**First- and Second-Year Math Courses**

**Pre-calculus**
- 105 Data, Functions & Graphs
  - Good preparation for Calculus

**Calc I** (Differentiation)
- 115 Calculus I
  - with applications to many other fields

**Calc II** (Integration)
- 116 Calculus II
  - with applications to many other fields

**Calc III** (Multivariable)
- 215 Multivariable & Vector Calculus
  - with applications to engineering & nat sci.

**Calc IV** (Diff. Eqs.)
- 216 Differential Equations
  - with applications to engineering & nat sci.

**Linear Algebra**
- 214 Applied Linear Algebra
  - For students studying computer science and IOR

**Honors Math Courses**
- 175 Introduction to Cryptology
  - Seminar-style exploration of advanced mathematical concepts through the study of cryptology

- 176 Explorations in Calculus
  - Bridge from Math 175 to Honors Calc sequence

- 185 Honors Calc I
  - Rigorous mathematical treatment of calculus

- 186 Honors Calc II
  - Together, 185 and 186 cover the same material as 295.

- 295 Honors Math I
  - Intense, rigorous real analysis course, covering the same material as 185 and 186 but over one semester instead of two.

- 296 Honors Math II
  - Rigorous linear algebra course

- 297 Introduction to Analysis
  - Bridge into Honors Math sequence for strong 217 students

- 316 Differential Equations
  - Diff. Eq. course for math majors

- 395 Honors Analysis I

- 396 Honors Analysis II

**Key**
- Fall only
- Winter only

Inquiry-Based Learning (IBL)
- Inquiry-based learning emphasizes discovery, analysis and investigation to deepen students’ understanding of the material and its applications. Students learn through guided exploration with the help of experienced instructors. Class time is spent with students working in groups and presenting and discussing their ideas with classmates.

Active Learning
- Active learning courses are taught in small sections of less than 20, with short lectures and a focus on in-class group work and problem solving.

Lecture
- Many upper-level courses

Students must meet with a Math Department Honors Adviser to receive permission to enroll.

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*Math 175 content is very different from 115, but many LSA programs with a 115 prerequisite will accept 175 in its place.

**Math 176 content overlaps significantly with 185-186 content, and many LSA programs with a 116 prerequisite will accept 176 in its place.

†Math 205 is not for students pursuing coursework in the physical sciences

††Math 215 is not for students majoring in Mathematics

Math 201 is a 1-credit course CR/NCR course designed to support students learning to write proofs.

Note that Statistics is a separate department, so its courses are not listed here.