more information about UMBC's introductory math requirements and the Summer Bridge Program, contact **Laila Shishineh** at [lailams@umbc.edu](mailto:lailams@umbc.edu) or **410-455-3737**.

GRIT  catch up. get ahead.  
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