CHEMISTRY  Bachelor of Science  (BS)

At least 120 hours are required for graduation, and students must earn a 2.0 overall GPA, a 2.0 WSU GPA, and a 2.0 GPA in the major. Students must also complete all courses required for Liberal Arts and Sciences General Education. Must meet with Chemistry Advisor upon declaration of major.

Requirements For Major (and their necessary prerequisites):  52 hours

ALL  CHEM 211  General Chemistry I (5)
ALL  CHEM 212  General Chemistry II (5)
FL   CHEM 514  Inorganic Chemistry (3)
FL   CHEM 523  Analytical Chemistry (4)
SP   CHEM 524  Instrumental Methods of Chemical Analysis (4)
ALL  CHEM 531  Organic Chemistry I (5)
FL&SP CHEM 532  Organic Chemistry II (5)
FL   CHEM 545  Physical Chemistry I (3)
SP   CHEM 546  Physical Chemistry II (3)
FL   CHEM 547  Physical Chemistry Laboratory (2)
SP   CHEM 615  Advanced Inorganic Chemistry (3)
SP   CHEM 616  Inorganic Chemistry Laboratory (2)
SP   CHEM 661  Principles of Biochemistry (3)
FL or BOTH CHEM 662  Biochemistry I (3)
SP AND CHEM 663*  Biochemistry II (3)
ALL  CHEM 690  Independent Study and Research (2)

*CHEM 663 fulfills 3 of the 4 additional hours of professional elective courses required from category A.

Other Required Courses (and their necessary prerequisites):  32 hours

FL & SP  BIOL 210  General Biology I (4)
ALL  MATH 112  Pre-calculus Mathematics (5) (or equivalent)
ALL  MATH 242  Calculus I (5)
ALL  MATH 243  Calculus II (5)
ALL  MATH 344  Calculus III (3)
FL & SP  PHYS 313  Physics for Scientists I (4)
FL & SP  PHYS 315  University Physics Laboratory I (1)
FL & SP  PHYS 314  Physics for Scientists II (4)
SP   PHYS 316  University Physics Laboratory II (1)

Four more hours of elective courses, taken in consultation with the Undergraduate Advising Committee of the Department of Chemistry. Courses from the area below will satisfy this requirement.

(A) Additional Chemistry courses selected from CHEM 600-799 excluding CHEM 700 and 701.

CHEM  

(B) Advanced Biology courses from the following (with 1 year of General Biology as prerequisite):

BIOL 419  Genetics (4)
BIOL 420  Molecular Cell Biology (4)
BIOL 590  Immunobiology (3)

(C) Math courses with MATH 344 as prerequisite or MATH 555.

MATH  

(D) Physics courses with Phys 314 as prerequisite (non-laboratory courses)

PHYS  

(E) Foreign Language: one academic year of German or French

  

(F) Other Courses as approved by the Undergraduate Affairs Committee.

  

Applied Learning:

Students in the BS in chemistry program are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by completing at least one semester of undergraduate research, by enrollment in CHEM 690.

Contact Dept. Office to arrange an advising appointment (978-3120, 206 McKinley Hall)

Dr. Doug English, Chair  Dr. Jim Bann, Advisor
Department of Chemistry
206 McKinley Hall, 978-3120
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jim.bann@wichita.edu
**Requirements For Minor:** Minimum of 16 hours of chemistry (4 courses) and a minimum GPA of 2.0 in chemistry.

- 211 General Chemistry I (5)
- 212 General Chemistry II (5)

At least 6 credit hours of chemistry must be chosen from the following:

- 514 Inorganic Chemistry (3)
- 523 Analytical Chemistry (4)
- 524 Instrumental Methods of Chemical Analysis (4)
- 531 Organic Chemistry I (5)
- 532 Organic Chemistry II (5)
- 545 Physical Chemistry I (3)
- 546 Physical Chemistry II (3)
- 661 Principles of Biochemistry (3)

The 6 credit hours of upper-division courses must be taken at WSU. A 2.0 GPA is required for all chemistry courses taken.

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