Progress Toward Completion of the Mathematics Major

Mathematical Biology Concentration

Arts and Sciences students may be admitted to the math major after successfully completing a semester of multivariable calculus, a semester of linear algebra, and a 3- or 4-credit computer programming course. To apply, visit math.cornell.edu/major.

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<tr>
<th>Student’s Name</th>
<th>Net ID</th>
<th>Faculty Advisor</th>
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Courses needed to complete the major

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<th>Course Code</th>
<th>Course Title</th>
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Math majors must complete 9 courses for the major, as described in items 1–3 below, with a minimum grade of C–. No course may be used to satisfy more than one requirement. MATH courses numbered between 4980 and 5999 do not count.

1. Two Courses in Algebra. ( ___ transfer credit applied, see reverse)

2. Two Courses in Analysis. ( ___ transfer credit applied, see reverse)

*See course descriptions at math.cornell.edu/upper-level-courses for information on forbidden overlaps.
3. **Concentration in Mathematical Biology.** (___ transfer credit applied, see below)

Five additional courses from (x) and (xi) below.

(x) Three biology courses that have mathematical content and provide background necessary for work at the interface between biology and mathematics:

- ____ BIOEE 3620 - Dynamic Models in Biology [also MATH 3620]
- ____ BIONB 4220 - Modeling Behavioral Evolution
- ____ BME 3110 - Cellular Systems Biology
- ____ BTRY 3080 - Probability Models and Inference* [also ILRST/STSCI 3080]
- ____ BTRY 4090 - Theory of Statistics* [also STSCI 4090]
- ____ BTRY 4820 - Statistical Genomics: Coalescent Theory and Human Population Genomics
- ____ BTRY 4830 - Quantitative Genomics and Genetics
- ____ BTRY 4840 - Computational Genetics and Genomics [also CS 4775]
- ____ NTRES 4120 - Wildlife Population Analysis: Techniques and Models
- ____ ___________________________________________________________ (approved by faculty advisor)

(xi) Two mathematics courses numbered 3000 or above. MATH 4200 and 4710* are particularly appropriate.

- ____ _________________________________________________________________________________
- ____ _________________________________________________________________________________

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**Transfer Credit / Study Abroad Courses Applied to the Major**

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<th>Course Number &amp; Title</th>
<th>Institution</th>
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*See course descriptions at math.cornell.edu/upper-level-courses for information on **forbidden overlaps**.*