

B.A. in Chemistry with a Concentration in Secondary Education

| First Semester | | | Second Semester | | |
|-------------------------|------------------------------|-----------|------------------------|---------------------------|------------|
| CHM 115 | Elements & Compounds | 3 | CHM 116 | The Chemical Reaction | 3 |
| CHM 113 | Elements & Compounds Lab | 1 | CHM 114 | The Chemical Reaction Lab | 1 |
| MTH 111 | Calculus I | 4 | MTH 112 | Calculus II | 4 |
| ENG 101 | English 101 | 4 | ENG 120 | Intro to Lit & Culture | 3 |
| FYF 101 | First Year Foundations | 3 | CS 125 | Computer Science I | 4 |
| | | | ED 180 | Educational Psychology | 3 |
| Semester Total | | 15 | Semester Total | | 18 |
| Third Semester | | | Fourth Semester | | |
| CHM 231 | Organic Chemistry I | 3 | CHM 232 | Organic Chemistry II | 3 |
| CHM 233 | Organic Chemistry I Lab | 1 | CHM 234 | Organic Chemistry II Lab | 1 |
| PHY 201 | Physics I | 3 | PHY 202 | Physics II | 3 |
| PHY 204 | Physics I Lab | 1 | PHY 205 | Physics II Lab | 1 |
| ED 190 | Effective Teaching | 3 | CHM 248 | Analytical Chemistry | 3 |
| | Distr. Req. (PSY 101 rec'd) | 3 | CHM 246 | Analytical Chemistry Lab | 1 |
| | Distribution Requirement | 3 | MTH 212 | Multivariate Calculus | 4 |
| Semester Total | | 17 | Semester Total | | 16 |
| Fifth Semester | | | Sixth Semester | | |
| CHM 341 | Instrumental Analysis | 3 | CHM 322 | Inorganic Chemistry | 3 |
| CHM 343 | Instrumental Analysis Lab | 1 | CHM 323 | Inorganic Chemistry Lab | 1 |
| CHM 355 | Physical Chem./Life Sciences | 3 | CHM 365 | Medical Biochemistry | 4 |
| CHM 357 | Physical Chem./Life Sci. Lab | 1 | CHM 370 | Integrated Chemistry Lab | 1 |
| EDSP 210 | Teaching Special Needs | 3 | CHM 390 | Junior Seminar | 1 |
| | Distribution Requirement | 3 | ED 191 | Classroom Technology | 3 |
| | Distribution Requirement | 3 | EDSP 225 | Special Ed Methodology | 3 |
| Semester Total | | 17 | Semester Total | | 16 |
| Seventh Semester | | | Eighth Semester | | |
| CHM 391 | Senior Research | 2 | CHM 392 | Senior Research | 2 |
| ED 220 | Diverse Learners | 3 | EDSP 388 | Inclusionary Practices | 3 |
| ED 380 | Content Literacy | 3 | ED 390 | Student Teaching | 12 |
| ED 371 | Special Methods: Sciences | 4 | | | |
| | Distribution Requirement | 3 | | | |
| Semester Total | | 15 | Semester Total | | 17 |
| | | | | | 131 |
| Grand Total | | | | | 131 |

⇒ Students in the B. A. program must complete CHM 323 (Inorganic Chemistry Lab, 1 credit) plus 1 credit of Integrated Laboratory (any of CHM 370/371/372).

Wilkes University Education Department Checklist

Bachelor of Arts-CHEMISTRY
With a Major* or Minor in Secondary Education
2019-2020

Name _____

WIN _____

Advisor _____ Date _____

General Education Requirements

___ FYF 101 (3)

Area I The Humanities (9)

___ ENG 120
 ___ HST 101
 ___ PHL 101, PHL 110, or Foreign Language _____

Area II The Scientific World (6) (met in major)

(two different sub-areas required)

___ BIO 105 / 121
 ___ CHM 105 / 115
 ___ EES 105 / 221 / 230 / 240 / 251
 ___ PHY 105 / 174 / 201

Area III The Social Sciences (6)

___ ANT 101
 ___ EC 102
 ___ PS 111
 ___ PSY 101 (required for minor)
 ___ SOC 101

Area IV The Visual and Performing Arts (3)

___ ART 101, 140, or 141
 ___ DAN 100
 ___ MUS 101
 ___ THE 100

Skill Requirements

I. Computer Literacy (met in major)

___ CS 115 or higher _____
 or two CI Courses _____

II. Written Communications (Required for certification)

___ ENG 101 (4 credits)

III. Oral Communications (met in major)

___ COM 101 or Two OPO Courses:
 ___ EDSP 225, ED 220, ED 390, CHM 391, CHM 392

IV. Quantitative Reasoning (met in major)

___ MTH 101 or higher _____

Chemistry Major Requirements[†]

| | | | |
|---------------------|---------------------------------|-----|-----|
| ___ CHM 115 | Elements & Compounds | F | (3) |
| ___ CHM 113 | Elements & Compounds Lab | F | (1) |
| ___ CHM 116 | The Chemical Reaction | S | (3) |
| ___ CHM 114 | The Chemical Reaction Lab | S | (1) |
| ___ CHM 231 | Organic Chemistry I | F | (3) |
| ___ CHM 233 | Organic Chemistry I Lab | F | (1) |
| ___ CHM 232 | Organic Chemistry II | S | (3) |
| ___ CHM 234 | Organic Chemistry II Lab | S | (1) |
| ___ CHM 248 | Analytical Chemistry | S | (3) |
| ___ CHM 246 | Analytical Chemistry Lab | S | (1) |
| ___ CHM 322 | Inorganic Chemistry | S | (3) |
| ___ CHM 323 | Inorganic Chemistry Lab | S | (1) |
| ___ CHM 341 | Instrumental Analysis | F | (3) |
| ___ CHM 343 | Instrumental Analysis Lab | F | (1) |
| ___ CHM 355 | Physical Chem for Life Science | F | (3) |
| ___ CHM 357 | Physical Chem for Life Sci. Lab | F | (1) |
| ___ CHM 365 | Medical Biochemistry | S | (4) |
| ___ CHM 370/371/372 | (one credit total) | F,S | (1) |
| ___ CHM 390 | Junior Seminar | S | (1) |
| ___ CHM 391 | Senior Research I (OPO) | F | (2) |
| ___ CHM 392 | Senior Research II (OPO) | S | (2) |
| ___ CS 125 | Computer Science I | F,S | (4) |
| ___ MTH 111 | Calculus I | F,S | (4) |
| ___ MTH 112 | Calculus II | F,S | (4) |
| ___ MTH 212 | Multivariate Calculus | F,S | (4) |
| ___ PHY 201/4 | General Physics I, with lab | F,S | (4) |
| ___ PHY 202/5 | General Physics II, with lab | F,S | (4) |

[†]The Chemistry and Math Departments require that students complete prerequisite courses with at least a 2.0 .

Major* and Minor Requirements for Secondary Education Certification

| | | |
|-------------------------|---|------------|
| ___ ED 180 | Educational Psychology | (3) |
| ___ ED 190 | Effective Teaching | (3) |
| ___ ED 191 | Integrating Technology in Classrooms (C.I.) | (3) |
| ___ ED 220 | Tchg Cult & Ling Diverse Learners (OPO) | (3) |
| ___ EDSP 210 | Teaching Students with Special Needs | (3) |
| ___ EDSP 225 | Special Education Methodology (OPO) | (3) |
| ___ ED 345 [‡] | Assessment | F,S (3) |
| ___ ED 371 | Teaching Methods in Science | F (4) |
| ___ ED375 [‡] | Middle Level & Secondary Ed. Methods | S (4) |
| ___ ED 380 | Content Area Literacy | F (3) |
| ___ EDSP 388 | Inclusionary Practs (taken with ED 390) | (3) |
| ___ ED 390 | Student Teaching (OPO) | (12) |
| | total for the minor | 40 credits |
| | *total for the major | 47 credits |

* Completion of the major in Secondary Education along with a Chemistry major will take an additional semester or summer coursework. Completion of the minor can be accomplished in eight semesters.

[‡] Required for major only.