Oberlin College
Mathematics Major Flow Chart

By End of Year 2
1 220 Discrete (F,S)
2 231 Multivariable (F,S)
3 232 Linear Algebra (F,S)

By End of Year 3
4 CS 150 (F,S) *
5 301 Analysis (F)
6 327 Group Theory (S)

By End of Year 4
Additional 300s and electives

(F) offered every Fall, (S) offered every Spring
* Recommended by end of Year 2 if possible

Calculus I and II are required if not already taken elsewhere
301, 327, and 335 offered every year. Other 300s generally offered in alternate years

300s without a 300 level prerequisite:
302 Dynamical Systems
305 Mathematics of Climate Modeling
317 Number Theory
318 Cryptography
328 Computational Algebra
331 Linear Optimization
332 Nonlinear Optimization
335 Probability
350 Geometry
397 Seminar in Math. Modeling
339 Prob. Mod.

300s with a 300 level prerequisite:
329 Algebra II: Rings and Fields
340 Mathematical Logic
343 Combinatorics
353 Topology
356 Complex Analysis
357 Harmonic Analysis
358 Real Analysis
STAT 336 Mathematical Statistics

Additional Statistics Minor

By End of Year 2
1 205 Stat. & Modeling
2 209 Data Comp. & Visual.

By End of Year 3
3 335 Probability

By End of Year 4
5 339 Prob. Mod.

& Machine Learn.

Recommended: CS 151 and CS 280
For more information, see Statistical Modeling Minor in the Course Catalog

8/11/2020
Optional Areas of Emphasis within a Mathematics Major

### Preparation for Graduate Studies in Mathematics

- Take as many additional 300s as possible.

### Operations Research and Industrial and Systems Engineering

- 331 Linear Optimization, 332 Nonlinear Optimization, and 335 Probability.
- Recommended: CS 151 and CS 280

### Connections to Computer Science

- Courses among MATH 318, 331, 332, 397, and STAT 339.
- CS 151 and 280.

### Preparation for Actuarial Work

- MATH 335 to prepare for Exam P.
- Recommended: ECON 206 and STAT 336.

### Connections to Economics

- MATH 332, 335, and 342.