

UB/HWI Department of Structural Biology

A structural biology Ph.D. program for a student well-prepared in both physical and biological sciences

1st semester (Fall)

BMS 503	Principles of Biochemistry	
<i>or</i> BCH 503	<i>or</i> Biochemical Principles	
<i>or</i> BIO 501	<i>or</i> Advanced Molecular Biology I	4 credits
STB 530	Protein Expression, Purification, and Crystallization	3 credits
STB 533	Crystallographic Methods of Structural Biology I	3 credits
STB 510 A	Research Rotation I	2 credits
STB 612	Structural Biology Seminar	1 credit

2nd semester (Spring)

BCH 507	Protein Structure and Function	2 credits
BCH 508	Gene Expression	2 credits
STB 505	Crystallographic Methods of Structural Biology II	3 credits
STB 510 B & C	Research Rotations II & III	2 + 2 credits
STB 612	Structural Biology Seminar	1 credit

CHOICE OF RESEARCH TOPIC, ADVISOR, AND COMMITTEE

3rd semester

BMS 501	Cell Biology I	
<i>or</i> BIO 502	<i>or</i> Advanced Cell Biology	4 credits
Elective	Biology, Biochemistry Chemistry, Physics, Mathematics, or Computing Elective	3 credits
STB 612	Structural Biology Seminar	1 credit
STB 700	Thesis or Dissertation Research	credit

4th semester

BIO 608	Topics in Macromolecular Structure	3 credits
	Cross-listed as STB Computational Modeling of Biomolecular Structure	
OR	OR	
CHE 512	NMR and Biomolecular Structure	3 credits
	Cross-listed as STB Spectroscopic Methods of Structural Biology	
STB 612	Structural Biology Seminar	1 credit
STB 700	Thesis or Dissertation Research	credit

CANDIDACY RESEARCH PROPOSAL AND EXAMINATION

5th semester *et sequentia*

STB 612	Structural Biology Seminar	1 credit
STB 700	Dissertation Research	credit