

# CHEMISTRY DEGREE

## Program Check Sheet

NAME: \_\_\_\_\_

### I. Institutional Graduation Requirements

\_\_\_\_\_ Complete a minimum of 180 credit hours.

\_\_\_\_\_ Earn an Eastern GPA of at least 2.000 and a composite GPA of 2.000. A transfer GPA and the Eastern GPA are combined at the time of graduation.

\_\_\_\_\_ Complete a minimum of 60 credit hours of upper -division coursework (300-400 level).

\_\_\_\_\_ Complete all requirements in the major, including at least 35 credit hours, 25 of which must be 300 or 400 level courses. Of these, a minimum of 20 must be from EOU of which 10 must be upper division.

\_\_\_\_\_ Complete a minimum of 45 credit hours from EOU of which 30 must be upper division.

\_\_\_\_\_ A maximum of 90 credit hours in one discipline may be applied to the B.S. or the B.A. degree.

\_\_\_\_\_ Complete college-level math requirement for B.S. (see catalog)

\_\_\_\_\_ Complete college-level foreign language requirement for B.A. (see catalog)

\_\_\_\_\_ Complete General Education Curriculum with a C- or better. (Minimum of 60 credits, see catalog)

**University Writing Requirement:** (Must complete UWR with a C- or better)

\_\_\_\_\_ Complete first-year writing courses as required by placement test: \_\_\_\_\_

\_\_\_\_\_ Complete one lower division UWR writing intensive course as identified by each major: \_\_\_\_\_

\_\_\_\_\_ Complete two upper division UWR writing intensive courses as identified by each major: \_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ Up to 12 credit hours in PE activity courses, up to 12 credit hours in music activity courses, and up to 12 credit hours in INTACT courses (Music majors may exceed the MUS limitation).

\_\_\_\_\_ Up to 45 credit hours of practicum coursework may be applied to the degree.

\_\_\_\_\_ Up to 120 credit hours of lower division transfer course work may be applied to the degree.

\_\_\_\_\_ Graduation Application filed \_\_\_\_\_.

May apply for graduation as early as one year in advance by submitting an application for graduation to the Registrar's Office. The deadline for submitting an application for graduation is the second Friday of the term prior to the expected graduation date.

**Students may not also attain a major in Biochemistry or a minor in Environmental Chemistry.**

\* meets UWR

**II. Program Requirements:** At least a "C-" in each course is required for the Chemistry degree and a minimum overall GPA of 2.00.

### A. CHEMISTRY REQUIREMENTS

COURSE #	COURSE TITLE	Hrs.	Gr.
CHEM 204	General Chemistry	5	
CHEM 205	General Chemistry	5	
CHEM 206	General Chemistry	5	
CHEM 285	Chemical Safety	1	
CHEM 320 *	Analytical Chemistry	3	
CHEM 321	Analytical Chemistry Lab	2	
CHEM 334	Organic Chemistry I	4	
CHEM 335	Organic Chemistry II	4	
CHEM 336	Organic Chemistry III	4	
CHEM 338	Organic Chemistry Lab I	1	
CHEM 339	Organic Chemistry Lab II	1	
CHEM 401	Research (Capstone)	1	
CHEM 407 *	Seminar (Capstone)	1	
CHEM 421	Instrumental Analysis	3	
CHEM 422	Instrumental Analysis Lab	2	
CHEM 440	Thermodynamics	4	
CHEM 441	Quantum Mechanics	4	
CHEM 442	Chemical Dynamics	4	
CHEM 443 *	Thermodynamics Lab	1	
CHEM 444	Quantum Mechanics Lab	1	
CHEM 445	Chemical Dynamics Lab	1	

### B. CHEMISTRY B - AT LEAST 5 HOURS SELECTED FROM:

COURSE #	COURSE TITLE	Hrs.	Gr.
CHEM 360	Environmental Chemistry	4	
CHEM 361	Environmental Chemistry Lab	1	
CHEM 402	Service Learning in Chemistry	1-3	
CHEM 410	Selected Topics	1-5	
CHEM 411	Inorganic Chemistry	4	
CHEM 412	Inorganic Chemistry Lab	1	
CHEM 450	Structural Biochemistry	4	
CHEM 451	Metabolic Biochemistry	4	
CHEM 454	Biochemistry Lab	2	

### C. MATH AND PHYSICS

COURSE #	COURSE TITLE	Hrs.	Gr.
MATH 251	Calculus	4	
MATH 252	Calculus	4	
MATH 253	Calculus	4	
PHYS 221	General Physics with Calculus	5	
PHYS 222	General Physics with Calculus	5	
PHYS 223 *	General Physics with Calculus	5	

### D. COMPUTER SCIENCE

CS 161	Found. of Computer Science I	4	
--------	------------------------------	---	--

### E. APPROVED UPPER DIVISION ELECTIVES IN CS, MATH, PHYS or STAT ( 3-5 hours):

- Complete a minimum of 62 hours in Chemistry, of which 46 or more must be 300 or 400 level courses.
- Complete a minimum of 34 credit hours in mathematics, physics, and computer science courses as outlined above (Sections C, D, and E).
- The designated capstone courses are CHEM 401 and CHEM 407.
- A minimum of 20 chemistry credit hours must be completed at Eastern.

