

Geneseo Curriculum Map for: B.A. in Mathematics

| Program Learning Outcomes (one per row): | These courses introduce material necessary for outcome achievement. (e.g., PSYC 100) | These courses reinforce material necessary for outcome achievement. | These courses provide coverage necessary for mastery of the outcome. |
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| 1) Students will be able to analyze problems and formulate appropriate mathematical models in a variety of areas of Mathematics. | MATH 221 MATH 222 MATH 223 | MATH 230 MATH 233 | MATH 326 MATH 361 MATH 341 MATH 371 MATH 345 |
| 2) Students will be able to select and utilize appropriate mathematical technology with which to analyze mathematical problems in a wide variety of areas. | MATH 221 MATH 222 MATH 223 | MATH 230 MATH 233 | MATH 326 MATH 345 MATH 360 |
| 3) Students will be able to make rigorous mathematical arguments including how to both prove and disprove conjectures. | MATH 221 MATH 222 | MATH 233 MATH 239 | MATH 324 MATH 333 MATH 330 MATH 371 |
| 4) Students will critically read mathematics. | MATH 221 MATH 222 | MATH 239 | MATH 324 |
| 5) Students will be able to use the concepts of Analysis in solving problems. The fundamental concepts include sets, numbers, functions, and convergence. | MATH 221 MATH 222 | MATH 223 MATH 239 | MATH 324 MATH 345 MATH 330 MATH 371 |
| 6) Students will be able to use the concepts of Algebra in solving problems. The fundamental concepts include equations, numbers, and algebraic structures. | MATH 233 | MATH 239 | MATH 330 MATH 333 MATH 371 |
| 7) Students will be able to express themselves in writing in an articulate, sound and well-organized fashion. | MATH 221 MATH 222 MATH 223 | MATH 233 MATH 239 | MATH 324 MATH 345 MATH 330 MATH 371 MATH 333 |
| 8) Students will be able to express themselves orally in an articulate, sound and well-organized fashion. | MATH 221 MATH 222 MATH 223 | MATH 233 MATH 239 | MATH 324 MATH 345 MATH 330 MATH 348 MATH 333 MATH 360 MATH 341 MATH 371 |