

GRADUATE STUDIES IN STRUCTURAL BIOLOGY



Department of Structural Biology
School of Medicine and Biomedical Sciences
State University of New York at Buffalo



and
Hauptman-Woodward Medical Research Institute, Inc.

Sample Curricula

**A structural biology Ph.D. program for a student entering
through required 1st and 2nd semester courses in the
*Interdisciplinary Graduate Program in Biomedical Sciences***

1st semester (Fall)

BMS 501	Cell Biology I	4 credits
BMS 503	Principles of Biochemistry	4 credits
BMS 509	IGPBS Laboratory Rotation I	2 credits
BMS 511	Interdisciplinary Seminar	2 credits

2nd semester (Spring)

BMS 506	Cell Biology IIA. Cell Growth, Transformation, Differentiation	2 credits
BCH 507	Protein Structure and Function	2 credits
BCH 508	Gene Expression	2 credits
BMS 510 A & B	IGPBS Laboratory Rotations II & III	2 + 2 credits
BMS 512	Interdisciplinary Seminar	1 credit

CHOICE OF RESEARCH TOPIC, ADVISOR, AND COMMITTEE

3rd semester

STB 530	Mathematics and Physics Topics for Biologists	2 credits
STB 531	Protein Expression, Purification, Crystallization	3 credits
STB 533	Crystallographic Methods of Structural Biology I	3 credits
STB 612	Structural Biology Seminar	1 credit
STB 700	Thesis or Dissertation Research	credit

4th semester

STB 534	Crystallographic Methods of Structural Biology II	3 credits
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
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Cross-listed as STB Spectroscopic Methods of Structural Biology

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

5th semester

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

CANDIDACY RESEARCH PROPOSAL AND EXAMINATION

6th semester *et sequentia*

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