

Bachelor of Science in Mathematics Sample Schedule

A typical student planning to get a B.S. in Mathematics (who in this example entered SPU in the fall of 2020) would follow the schedule below. Courses in normal print are required for the major, while courses in *italics* are upper-division electives. A total of 19 credits of upper-division math electives are required for the B.S.

Because many upper-division courses are only offered alternating years, all students are strongly encouraged to consult with an advisor from the faculty in the Mathematics Department to carefully plan their schedule.

	Autumn	Winter	Spring
Freshman Year (22-23)	MAT 1234 Calculus I MAT 2360 Intro Stats for the Sciences*	MAT 1235 Calculus II	MAT 1236 Calculus III
Sophomore Year (23-24)	MAT 2401 Linear Algebra or MAT 3237 Differential Equations	MAT 3360 Probability and Statistics MAT 3237 Differential Equations or MAT 3238 Vector Calculus	MAT 3238 Vector Calculus or MAT 2401 Linear Algebra MAT 2720 Discrete Mathematics <i>MAT 3333 Statistical Modeling (alternate years)</i>
Junior Year (24-25)	MAT 3749 Introduction to Analysis <i>MAT 3442 Geometry (alternate years)</i> <i>MAT 3724 Applied Analysis (alternate years)</i>	MAT 4402 Modern Algebra I <i>MAT 4830** Mathematical Modeling (alternate years)</i>	MAT 4403 Modern Algebra II (alternate years) MAT 3899 Mathematical Writing <i>MAT 4363 Mathematical Statistics (alternate years)</i>
Senior Year (25-26)	MAT 4898 Senior Capstone Seminar <i>MAT 3401 Number Theory (alternate years)</i> <i>MAT 3380 Intro to Data Science</i>	MAT 3751 Real Analysis II (alternate years) <i>MAT 4725** Numerical Analysis (alternate years)</i>	<i>MAT 3730 Complex Variables (alternate years)</i> <i>MAT 3333 Statistical Modeling (alternate years)</i>

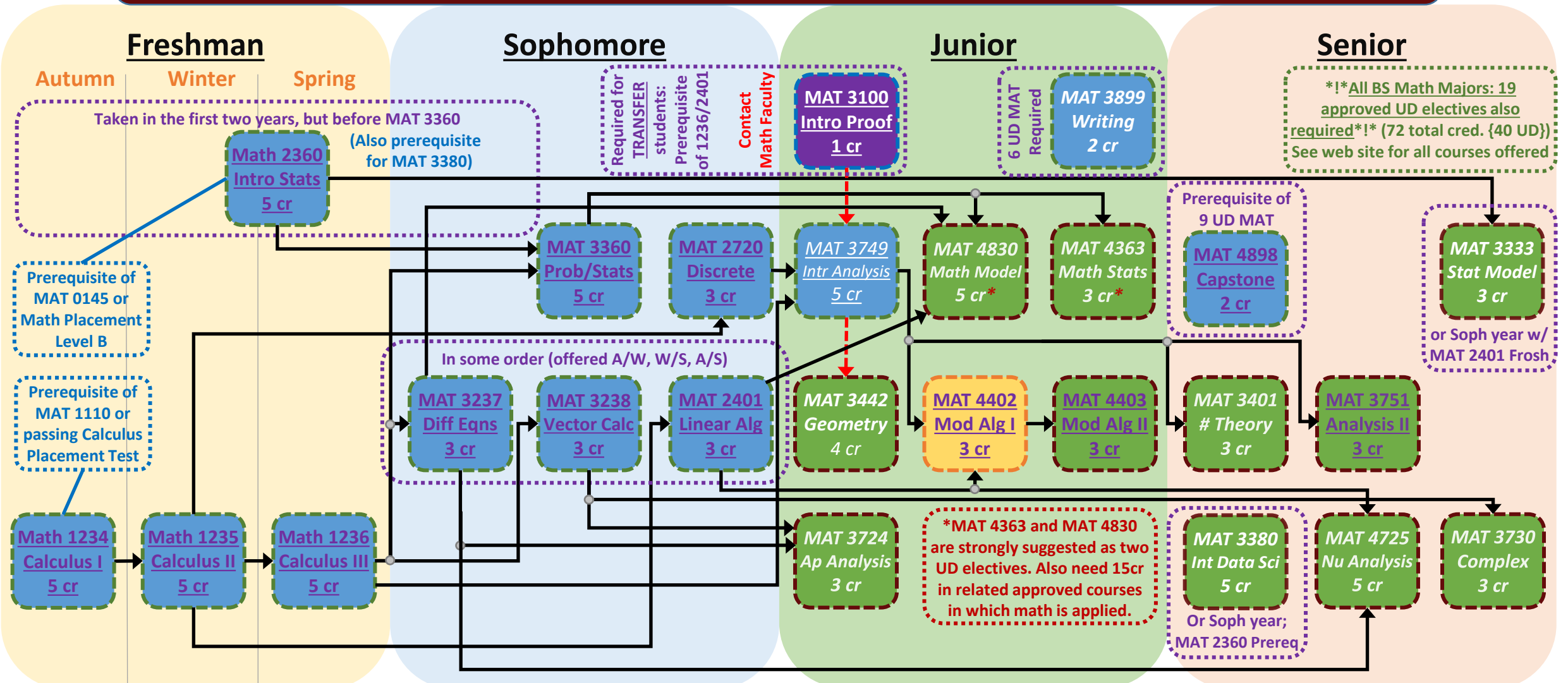
*MAT 2360 can be taken any quarter in the first two years but must be taken before MAT 3360 (and MAT 3333 and MAT 3380).

**MAT 4363 and 4830 are strongly recommended as two of the elective courses for the B.S. 15 credits in related approved courses in which mathematics is applied are also required.

Note that a number of courses are offered on alternate years. It is therefore quite important that students wishing to major in mathematics start out by taking the calculus sequence in their freshman year. Also, since a number of upper-division courses require MAT 3749 as a prerequisite, it is important to take that course during the autumn quarter of the junior year.

BS in Mathematics Flow Chart and Suggested Course Sequence [Even year start]

See <http://spu.edu/academics/college-of-arts-sciences/mathematics> for more details. **Please contact Math advisor.**



!All BS Math Majors: 19 approved UD electives also required! (72 total cred. {40 UD})
See web site for all courses offered

Required for TRANSFER students: Prerequisite of 1236/2401
Contact Math Faculty

6 UD MAT Required
MAT 3899 Writing 2 cr

Prerequisite of MAT 0145 or Math Placement Level B

Prerequisite of MAT 1110 or passing Calculus Placement Test

In some order (offered A/W, W/S, A/S)

*MAT 4363 and MAT 4830 are strongly suggested as two UD electives. Also need 15cr in related approved courses in which math is applied.

MAT 3380 Int Data Sci 5 cr
Or Soph year; MAT 2360 Prereq