

Individualized Mathematical Biology Minor Learning Plan Proposal

Name: _____ e-mail address: _____

Graduation Date: _____ Major: _____

MBMOC Member (Print then Sign): _____

The Mathematical Biology Minor will be awarded to those students who demonstrate an ability to work at the interface between the life sciences and mathematics. Specifically, the student must participate in coursework, research and related experiences that establish demonstrable proficiency in five key areas. Use the **Proposed Coursework** form below to organize the courses and experiences that will contribute to a cohesive interdisciplinary experience. Completion of *Introduction to MathBio* (BIOL or MATH345) is required for all who wish to earn the minor. In addition, the coursework included in the **Learning Plan** must comprise a total of **15 credits** (≥ 9 credits must be 300-500 level). At most six (6) credit hours in the minor may be used to satisfy a major requirement (i.e., core course or major electives). Indicate all courses counting toward your major by placing an "X" in the *Major Requirement* column. Included, for your convenience, are courses that have been used to build the conceptual foundation for particular proficiencies. With the exception of *Introduction to MathBio*, these are not required courses.

Proposed Coursework

Proficiency Category — Description

Course Name / Course Number	Credits	Semester	Major Requirement?
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Data Acquisition — Acquiring data on biological phenomena in a lab setting, field setting, or both.

_____	___	_____	_____
_____	___	_____	_____

Computation — Developing or applying computational tools in a biological context.

Introduction to Bioinformatics / BIOL370 or CS325	3	_____	_____
Other: _____	___	_____	_____

Modeling — Developing and applying mathematical models in a biological context.

Introduction to MathBio / BIOL or MATH345	3	_____	_____
Other: _____	___	_____	_____

Statistics — Applying statistical testing to biological hypotheses.

Biometry / BIOL502	3	_____	_____
Biostatistics / STAT390	3	_____	_____
Other: _____	___	_____	_____

Research — Addressing an open-ended research question in Mathematical Biology.

Research for Credit (e.g., BIOL 441)	___	_____	_____
Participation in TruScholars or MathBio	NA	_____	NA
REU or Other: _____	NA	_____	NA

Learning Plan Statement

Write a brief statement (500-700 words) about your reasons for earning the Minor in Mathematical Biology. Convey aspects of your plan that are not represented in the **Proposed Coursework** section. Use this opportunity to describe how your learning plan will prepare you to do interdisciplinary work at the interface of mathematics and the life sciences. The **Learning Plan Statement** will be used to evaluate your proposed learning plan.

Submitting the Learning Plan

Before submitting your learning plan to the Mathematical Biology Minor Oversight Committee (MBMOC), please discuss your proposal with a member of the committee. The MBMOC member should sign the front page of this form to indicate that the two of you have discussed your plan and believe it to be ready to submit to the MBMOC for review.

Please submit **four (4) copies** of this learning plan proposal, each with an accompanying **Learning Plan Statement**, to the chair of the MBMOC; see the MathBio website for contact information.