Total Major Hours: 74-78

## **Mathematics Major** Suggested hours per semester: 16-18 with Secondary Education Concentration

## Major Academic Plan (MAP) for Catalog Year 2022-2023

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

Spring Semester 1	Summer 1
MATH 245 Linear Algebra* MATH 331 Vector Calculus* (2)  First-Year CATC Options (2-4) Language Core Competency	Consider study, internship or research options — Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer
BITH 211/ARCH 211: Old Testament	research
Spring Semester 2	Summer 2
MATH 333 Differential Equations* CSCI 235 <sup>1</sup> OR CSCI 245* EDCU 305 Learning Differences	Consider study, internship or research options.
Thomatic Care Course	
BITH 315: Christian Thought* Advanced Integrative Seminar*	
Spring Semester 3	Summer 3
MATH 324 Methods of Teaching Mathematics (2) <sup>S</sup> MATH 325 Methods of Teaching Middle Grade Mathematics (2) <sup>S</sup> MATH 362 Geometry*# MATH 341 Modern Algebra* LING 326 English Language Methods for Content Area Teachers (2) <sup>S</sup> EDUC 305L Learning Differences Practicum (1) <sup>4*</sup> EDUC 324L Methods Practicum (Middle & High School) (1) <sup>4*</sup>	Consider study, internship or research options.
	MATH 245 Linear Algebra* MATH 331 Vector Calculus* (2)  First-Year CATC Options (2-4) Language Core Competency BITH 211/ARCH 211: Old Testament  Spring Semester 2  MATH 333 Differential Equations* CSCI 235¹ OR CSCI 245* EDCU 305 Learning Differences  Thematic Core Course BITH 315: Christian Thought* Advanced Integrative Seminar*  Spring Semester 3  MATH 324 Methods of Teaching Mathematics (2) <sup>5</sup> MATH 325 Methods of Teaching Middle Grade Mathematics (2) <sup>5</sup> MATH 341 Modern Algebra* LING 326 English Language Methods for Content Area Teachers (2) <sup>5</sup> EDUC 305L Learning Differences Practicum (1) <sup>4*</sup> EDUC 324L Methods Practicum (Middle & High

Fall Semester 4	Spring Semester 4	Summer 4
EDUC 494 (2)*		
EDUC 496 (9)*	MATH 494 Senior Seminar* (2)	
EDUC 497 (3)*		
	Complete CATC Coursework	

## **Notes or Special Guidance for Majors:**

- \*Course has prerequisite
- <sup>F</sup> Fall only course
- <sup>S</sup> Spring only course
- \*Offered every other year

<sup>1</sup> Courses that meet CATC tags (with max of 3 from major counting for Christ at the Core Thematic Core) are included in elective and study abroad courses. Secondary Education courses that meet the CATC Thematic Core tags: EDUC 225 (SI) and EDUC 497 (with EDUC 135 taken at Wheaton) meets the PI theme. Mathematics major courses that meet CATC tags: CSCI 235 (AAQR), CSCI 243 (AAQR), MATH 231 (AAQR), Calculus AB or BC AP Exam with qualifying score (AAQR). A maximum of 3 themes can count in both the major requirements and the general education requirements - for each major.

Guidelines for determining Calculus placement:

- 1. Students with a score of 4 or 5 on AP Calculus BC Exam should enroll in Math 234 (Calculus 2B) in A Quad and MATH 331 (Vector Calculus) in B Quad.
- 2. Students with a score of 3 on the AP Calculus BC Exam or a score of 4 or 5 on the AP Calculus AB Exam should enroll in MATH 232 (Calculus 2).
- 3. Students with a score of 3 on the AP Calculus AB Exam should enroll in MATH 233 (Calculus 1B) in B-Quad.
- 4. Students without AP or dual enrollment credit should take the <u>Calculus Readiness Assessment</u>.

<sup>3</sup>Concentrations: All math majors complete a common set of required mathematics courses in their first two years. During their sophomore year, each math major chooses one of the following four concentrations: Pure Mathematics, Statistics, Applied Mathematics, or Math and Secondary Education. Each concentration has a required set of upper-level mathematics course requirements. These requirements can be found on the <a href="department's website">department's website</a> or in the Course Catalog.

Note: Secondary Education can be added to any of the Mathematics concentrations listed above. But the department recommends the Secondary Education concentration for those interested in pursing teaching math at the high school level.

<sup>&</sup>lt;sup>2</sup> Students not ready for Calculus II should discuss with their faculty advisor next steps.

<sup>&</sup>lt;sup>4</sup> EDUC 324L and EDUC 305L are taken concurrently the semester prior to student teaching.

<sup>&</sup>lt;sup>5</sup> While EDUC 135, 136 and 136L need to be taken together, EDUC 101 can be taken separately. These courses should be completed during the first year.