**University Graduation Requirements**
1. Complete the All-University Core Curriculum (AUCC) – See General Catalog
2. Earn grades of “C” or higher in the major course requirements (listed below)
3. Complete a minimum of 120 credits
4. Complete a minimum of 42 upper-division credits (300-level or higher)
5. Maintain a cumulative GPA of 2.0 or higher and GPA of 2.0 or higher in AUCC courses

### Chemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisite(s)</th>
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<tbody>
<tr>
<td>CHEM 111</td>
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<td>MATH 118</td>
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<tr>
<td>CHEM 112</td>
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<td>CHEM 113</td>
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<td>CHEM 107 or CHEM 111; MATH 124</td>
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<td>CHEM 108 or CHEM 112; CHEM 113 or concurrent registration</td>
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<td>CHEM 345</td>
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<td>CHEM 341</td>
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<td>CHEM 344</td>
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<td>CHEM 114; CHEM 343 or concurrent registration</td>
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<td>CHEM 261</td>
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<td>CHEM 335</td>
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<td>CHEM 113; concurrent registration in CHEM 334</td>
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<td>CHEM 344 or CHEM 346</td>
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<td>CHEM 474</td>
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<td>CBE 333 or CHEM 334; CHEM 474 or concurrent registration or CBE 310 or concurrent registration CHEM 474</td>
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<td>CHEM 476</td>
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<td>CHEM 462</td>
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<tr>
<td>CHEM 493</td>
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<td>CHEM 474</td>
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### Other

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<tr>
<td>BZ104/105, BZ110/111, LIFE 102</td>
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<tr>
<td>MATH 160</td>
<td>4</td>
<td>MATH 124; MATH 126</td>
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<td>MATH 161</td>
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<td>MATH 160</td>
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<td>PH 142</td>
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<td>BC 351</td>
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*Advanced science electives must be 300-level or higher. All 3++, 4++ and 5++ courses offered by departments in the College of Natural Sciences apply. Courses in other departments may apply as well, please check with a chemistry advisor.
### Category 1. Basic Competencies

**A. Intermediate Writing (3 credits)**
- CO 150 College Composition
- HONR 193 Honors Seminar (Must be enrolled in the University Honors Program)

**B. Mathematics (3 credits)**
- MATH 117 College Algebra in Context I
- MATH 118 College Algebra in Context II
- MATH 124 Logarithmic and Exponential Functions
- MATH 125 Numerical Trigonometry
- MATH 126 Analytic Trigonometry
- MATH 130 Math in the Social Sciences
- MATH 133 Financial Mathematics
- MATH 135 Patterns of Phenomena I
- MATH 141 Calculus in Management Sciences
- MATH 155 Calculus for Biological Scientists I
- MATH 160 Calculus for Physical Scientists I
- MATH 161 Calculus for Physical Scientists II
- MATH 255 Calculus for Biological Scientists II

### Category 2. Additional Communication

**A. Oral Communication** (Before Fall 2008 only)
- SPCM 200

**B. Advanced Writing (3 credits)**
- BUS 300 Business Writing and Communication
- CHEM 301 Advanced Scientific Writing: Chemistry
- CO 300 Writing Arguments
- CO 301A Writing in the Disciplines – Arts and Humanities
- CO 301B Writing in the Disciplines – Sciences
- CO 301A Writing in the Disciplines – Social Sciences
- CO 301A Writing in the Disciplines – Education
- CO 302 Writing Online
- JTC 300 Professional and Technical Communication

### Category 3. Foundations and Perspectives

**A. Biological/Physical Sciences (7 credits)**
- AA 100 Introduction to Astronomy
- AA 101 Astronomy Laboratory
- ANTH 120 Human Origins and Variation
- ANTH 121 Human Origins and Variation Laboratory
- BZPM 102 Insects, Science and Society
- BZ 101 Humans and Other Animals
- BZ 104 Basic Concepts of Plant Life
- BZ 105 Basic Concepts of Plant Life Laboratory
- BZ 110 Principles of Animal Biology
- BZ 111 Animal Biology Laboratory
- BZ 120 Principles of Plant Biology
- CHEM 103 Chemistry in Context
- CHEM 104 Chemistry in Context Laboratory
- CHEM 107 Fundamentals of Chemistry
- CHEM 108 Fundamentals of Chemistry Laboratory
- CHEM 111 General Chemistry I
- CHEM 112 General Chemistry I Laboratory I
- FW 104 Wildlife Ecology and Conservation
- GEOL 120 Exploring Earth: Physical Geology
- GEOL 121 Introduction to Geology Laboratory
- GEOL 122 The Blue Planet: Geology of Our Environment
- GEOL 124 Geology of Natural Resources
- HORT 100 Horticultural Sciences
- LAND 220 Fundamentals of Ecology
- LIFE 102 Attributes of Living Systems
- LIFE 201A Introductory Genetics-Applied Genetics
- LIFE 201B Introductory Genetics-Molecular
- LIFE 202 Fundamentals of Ecology
- MIP 101 Introduction to Human Disease
- NR 120A Environmental Conservation
- NR 130 Global Environmental Systems
- NR 150 Oceanography
- PH 110 Descriptive Physics
- PH 111 Descriptive Physics Laboratory
- PH 121 General Physics I
- PH 122 General Physics II
- PH 141 Physics for Scientists and Engineers I
- PH 142 Physics for Scientists and Engineers II
- WR 304 Principles of Watershed Management
- B. Arts/Humanities (6 credits)
- ART 100 Introduction to Visual Arts
- D 110 Understanding Dance
- E 140 The Study of Literature
- E 232 Introduction to Humanities
- E 242 Reading Shakespeare
- E 270 Introduction to American Literature
- E 276 Survey of British Literature I
- E 277 Survey of British Literature II
- ETST 240 Native American Cultural Expressions
- HONR 392 Seminar (Must be enrolled in the University Honors Program)
- LARA 200 Second Year Arabic I
- LARA 201 Second Year Arabic II
- LARA 250 Arabic Language, Literature and Culture in Translation
- LCHI 200 Second Year Chinese I
- LCHI 201 Second Year Chinese II
- LCHI 250 Chinese Language, Literature and Culture in Translation
- LCHI 250 Second Year French I
- LCHI 201 Second Year French II
- LCHI 250 French Language, Literature and Culture in Translation
- LGER 200 Second Year German I
- LGER 201 Second Year German II
- LGER 250 German Language, Literature and Culture in Translation
- LJPN 200 Second Year Japanese I
- LJPN 201 Second Year Japanese II
- LJPN 250 Japanese Language, Literature and Culture in Translation
- LRUS 200 Second Year Russian I
- LRUS 201 Second Year Russian II
- LRUS 250 Russian Language, Literature and Culture in Translation
- LSPA 200 Second Year Spanish I
- LSPA 201 Second Year Spanish II
- LSPA 250 Spanish Language, Literature and Culture in Translation
- MU 100 Music Appreciation
- MU 111 Music Theory Fundamentals
- MU 131 Introduction to Music History and Literature
- PHIL 100 Appreciation of Philosophy
- PHIL 103 Moral and Social Problems
- PHIL 110 Logic and Critical Thinking
- PHIL 120 History and Philosophy of Scientific Thought
- SPCM 100 Communication and Popular Culture
- SPCM 201 Rhetoric in Western Thought
- TH 141 Introduction to Theatre

### C. Social/Behavioral Sciences (3 credits)
- ANTH 100 Introductory Cultural Anthropology
- AREC 202 Agricultural and Resource Economics
- AREC 240 Issues in Environmental Economics
- ECON 101 Economics of Social Issues
- ECON 202 Principles of Microeconomics
- ECON 204 Principles of Macroeconomics
- ECON 212 Racial Inequality and Discrimination
- ECON 240 Issues in Environmental Economics
- EDUC 275 Schooling in the US
- GR 100 Introduction to Geography
- HDFS 101 Individual and Family Development
- HONR 492 Senior Seminar (Must be enrolled in the University Honors Program)
- JTC 100 Media in Society
- POLS 103 American Government and Politics
- POLS 105 State and Local Government and Politics
- PSY 100 General Psychology
- SOC 100 General Sociology
- SOC 105 Social Problems
- SWRK 110 Contemporary Social Welfare

### D. Historical Perspectives (3 credits)
- AMST 100 Self/Community in American Culture, 1600-1877
- AMST 101 Self/Community in American Culture Since 1877
- ANTH 140 Introduction to Prehistory
- ETST 250 African American History
- ETST 252 Asian American History
- ETST 255 Native American History
- HIST 100 Western Civilization, Pre Modern
- HIST 101 Western Civilization, Modern
- HIST 115 Islamic World to 1500
- HIST 120 Asian Civilizations I
- HIST 121 Asian Civilizations II
- HIST 150 US History to 1876
- HIST 151 US History since 1876
- HIST 170 World History, Ancient-1500
- HIST 171 World History, 1500-Present
- HIST 250 African American History
- HIST 252 Asian American History
- HIST 255 Native American History
- NR 320 Natural Resources History and Policy

### E. Global and Cultural Awareness (3 credits)
- AGRI 116 Plants and Civilizations
- AGRI 270 World Interdependence-Population and Food
- AM 250 Clothing, Adornment and Human Behavior
- ANTH 200 Cultures in the Global System
- E 238 20th Century Fiction
- E 245 World Drama
- ECON 211 Gender in the Economy
- ETST 100 Introduction to Ethnic Studies
- ETST 205 Ethnicity and the Media
- ETST 253 Chicana/o History and Culture
- ETST 256 Border Crossings: People/Politics/Culture
- HORT 171 Environmental Issues in Agriculture
- IE 116 Plants and Civilizations
- IE 270 World Interdependence-Population and Food
- IE 370 Model United Nations
- LB 170 World Literatures to 1500
- LB 171 World Literatures-The Modern Period
- PHIL 170 World Philosophies
- POLS 131 Current World Problems
- POLS 232 International Relations
- POLS 241 Comparative Government and Politics
- SA 482 Approved Study Abroad Courses (Contact the Office of International Programs)
- SOC 205 Contemporary Race-Ethnic Relations
- SOCR 171 Environmental Issues in Agriculture

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1. This requirement must be completed within the first 60 credits (CSU and Transfer) taken.
2. First-time students entering a college or university on or after July 1, 2008 must take an advanced writing course.
3. At least one course must have a laboratory component. Sometimes the laboratory component is a separate course number. Credit allowed for only one of the following: GEOL 120, GEOL 122, GEOL 124, GEOL 150, G CC 130, G 140. Credit allowed for only one of the following: GEOL 121, GEOL 150, G 140. Credit not allowed for both LIFE 201 A and LIFE 201 B. Credit not allowed for both NR 130 and G CC 130 and NR 130.
4. No more than three credits of intermediate foreign language (except for courses denoted by ***) may be used toward this category.