# Mathematics (BA or BS), Graduate School Bound Students 

## FALL - Semester 1

MATH 198: Analytic Geometry with Calculus I TRU 117: Self \& Society Sem: Game Theory TRU 100: Truman Symposium Dialogues coursework

## FALL - Semester 3

MATH 200: Foundations of Mathematics
MATH 264: Analytic Geometry with Calculus III
CHEM 130 or PHYS 195
Foreign Language

## FALL - Semester 5

MATH 451: Algebraic Structures I
MATH XXX: One course from List A or B JINS 3XX: Junior Interdisciplinary Seminar
Dialogues or BS/BA coursework
Elective
FALL - Semester 7
MATH 461: Advanced Calculus I
MATH 499: Mathematics Capstone Seminar
Electives

## SPRING - Semester 2

MATH 263: Analytic Geometry with Calculus II CS 170: Intro to Computer Science
Dialogues coursework

## SPRING - Semester 4

STAT 290: Statistics
MATH 357: Linear Algebra
Dialogues coursework
Foreign Language

## SPRING - Semester 6

MATH 398: Junior Seminar in Mathematics
MATH 452: Algebraic Structures II*
MATH XXX: One course from List A or B
Dialogues or BS/BA coursework
Elective

SPRING - Semester 8<br>MATH 462: Advanced Calculus II<br>MATH 440: Topology**<br>Electives (as needed) to total at least 120 hours

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NOTES:
*Math 452 is offered only in the spring of even years and Math 462 is offered only if the spring of odd years. So students may need to swap years for the Math 451-452 and Math 461-462 sequences.
**Offered only every other year. May need to take in junior year.
Graduation Requirements: Total credit hrs>=120 (40 credit hrs @ 300-level or higher)

## List A of Elective Courses:

MATH 363: College Geometry
MATH 440: Topology
MATH 447: Combinatorial Analysis
MATH 452: Algebraic Structures II
MATH 454: Theory of Numbers
MATH 462: Advanced Calculus II
MATH 465: Differential Geometry
MATH 468: Intro to Set Theory
MATH 469: Intro to Math Logic
MATH 515: Complex Variables I
STAT 570: Math. Probability \& Stat. I

## List B of Elective Courses:

MATH 300: Introduction to Numerical Analysis

MATH 330: Mathematics of Finance
MATH 335: Game Theory
MATH 345: Introduction to Mathematical Biology
MATH 347: Discrete Mathematics
MATH 364: Vector Analysis
MATH 365: Ordinary Differential Equations
MATH 400: Methods of Optimization
MATH 455: History of Mathematics I
MATH 456: History of Mathematics II
MATH 464: Higher Geometry
MATH 511: Numerical Analysis
MATH 521: Partial Differential Equations
MATH 530: Topics in Mathematical Modeling
MATH 564: Advanced Linear Algebra
STAT 571: Mathematical Probability and Statistics II
The Dialogues Curriculum requires a certain number of courses/credit hours in the following Perspectives: Social, Arts and Humanities, STEM, Communications, and Statistics. The exact number of courses a student will be required to take during their undergraduate career varies individually according to the credit transferred in.

Department Chair: Please contact the Center for Academic Excellence with any updates to the plan above.

