

# Chemistry, B.S. major Chemistry Emphasis

Required Credits: 71 Required GPA: 2.25

### I REQUIRED COURSES

#### SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 1111 General Chemistry I (4 credits)
- CHEM 2211 Principles of Chemistry I (4 credits)

#### COMPLETE THE FOLLOWING COURSES:

- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3100 Journal Club (1 credit)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 3507 Analytical Chemistry (3 credits)
- CHEM 3570 Analytical Chemistry Laboratory (1 credit)
- CHEM 4510 Instrumental Methods of Analysis (3 credits)
- CHEM 4571 Instrumental Analysis Laboratory I (1 credit)
- CHEM 4572 Instrumental Analysis Laboratory II (1 credit)
- MATH 2471 Calculus I (5 credits)
- PHYS 2101 Physics I (4 credits)

#### II REQUIRED EMPHASIS

#### COMPLETE THE FOLLOWING COURSES:

- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4711 Physical Chemistry I (3 credits)
- CHEM 4712 Physical Chemistry II (3 credits)
- CHEM 4771 Physical Chemistry Laboratory I (1 credit)
- CHEM 4772 Physical Chemistry Laboratory II (1 credit)
- CHEM 4811 Advanced Inorganic Chemistry I (3 credits)
- CHEM 4871 Inorganic Chemistry Laboratory I (1 credit)
- MATH 2472 Calculus II (5 credits)
- PHYS 2102 Physics II (4 credits)

#### SELECT 1 OF THE FOLLOWING COURSES:

- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4812 Advanced Inorganic Chemistry II (3 credits)

## II REQUIRED EMPHASIS

SELECT 9 SEMESTER CREDITS FROM CHEM 3100 OR ABOVE AND/OR THE FOLLOWING COURSES. (7 CREDITS MUST COME FROM 3000-LEVEL COURSES OR ABOVE). CHEM 3100 MAY BE REPEATED WITH 1 SEMESTER CREDIT APPLYING TO THIS AREA.

- PHYS 3300 Thermal and Statistical Physics (3 credits)
- PHYS 3103 Physics III (4 credits)
- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2480 Multivariable Calculus (4 credits)
- MATH 2490 Differential Equations (4 credits)
- STAT 2610 Applied Statistics (4 credits)