

Department of Chemistry and Biochemistry
Eastern Illinois University
Charleston, IL 61920

**SUGGESTED ACCELERATED 4 + 1 - PLAN OF STUDY FOR BS/MS DEGREE IN CHEMISTRY
B.S. with Biochemistry Concentration (ACS-approved) plus MS Chemistry**

FRESHMAN YEAR

<i>Fall Semester (16 SH)</i>			SH	<i>Spring Semester (16 SH)</i>			SH
CHM	1310G	General Chemistry I	3	CHM	1410	General Chemistry II	3
CHM	1315G	General Chemistry Laboratory I	1	CHM	1415	General Chemistry Laboratory II	1
ENG	1001G	Composition and Language	3	ENG	1002G	Composition and Literature	3
PHY	1351G	General Physics I	3	PHY	1361	General Physics II	3
PHY	1352G	General Physics I Laboratory	1	PHY	1362	General Physics II Laboratory	1
MAT	1441G	Calculus and Analytic Geometry I	5	MAT	2442	Calculus and Analytic Geometry II	5

SOPHOMORE YEAR

<i>Fall Semester (18 SH)</i>			SH	<i>Spring Semester (14-17 SH)</i>			SH
CHM	2440	Organic Chemistry I	3	* CHM	2310	Inorganic Chemistry I	3
CHM	2445	Organic Chemistry Laboratory I	1	CHM	2840	Organic Chemistry II	3
CHM	2730	Quantitative Analysis	3	CHM	2845	Organic Chemistry Laboratory II	1
* CHM	3500	Introduction to Chemical Research	1	S/B Gen Ed/Diversity			3
BIO	1500	General Biology	4	S/B Gen Ed			3
CMN	1310G	Intro to Speech Communication	3	HUM Gen Ed			3
S/B Gen Ed			3				

JUNIOR YEAR

<i>Fall Semester (17 SH)</i>			SH	<i>Spring Semester (14-17 SH)</i>			SH
CHM	3000	Chemistry Seminar I	0	CHM	3001	Chemistry Seminar II	1
* CHM	3780	Instrumental Analysis	3	* CHM	3920	Quantum Chemistry (or 4900 in FA)	3 or 0
* CHM	3450	Biochemistry I	3	* CHM	3455	Biochemistry Lab	2
* CHM	3910	Chemical Thermodynamics & Kinetics	3	* CHM	3460	Biochemistry II	3
CHM	4400	Undergraduate Research	1	CHM	4400	Undergraduate Research	1
FA elective (upper division)			3	BIO	3200 or 3	Microbiology or Genetics	4
^# Elective (BIO 1550G)			4	H/FA elective(upper division)			3

SENIOR YEAR

<i>Fall Semester (UG 7-10 SH; Shared 6 SH)</i>			SH	<i>Spring Semester (UG 8SH; Shared 3 SH)</i>			SH
CHM	4000	Chemistry seminar III	0	CHM	4001	Chemistry Seminar IV	1
EIU	41xxG	Senior Seminar	3	# CHM	4400x	Undergrad research (UG CHM elec)	1
@ CHM	4860Z	Advanced Biochemistry	3	CHM	4915	Adv Laboratory or Approved Bio Course > 4750	3
# CHM	4400x	Undergrad research (UG CHM elec)	1	CHM	3915	Physical Chemistry Lab	2
CHM	4900	Inorganic II (or CHM 3920 in SP)	3 or 0	@ CHM	5180Z	Bioanalytical or Supra Mol or Approved Bio course >5	3
@ CHM	5300Z or 5	Molec Spect or Modern Org	3	^# Electives			6
^# Electives			3				

GRADUATE YEAR → next page

GRADUATE YEAR (9 SH from YR 4)

Summer #1 (3 SH)

CHM 5890x Graduate Research 3 SH

Fall Semester (9 SH)

CHM >4750 Elective 3 SH
* CHM 5003 Reading Chemical Literature 1 SH
CHM 5300Z or 5: Molec Spect or Modern Org 3 SH
CHM 5890x Graduate Research 1 SH
* CHM 5002 Introduction to Research 1 SH
CHM 5000 Graduate Seminar I 0 SH

Spring Semester (9 SH)

CHM 5001 Graduate Seminar II 1 SH
CHM 5950 Thesis 3 SH
CHM 5360Z Supramolecular /Bioanalyt/ Approved Bio >5000 3 SH
CHM 5890x Graduate Research 2 SH

Summer #2 (if necessary)

CHM 5890x Graduate Research 3 SH

NOTES

Only two chemistry graduate courses can be substituted with approved biology graduate courses with graduate coordinator's permission

Approved Biology Graduate Courses

BIO 4835 - Advanced Neurobiology

BIO 4751 - Advanced Molecular Cell Biology.

BIO 4836 - Pathogenic Microbiology.

BIO 5400 - Cell Physiology.

BIO 5406 - Endocrinology.

* Only offered in semester listed

@ Shared credit; B or better grade is necessary to stay in the 4+1 program

UNDERGRADUATE DEGREE NOTES:

Transfer students should complete Math and Physics requirements during the two years before transferring.

Minimum hours for graduation: 120

^ Undergraduate must have 40 hours of coursework numbered 3000 and above

Five semester hours of Chemistry or Bio electives needed, including the two hours of CHM 4400. Bio electives require prior approval of academic advisor and I

GRADUATE DEGREE NOTES:

Limit of 9 hours Thesis (5950) and Research (5890)

Graduate students must have 30 hours total with 20 hours at the 5000 level

Nine hours of courses numbered 4750 through 5499 can be carried over from senior year to be counted for graduate credit