Oberlin College
Mathematics Major Flow Chart

Calculus I & II are required if not already taken elsewhere

By End of Year 2
- 220 Discrete (F/S)
- 231 Multivariable (F/S)
- 232 Linear Algebra(F/S)

- 301 Analysis (F/S)
- 327 Algebra I: Group Theory (F/S)
- CS 150 (F/S)*

By End of Year 3

By End of Year 4
- Additional 300s and Electives
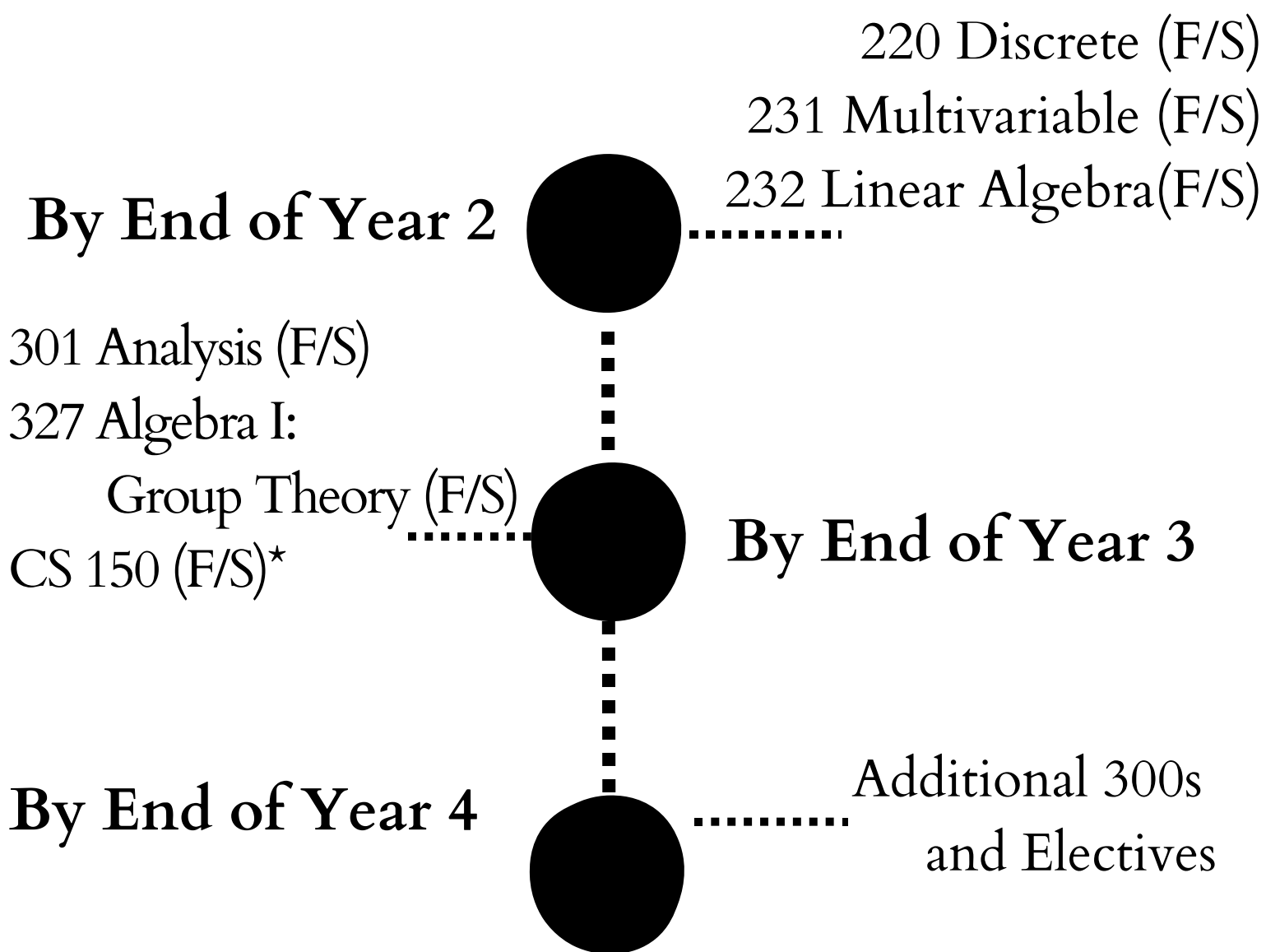
Recommended: MATH 234 Differential Equations

Additional Statistical Modeling Minor

By End of Year 2
- 205 Stat. & Modeling
- 209 Data Comp. & Visual.
- –or–
- 237 Bayesian Comp.

- 335 Probability

By End of Year 3

By End of Year 4
- 336 Math. Stat.
- 339 Prob. Mod. & Machine Learning
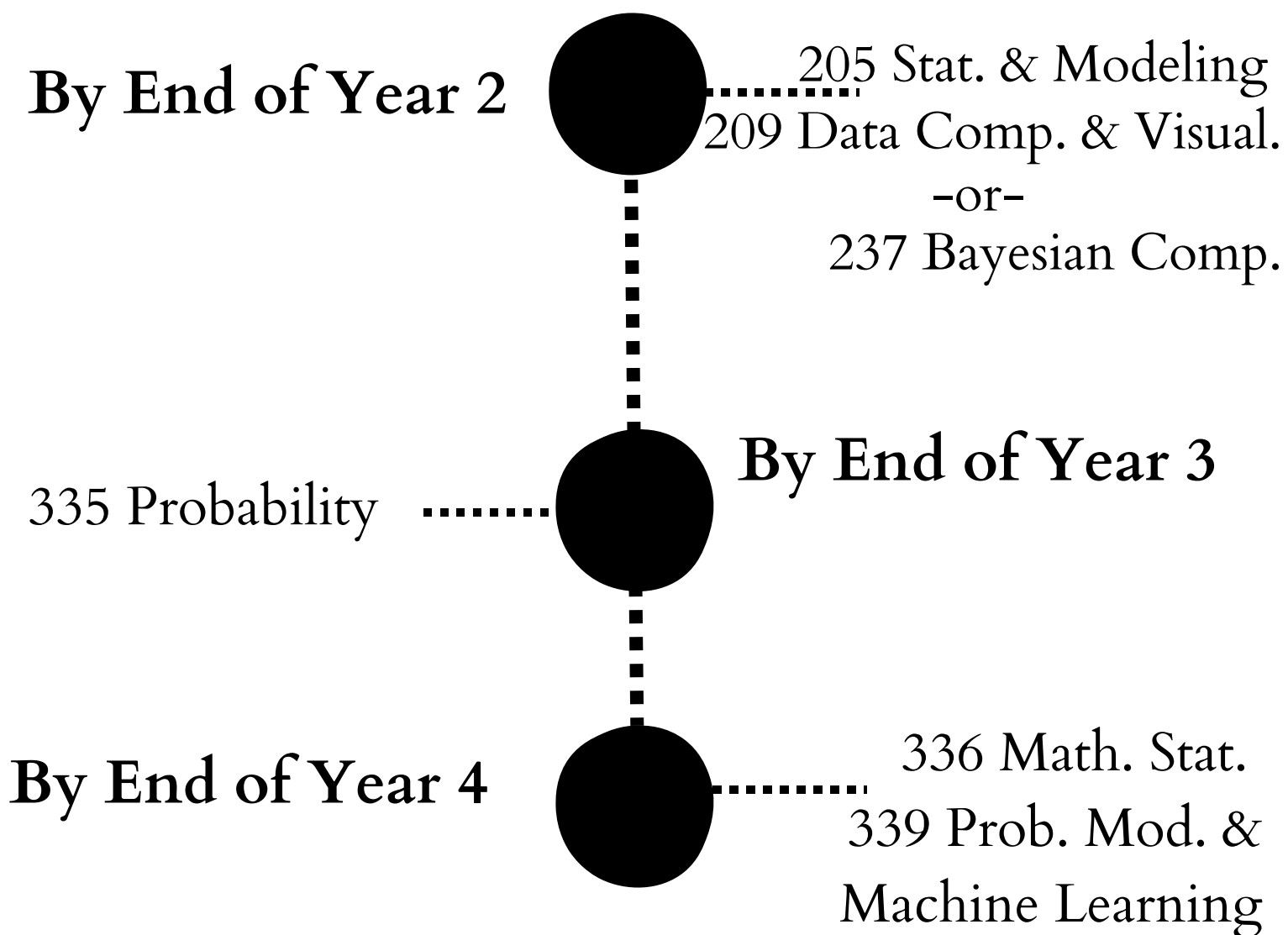
Recommended: CS 151 & CS 280
For more information, see Statistical Modeling Minor in the Course Catalog

(F) Offered Every Fall
(S) Offered Every Spring
*Recommended By End Of Year 2 If Possible

300 Level Courses

301, 327, and 335 offered every year.
Other 300s generally offered in alternate years.

300s without a 300 level prerequisite:

302 Dynamical Systems
317 Number Theory
318 Cryptography
328 Computational Algebra
331 Linear Optimization
332 Nonlinear Optimization
335 Probability
342 Mathematics of Social Choice
350 Geometry
397 Seminar in Mathematical Modeling
STAT 339 Probabilistic Modeling and Machine Learning

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

Optional Areas of Emphasis within a Mathematics Major

Preparation for Graduate Studies in Mathematics
329 Algebra II, 353 Topology, and 356 Complex Analysis.
Take as many additional 300s as possible.

Operations Research & Industrial & 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.