

Academic Advisor _____

Quantitative Sciences Major Checklist Substantive Track: Biology

Student Name _____ /Student ID _____ /Date _____

Requirement	Course Taken	Fall/Spring and Year	Credits	Instructor	Grade
MATH 111					
QTM 110					
QTM 120					
QTM 210					
QTM 220					
QTM elective ¹					
QTM elective					
QTM elective					
BIOL 141/141L					
BIOL 142/142L					
CHEM 141 or 142 ²					
PHYS 151 or 152 ³					
Track 1: Neurobiology*					
BIOL 360					
BIOL 450					
Elective Course ⁴					
Elective Course					
Track 2: Population Biology, Ecology, and Evolution (PBEE)*					
BIOL 241					
BIOL 247					
Elective Course					
Elective Course					

¹ QTM elective courses include 300-level and 400-level lecture and seminar-style classes. Previously listed at QTM 385s.

² Cannot use AP credit

³ Cannot use AP credit

⁴ See attached "QSS + Biology Track Electives" for a list of appropriate electives

Academic Advisor _____

*Choose either track 1 or track 2

Credits Earned Towards QSS: _____/(50 needed to earn degree⁵)

Total Credits Earned: _____/(124 academic credit hours + 2 P.E. + HLTH 100 needed for graduation)

Expected Graduation Date: (Fall / Spring) _____

⁵ 50 credits are needed to earn a B.S. in Quantitative Sciences with most substantive fields; 52+ credits are needed to earn a B.S. in Quantitative Sciences with a substantive field of Biology because of additional curriculum requirements

QSS + Biology Concentration Electives

Elective courses for the QSS Biology concentration include the following (and can include the required courses of the track option not chosen):

1. PHYS / BIOL 212: Computational Modeling in the Sciences⁶
2. BIOL 223: Developmental Biology
3. BIOL 241: Ecology
4. BIOL 247: Evolution
5. BIOL 250: Cell Biology
6. BIOL 264: Human Genetics
7. BIOL 301: Biochemistry
8. NBB 302: Behavioral Neuroscience
9. BIOL 330 / CHEM 330: Chemistry, Biology and Molecular Modeling
10. BIOL 336: Human Physiology
11. BIOL 360: Intro Neurobiology
12. PHYS 434: Physical Biology
13. CHEM 435: Molecular Simulation Chem Bio
14. BIOL 450: Computational Neuroscience
15. BIOL 455: Immunology and Disease
16. BIOL 463: Population Biology and Evolution of Disease

Note: Other Biology-related elective classes may be taken in consultation with a Biology faculty advisor. Students can also consider other combinations of the 4 elective classes, outside of the Neurobiology and PBEE options described above. This can be planned with guidance from track advisors.

Biology faculty advisors for QSS students: Rustom Antia, Gordon Berman, Ronald Calabrese, Dieter Jaeger, Bruce Levin, Robert Liu, Ilya Nemenman, Astrid Prinz, Leslie Real, Jaap De Roode, Samuel Sober.

⁶ While not required, PHYS / BIOL 212 is highly recommended as an elective