



# Springfield College Sequencing Guide Mathematics Major (non-teaching) (MATH) ▼ 2023-2024

*Requirements are subject to change and may not be offered when listed. Use your online degree audit to verify your progress with your advisor.*

## Core Curriculum Requirements, Electives, and College Requirements

*In addition to the major requirements listed below, you will need to fill the following Core Curriculum categories:*

- |  |                                |                                |                              |
|--|--------------------------------|--------------------------------|------------------------------|
| • 100-level Wellness & Physical (1 cr) | • Literature (3 cr)            | • Aesthetic Expression (3 cr)  | • Themed Explorations (9 cr) |
| • 200-level Wellness & Physical (1 cr) | • Scientific Reasoning (4 cr)  | • Historical and Social (3 cr) | ➢ 3 prefixes                 |
| • 300-level Wellness & Physical (1 cr) | • Spiritual and Ethical (3 cr) |                                | ➢ 1 Global course            |

*This major typically requires 46 credits to complete. In addition to the Core Curriculum and major requirements listed, you must complete:*

- **38 elective credits or more** to total at least 120 credits
- The **residency requirement**—45 credits taken at Springfield College (including 15 of your last 30)

## Wellness Passport Stamps

All students must complete **24 stamps** upon successful completion of a WLPL 300-level course. Students must complete a minimum of 8 stamps in each of the following domains:

- Mental Wellness    
  Physical Wellness    
  Meaning and Purpose Wellness

## MATH Major Requirements – Typical First-Year Schedule

<b>Fall:</b> SCSM 101, Springfield College Seminar (Core requirement – 3 cr) ENGL 113, College Writing I (Core requirement – 3 cr) MATH 140, Calculus I (3 cr – also fills Quantitative Reasoning Core– may first need to take MATH 115, College Algebra, or MATH 125, Precalculus) Plus other Core and major requirements, or electives to total approximately 15 credits	<b>Spring:</b> ENGL 114, College Writing II (Core requirement – 3 cr) MATH 142, Calculus II (3 cr) Plus other Core and major requirements, or electives to total 30 credits for the year
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## MATH Major Requirements – Typical Second-Year Schedule

<b>Fall:</b> MATH 220, Calculus III (3 cr) PHYS 310 Physics I with Calculus (4 cr) PHYS 212 General Physics I Lab (0 cr) Plus Core and major requirements, or electives to total approximately 15 credits	<b>Spring:</b> MATH 305, Differential Equations (3 cr) Plus Core and major requirements, or electives to total 30 credits for the year
<b>Fall or Spring:</b> MATH 235, Discrete Mathematics I (3 cr)	

## MATH Major Requirements – Typical Third-Year Schedule

<b>Fall:</b> MATH 310, Linear Algebra (3 cr) Plus Core and major requirements, or electives to total approximately 15 credits	<b>Spring:</b> MATH 415, Abstract Algebra (3 cr – also fills half of WAC Core) Plus Core and major requirements, or electives to total 30 credits for the year
<b>Fall or Spring:</b> MATH 382, Mathematics Seminar (3 cr) MATH 405, Mathematical Analysis (3 cr – also fills half of WAC Core)	

### **MATH Major Requirements – Typical Fourth-Year Schedule**

**Fall or Spring:**

Any outstanding Core and major requirements, or electives to total a minimum of 120 credits for your career

### **Additional MATH Major Requirements – Flexible Timing**

MATH 215, Probability and Statistics (3 cr)

Select **one** course (3 credits) from the following:

CISC 125, Data Analysis Using R (3 cr)

CISC 165, Visual Programming Concepts (3 cr – spring only course)

CISC 175, Introduction to Computer Science with C++ (3 cr – fall only course)

CISC 215, Python Programming (3 cr)

Select 3 courses (9 credits) from the following:

MATH 201, Contemporary Applications of Mathematics (3 cr)

MATH 205, Geometry (3 cr)

Any 300 or 400 – Level MATH Course

### **MATH Major – Program Standards**

Program standards for the MATH major include, but are not limited to:

- Achieve a minimum cumulative GPA of 2.500
- Achieve a minimum cumulative GPA of 2.500 in MATH major requirements
- Complete all program requirements with a grade of C- or better

For more information about these and other program standards, contact your advisor or the MPCS department chairperson.