Sample Four Year Plan

Mathematics (BA/BS), Actuarial Science

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)
- CHEM 130: Chemical Principles I (4 cr), **OR** PHYS 185: College Physics I (4 cr)
- Dialogues Curriculum course (3 cr)

Semester 3
- MATH 200: WE/Foundations of Mathematics (3 cr)
- MATH 264: Analytic Geometry and Calculus III (4 cr)
- ECON 200: Principles of Macroeconomics (3 cr)
- BSAD 153: Intro to Business Data Analytics (1 cr)
- Elementary Foreign Language I (3 cr)

Semester 4
- MATH 357: Linear Algebra (3 cr)
- MATH 330: Mathematics of Finance (3 cr)
- ECON 201: Principles of Microeconomics (3 cr)
- STAT 290: Statistics (3 cr)
- Dialogues Curriculum course (3 cr)
- Elementary Foreign Language II (3 cr)

Semester 5
- MATH 451: Algebraic Structures I (3 cr)
- STAT 570: Mathematical Probability and Statistics I (3 cr)
- ACCT 220: Introduction to Financial Accounting (3 cr)
- JINS 3XX: WE/_____ (3 cr)
- Dialogues Curriculum course (3 cr), **OR** BS/BA coursework (3 cr)

Semester 6
- MATH 398: Junior Seminar in Mathematics (1 cr)
- STAT 481: Loss Models (3 cr) **(*)**
- STAT 571: Mathematical Probability and Statistics II (3 cr)
- BSAD 329: Principles of Finance (3 cr)
- Dialogues Curriculum course (3 cr), **OR** BS/BA coursework (3 cr)

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

Semester 8
- MATH 425: Intro. to the Math. of Life Contingencies (3 cr) (*)
- Dialogues Curriculum course (6 cr), OR BS/BA coursework (6 cr)

Electives (as needed) to total at least 120 hours

NOTES:

- **(*) =** MATH 425 in only offered in odd years and STAT 481 in even years, so these courses may need to be swapped in the plan
- 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):

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 464: Higher Geometry
MATH 465: Differential Geometry
MATH 468: Intro to Set Theory
MATH 469: Intro to Mathematical Logic
MATH 515: Complex Variables I
STAT 570: Mathematical Probability and Statistics I

List B of Elective Courses (3 cr):

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 425: Intro. To the Math. of Life Contingencies
MATH 455: History of Mathematics I
MATH 456: History of Mathematics II
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

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