

## SDSU Math/Stat Department Curriculum

### The curriculum consists of a Core Curriculum and Concentration Areas

- All math majors take the same Core Curriculum.
- Each math major chooses one (or more) areas of concentration and takes recommended courses appropriate to that concentration.
- [Concentrations correspond to specific groups of careers.](#) (Wall Street Journal [source article](#); [CareerCast.com](#))
- Additionally, there are many math/stat courses you can take just because they're fun and interesting!

### Core/Concentration Structure

<a href="#">Computational Science Concentration Courses</a>		<a href="#">Financial Engineering Concentration Courses</a>		<a href="#">Mathematics Education Specialization Courses</a>		<a href="#">Statistics Concentration Courses</a>		Other, such as Pure Math Concentration or double major
Core Curriculum								
MATH 123 Calculus I				MATH 253 Logic and Sets				MATH 198 The Mathematics Profession
MATH 125 Calculus II				MATH 315 Linear Algebra				MATH 215 Matrix Algebra
MATH 225 Calculus III				MATH 413 Abstract Algebra I				MATH/STAT 381 Intro to Prob. & Stat
MATH 321 Differential Equations				MATH 425 Real Analysis I				MATH 401 Senior Capstone (two semesters)

### Important subsets of the Core Curriculum and their function within the curriculum

- Calc I & II: The basis for virtually all that follows. Mastery here will pay off everywhere else!
- Calc I, II, III, & DifEq: The basic calc-related sequence. One major part of the basis for applied mathematics and computational science.
- Matrix and Linear Algebra: Another major part of the basis for applied mathematics and computational science.
- Intro to Prob & Stat: Gateway course into statistics, a tremendously important subfield of the mathematical sciences.
- Logic and Sets, Linear Algebra, Abstract Algebra I, and Real Analysis: This sequence is where you learn to think like a mathematician.
- Senior Capstone: Provides research, writing, and presentation experience, plus the chance to work intensively with a favorite professor.
- The Math Profession: A basic overview of the Math/Stat Department, the math & stat professions, and math & stat career possibilities.