

16^{REV D}



B.S. IN CHEMISTRY DEGREE REQUIREMENTS

With a Concentration in Biochemistry

THIS SHEET APPLIES FALL 2016

Additional information can be found at www.chem.wayne.edu. (TRANSFER STUDENTS: You must earn a minimum of 15 chemistry credits at WSU. Check transferred chemistry courses with an advisor to prevent problems at graduation.)

NON-CHEMISTRY REQTS FOR B.S. CHEM MAJORS

ANY FOREIGN LANGUAGE: 1010(4) 1020(4) 2010(4)

MATHEMATICS: 2010(4) 2020(4) 2030(4)

[NOTE: A math placement exam is required prior to enrolling in MAT 201. Contact the Testing Office (577-3400) for dates and arrangements. Both MAT 2250 & 2350 are recommended.]

PHYSICS: math 2020 coreq 2170(4) 2171(1) 2180(4) 2181(1)

ALL students who transfer in less than 10 hrs physics should check with a chemistry advisor.

CHEMISTRY & BIOLOGY COURSES

GENERAL/ORGANIC CHEMISTRY:

1220 (4) or 1225(3)/1230(1) or [1070(4) or 1050(6) or 1310(5) or 1410(5)]

1240(4)/1250(1) or [2240(4) or 2310(4) or 1410(5)]

2220(4)/2230(1) or [2260(4)/2270(2) or 2320(4)/2270(2) or 1420(5)]

GENERAL/ANALYTICAL CHEMISTRY: if you have taken 1080 but not 3120, please see an advisor

2280(3)/2290(2) OR [1080(5) AND 3120(4) or 1320(5)]

5160(3)[F only]

5570(3)[W only]

INORGANIC CHEMISTRY:

3020(3)[W only] 5020(3)[F only]

PHYSICAL CHEMISTRY:

5400(4)[W only] or 5420(3)[F only]

Physical Lab:

5550(2)[F, W] Coreq or Prereq: Chem 54X0

BIOCHEMISTRY:

6620(3)[F] 6640(3)[W]

Biochemistry Lab:

6610(3)[F, W] Prereq: Chem 6620

BIOLOGY: 1510(4)

2200(4)

3070(4)

MISCELLANEOUS: CHM 5510(3) or MAT 2250(3) or 2350(3) or 2150(4)

RESEARCH IN CHEMISTRY: 5999(min. 2; max 4)[All] [NOTE: Start Research Project no later (sooner the better) than the 1ST SEMESTER OF SENIOR YR.] To sign up for research, make an appointment with Dr. Linz in 367 Chemistry. Email him at linz@chem.wayne.edu. You must file an Undergraduate Research Form and present a written report signed by the Chairman of the Department of Chemistry in order to obtain a grade for your work. With prior approval, students may be allowed to substitute 2 credits of an internship experience (CHM 6991) in place of research.

B.S. WITH HONORS:

Students wishing to earn a B.S. in Chemistry degree with Honors must see Dr. Linz (367 Chemistry).



Degree Requirements for BS in Chemistry at Wayne State University

With a Concentration in Biochemistry

Freshman Year

Fall Semester

<input type="checkbox"/> CHM 1220/1230 – (PS) General Chemistry I	Credits	5
<input type="checkbox"/> English 1020 (BC) – (BC) Introductory College Writing		3
<input type="checkbox"/> Mathematics 2010 – Calculus I		4
<input type="checkbox"/> Competency Requirement		3

Total: 15

Winter Semester

<input type="checkbox"/> CHM 1240/1250 - Organic Chemistry I	Credits	5
<input type="checkbox"/> Intermediate Composition (IC)		3
<input type="checkbox"/> Mathematics 2020 - Calculus II		4
<input type="checkbox"/> BIO 1510 - (LS) Basic Life Mechanisms		4

Total: 16

Sophomore Year

Fall Semester

<input type="checkbox"/> CHM 2220/2230 - Organic Chemistry II	Credits	5
<input type="checkbox"/> Physics 2170/2171 - (PS) General Physics I		5
<input type="checkbox"/> Mathematics 2030 - Calculus III		4
<input type="checkbox"/> Competency Requirement		3

Total: 17

Winter Semester

<input type="checkbox"/> CHM 2280/2290 - General Chemistry III/ Analytical	Credits	5
<input type="checkbox"/> Physics 2180/2181 - General Physics II		5
<input type="checkbox"/> BIO 2200 - (LS) Introductory Microbiology		4
<input type="checkbox"/> Language I		4

Total: 18

Junior Year

Fall Semester

<input type="checkbox"/> CHM 6620 - Metabolism: Pathways and Regulation	Credits	3
<input type="checkbox"/> CHM 5510 *		3
<input type="checkbox"/> CHM 5999		2
<input type="checkbox"/> Language II		4
<input type="checkbox"/> Group Requirement		3

Total: 15

Winter Semester

<input type="checkbox"/> CHM 5400 - Biological Physical Chemistry	Credits	4
<input type="checkbox"/> CHM 3020 - Intermediate Inorganic Chemistry I		3
<input type="checkbox"/> BIO 3070 - Genetics		4
<input type="checkbox"/> Language III		4
<input type="checkbox"/> Group Requirement		3

Total: 18

Senior Year

Fall Semester

<input type="checkbox"/> CHM 5020 - Intermediate Inorganic Chemistry II	Credits	3
<input type="checkbox"/> CHM 5550 - (WI) Physical Chemistry Laboratory		2
<input type="checkbox"/> CHM 5160 - Instrumental Analytical Chemistry		3
<input type="checkbox"/> Group Requirements		9

Total: 17

Winter Semester

<input type="checkbox"/> CHM 5570 - Instrumental Analytical Chemistry Lab	Credits	3
<input type="checkbox"/> CHM 6610 - Biological Chemistry Laboratory		3
<input type="checkbox"/> CHM 6640 - Molecular Biology		3
<input type="checkbox"/> Group Requirements		6

Total: 15

All College of Liberal Arts and Science students must maintain at least a 2.0 overall gpa. All Chemistry Majors must earn a grade of "C" or above in all chemistry prerequisite courses and the writing intensive course (CHM 5550). Chemistry Majors must also maintain at least a 2.0 chemistry gpa.

* Majors may elect to substitute a math course in place of CHM 5510. Options include MAT 2250, MAT 2350, or MAT 2150.