Sample Four Year Plan

Mathematics (BA/BS)

Semester 1
- TRU 120: First Year Seminar (3 cr)
- MATH 198: Analytic Geometry and Calculus I (5 cr)
- Dialogues Curriculum course (6 cr)

Semester 2
- MATH 263: Analytic Geometry and Calculus II (4 cr)
- CS 170: Intro to Computer Science I (4 cr), **OR** CS 180: Foundations of Computer Science I (4 cr) **(*)**
- Dialogues Curriculum course (6 cr)

***(*)** = Students interested in double majoring in CS should take CS 180*

Semester 3
- MATH 200: WE/Foundations of Mathematics (3 cr)
- MATH 264: Analytic Geometry and Calculus III (4 cr)
- Elementary Foreign Language I (3 cr)
- Dialogues Curriculum course (3 cr)

Semester 4
- MATH 357: Linear Algebra (3 cr)
- STAT 290: Statistics (3 cr), **OR** STAT 370: Probability (3 cr)
- CHEM 130: Chemical Principles I (4 cr), **OR** PHYS 185: College Physics I (4 cr) **(**)**
- Elementary Foreign Language II (3 cr)

***(**)** = Math majors are required to take either CHEM 130 or PHYS 185*

Semester 5
- MATH 451: Algebraic Structures I (3 cr) **(***)**
- MATH XXX: One course from List A or B (3 cr)
- JINS 3XX: WE/_____ (3 cr)
- Dialogues Curriculum course (3 cr), **OR** BS/BA coursework (3 cr)
- Elective (3 cr)

***(***)** = Math 451 and 461 are only offered in the fall. Math 452 is only offered in the spring of even years, and Math 462 is only offered in the spring of odd years. So, students may need to swap years for the Math 451-452 and 461-462 sequences.*

Semester 6
- MATH 398: Junior Seminar in Mathematics (1 cr)
- MATH XXX: One course from List A or B (3 cr)
- MATH XXX: One course from List A or B (3 cr)
- Dialogues Curriculum course (3 cr), **OR** BS/BA coursework (3 cr)
- Elective (3 cr)

Semester 7
- MATH 461: Advanced Calculus (3 cr) **(***)**
- MATH 499: WE/Mathematics Capstone (3 cr)
- Electives (6-9 cr)

***(***)** = Math 451 and 461 are only offered in the fall. Math 452 is only offered in the spring of even years, and Math 462 is only offered in the spring of odd years. So, students may need to swap years for the Math 451-452 and 461-462 sequences.*

Semester 8
- MATH XXX: One course from List A or B (3 cr)
- MATH XXX: One course from List A or B (3 cr)
- Dialogues Curriculum course (6 cr), **OR** BS/BA coursework (6 cr)

Electives (as needed) to total at least 120 hours

NOTES:

- (*) = Students interested in double majoring in CS should take CS 180
- (**) = Math majors are required to take either CHEM 130 or PHYS 185
- (***) = Math 451 and 461 are only offered in the fall. Math 452 is only offered in the spring of even years, and Math 462 is only offered in the spring of odd years. So, students may need to swap years for the Math 451-452 and 461-462 sequences.

- Graduation Requirements: Total credit hrs>=120 (40 credit hrs @ 300-level or higher)
- WE = Writing Enhanced course
- If you have not completed the Civics Exam, we recommend doing so in your **first year**.
- Truman students are required to complete a Portfolio to graduate. We recommend starting to compile your work for the Portfolio sooner than later.
- Students must complete their Application to Graduate **the semester prior to graduating**. Apply to graduate through TruView.
- Graduating seniors need to complete their seniors test and questionnaire. We recommend reviewing the Assessment & Testing page to plan accordingly.
- **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.

List A of Elective Courses (3 cr):	**List B of Elective Courses (3 cr):**
MATH 363: College Geometry	MATH 300: Introduction to Numerical Analysis
MATH 440: Topology	MATH 330: Mathematics of Finance
MATH 447: Combinatorial Analysis	MATH 335: Game Theory
MATH 452: Algebraic Structures II	MATH 345: Introduction to Mathematical Biology
MATH 454: Theory of Numbers	MATH 347: Discrete Mathematics
MATH 462: Advanced Calculus II	MATH 364: Vector Analysis
MATH 465: Differential Geometry	MATH 365: Ordinary Differential Equations
MATH 468: Intro to Set Theory	MATH 400: Methods of Optimization
MATH 469: Intro to Mathematical Logic	MATH 425: Intro. To the Math. of Life Contingencies
MATH 515: Complex Variables I	MATH 455: History of Mathematics I
STAT 570: Mathematical Probability and Statistics 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 AlgebraSTAT 571: Mathematical Probability and Statistics II
	STAT 571: Mathematical Probability and Statistics II

Department Chair: Please contact the Center for Academic Excellence with any updates to the plan above. Rev. 8-5-24