Name: **Date:**

PeopleSoft ID:

Check List for BS in Mathematical Biology

MATHEMATICS (27 Hours)

Tr	UH		
		MATH 2413 (1431)	Calculus I Fall, Spring, Sum
		MATH 2414 (1432)	Calculus II Fall, Spring, Sum
		MATH 2318 (2331)	Linear Algebra Fall, Spring, Sum
		MATH 2415 (2433)	Calculus III Fall, Spring, Sum
		MATH 3331	Differential Equations Fall, Spring, Sum
		MATH 3338	Probability Fall, Spring, Sum
		MATH 3339	Statistics for the Sciences Fall, Spring, Sum
		MATH 43____	4000-level MATH elective

BIOLOGY (23 Hours)

		BIOL 1106 (1161)	Biology for Science Majors I Lab Fall, Sum
		BIOL 1306 (1361)	Biology for Science Majors I Fall, Sum
		BIOL 1107 (1162)	Biology for Science Majors II Lab Spring, Sum
		BIOL 1307 (1362)	Biology for Science Majors II Spring, Sum
		BIOL 3301	Genetics Fall, Spring
		BIOL 3306	Evolutionary Biology Fall, Spring
		BIOL 3311	Genetics Laboratory **(*WID)** Fall, Spring
		BIOL 3324	Human Physiology Fall, Spring
		BIOL 4374	Cell Biology Fall, Spring

BIOCHEMISTRY (3 Hours)

		BCHS 3304	General Biochemistry I Fall, Spring

INTERDISCIPLINARY COURSES (6 Hours)

		BIOL/MATH 4309	Mathematical Biology Spring
		BIOL/MATH 4310	Biostatistics Fall

CORE (Check UH Catalog or UH Core Website for Pre-Requisites)

COMMUNICATION (6 Hours):

Tr	UH		
		ENGL 1301 (1303)	First Year Writing I
		ENGL 1302 (1304)	First Year Writing II

STATE REQUIREMENTS (12 Hours):

			American History (3 Hours)
			American History (3 Hours)
		GOVT 2305 (POLS 1337)	U.S. Government: Congress, President, and Court
		GOVT 2306 (POLS 1336)	U.S. and Texas Constitutions and Politics

FROM APPROVED CORE LIST (12 Hours): Choose from UH Core Website

			Creative Arts (3 Hours)
			Language, Philosophy & Culture (3 Hours)
			Social & Behavioral Sciences (3 Hours)
		Satisified by BIOL 3311	Writing in the Disciplines (3 Hours)*

*EXAMPLES OF 4000-LEVEL MATH ELECTIVES

F	**MATH 4320**	**Introduction to Stochastic Processes**
F	**MATH 4322**	**Introduction to Data Science and Machine Learning**
F	**MATH 4323**	**Data Science and Statistical Learning**
F	**MATH 4331**	**Introduction to Real Analysis**
F	**MATH 4335**	**Partial Differential Equations**
F	**MATH 4339**	**Multivariate Statistics**
F	**MATH 4350**	**Differential Geometry**
S	MATH 4355	Mathematics of Signal Representation
**	MATH 4362	Theory of Ordinary Differential Equations
F	**MATH 4364**	**Numerical Analysis**
S	**MATH 4380**	**Mathematical Introduction to Options**

F - Fall Semester, S - Spring Semester, Su - Summer Semester

***Indicates the course is not offered at consistent intervals**

CHEMISTRY (12 Hours)

Tr	UH		
		CHEM 1111 (1111)	Fundamentals of Chemistry I Lab
		CHEM 1311 (1331)	Fundamentals of Chemistry I
		CHEM 1112 (1112)	Fundamentals of Chemistry II Lab
		CHEM 1312 (1332)	Fundamentals of Chemistry II
		CHEM 2123 (3221)	Organic Chemistry I Lab
		CHEM 2323 (3331)	Organic Chemistry I

UNIVERSITY PHYSICS (8 Hours)

		PHYS 2125 (1121)	University Physics Lab I
		PHYS 2325 (1321)	University Physics I
		PHYS 2126 (1122)	University Physics Lab II
		PHYS 2326 (1322)	University Physics II

FREE ELECTIVES

(Additional hours to complete a total of **120 hours** and **36 advanced hours** as needed)

Tr	UH	

RULES YOU NEED TO KNOW:

Numbers in parentheses indicate UH course numbers prior to Fall 2021.

1. MINIMUM of a **2.00 GPA** in cumulative, major, and minor GPA to graduate
2. **PRE-REQ RULE:** Must earn C- or better in pre-requisite for MATH and BIOL courses
3. **C- RULE**: MAXIMUM of **6 hours** of grades below C- allowed in UH MATH and BIOL courses
4. LAST **30 hours** must be exclusively completed at UH
5. MAXIMUM of **6 W's** allowed during entire undergraduate career
6. MINIMUM of **36 advanced hours** and **120 total hours** to graduate
7. MAXIMUM of **66 lower level transfer hours** may be applied towards UH degree

NSM CAPSTONE:

By virtue of the interdisciplinary nature of the program, students who complete the requirements for the B.S. degree in Mathematical Biology have satisfied the NSM Capstone.

NOTE: Students who plan to apply for medical school should include CHEM 2325 and CHEM 2125 in their free elective hours.

Advisor: _____