

ORAL ROBERTS UNIVERSITY
 DEGREE: Bachelor of Science
 MAJOR: Chemistry (CHE)

DEGREE PLAN SHEET 2011-2012
Biology and Chemistry Department

TOTAL HOURS REQUIRED 128
 Hours in General Education 56
 Hours in Major 37
 Hours in Cognate 18
 Hours in General Electives (minor) 17

Name _____
 Z No. _____ Date _____
 Telephone _____ Email _____
 Advisor _____

| COURSE EARNED | COURSE CODE | COURSE TITLE | CREDIT HOURS | COURSE EARNED | COURSE CODE | COURSE TITLE | CREDIT HOURS |
|----------------------------|-------------|-------------------------------------|--------------|----------------------------|-------------|---|--------------|
| FRESHMAN Semester 1 | | | | FRESHMAN Semester 2 | | | |
| _____ | CHE 111 | General Chemistry I Lecture | 3 | _____ | CHE 112 | General Chemistry II Lecture | 3 |
| _____ | CHE 111 | General Chemistry I Lab | 1 | _____ | CHE 112 | General Chemistry II Lab | 1 |
| _____ | MAT 201 | Calculus I | 4 | _____ | MAT 202 | Calculus II | 4 |
| _____ | COMP 102 | Reading and Writing in Liberal Arts | 3 | _____ | PHY 111 | Physics I Lecture (<i>Calculus Based</i>) | 3 |
| _____ | _____ | General Elective (<i>Minor</i>) | 3 | _____ | PHY 111 | Physics I Lab (<i>Calculus Based</i>) | 1 |
| _____ | HPE 001 | Health Fitness I | 1 | _____ | COM 101 | Oral Communication | 3 |
| _____ | PRF 070 | Swimming Proficiency | 0 | _____ | HPE 002 | Health Fitness II | 1 |
| _____ | GEN 099 | Whole Person Assessment | 0 | | | | 16 |
| | | | 15 | | | | |

ORU Summer and Online Courses are available. See Class Schedule Newspaper.

| | | | | | | | |
|-----------------------------|-----------|--|------|-----------------------------|-----------|--|------|
| SOPHOMORE Semester 3 | | | | SOPHOMORE Semester 4 | | | |
| _____ | CHE 211 | Organic Chemistry I Lecture (<i>F</i>) | 3 | _____ | CHE 212 | Organic Chemistry II Lecture (<i>S</i>) | 3 |
| _____ | CHE 211 | Organic Chemistry I Lab (<i>F</i>) | 1 | _____ | CHE 212 | Organic Chemistry II Lab (<i>S</i>) | 1 |
| _____ | PHY 112 | Physics II Lecture (<i>Calculus Based</i>) | 3 | _____ | CHE 300 | Quantitative Analysis Lecture (<i>S</i>) | 2 |
| _____ | PHY 112 | Physics II Lab (<i>Calculus Based</i>) | 1 | _____ | CHE 300 | Quantitative Analysis Lab (<i>S</i>) | 2 |
| _____ | BLIT 110 | Survey of Old Testament Lecture | 3 | _____ | MAT 211 | Differential Equations (<i>S</i>) | 3 |
| _____ | HIS 101 | American History | 3 | _____ | CSC 111 | Intro to Computing | 3 |
| _____ | HUM 101 | Introduction to Humanities | 3 | _____ | BLIT 120 | Survey of New Testament Literature | 3 |
| _____ | HPE _____ | HPE Activity | 0.5 | _____ | HPE _____ | HPE Activity | 0.5 |
| | | | 17.5 | | | | 17.5 |

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| | | | | | | | |
|--------------------------|-----------|---|------|--------------------------|-----------|--|------|
| JUNIOR Semester 5 | | | | JUNIOR Semester 6 | | | |
| _____ | CHE 303 | Physical Chemistry I Lecture (<i>F</i>) | 3 | _____ | CHE 303 | Physical Chemistry I Lab (<i>S</i>) | 1 |
| _____ | CHE 400 | Chemical Instrumentation Lecture (<i>F</i>) | 2 | _____ | CHE 304 | Physical Chemistry II Lecture (<i>S</i>) | 3 |
| _____ | CHE 400 | Chemical Instrumentation Lab (<i>F</i>) | 2 | _____ | CHE 449 | Chemistry Research (<i>S</i>) | 1 |
| _____ | _____ | Behavioral Science Elective | 3 | _____ | THE 103 | Spirit-Empowered Living | 3 |
| _____ | GOV 101 | American Government | 3 | _____ | COMP 303 | Critical Reading and Writing | 3 |
| _____ | HUM _____ | Humanities Elective | 3 | _____ | HUM _____ | Humanities Elective | 3 |
| _____ | HPE _____ | HPE Activity | 0.5 | _____ | HPE _____ | HPE Activity | 0.5 |
| _____ | | Prepare for Summer Internship Program | 0 | _____ | | Take the GRE this Spring | 0 |
| | | | 16.5 | | | | 14.5 |

CHEMISTRY INTERNSHIP DURING THE SUMMER

| | | | | | | | |
|--------------------------|-----------|---|------|--------------------------|-----------|-----------------------------------|------|
| SENIOR Semester 7 | | | | SENIOR Semester 8 | | | |
| _____ | CHE 499 | Individual Research and Senior Paper (<i>F</i>) | 3 | _____ | CHE _____ | Chemistry Elective | 3 |
| _____ | CHE _____ | Chemistry Elective | 3 | _____ | CHE _____ | General Elective (<i>Minor</i>) | 3 |
| _____ | CHE _____ | Chemistry Elective | 3 | _____ | CHE 452 | Seminar (<i>S</i>) | 1 |
| _____ | _____ | General Elective (<i>Minor</i>) | 3 | _____ | _____ | General Elective (<i>Minor</i>) | 4 |
| _____ | _____ | General Elective (<i>Minor</i>) | 4 | _____ | HUM _____ | Humanities Elective | 3 |
| _____ | HPE _____ | HPE Activity | 0.5 | _____ | HPE _____ | HPE Activity | 0.5 |
| | | | 16.5 | | | | 14.5 |

KEY

(*F*) Offered in Fall Only
 (*S*) Offered in Spring Only

Chemistry

F=Fall Semester S=Spring Semester

*F=Alternating Fall Semesters

*S=Alternating Spring Semesters

| GENERAL EDUCATION REQUIREMENTS | | | | MAJOR REQUIREMENTS | | | | | |
|---|-------|-------|--|--------------------------|---|-----|-----|--|-----------------|
| 56 Credit Hours Required | | | | 37 Credit Hours Required | | | | | |
| | | | | Credit Hours | | | | | Credit Hours |
| For the Spirit | | | | | | | | | |
| _____ | BLT | 110 | Survey of Old Testament Literature | 3 | _____ | CHE | 211 | Organic Chemistry I Lecture (F) | 3 |
| _____ | BLT | 120 | Survey of New Testament Literature | 3 | _____ | CHE | 211 | Organic Chemistry I Laboratory (F) | 1 |
| _____ | THE | 103 | Spirit-Empowered Living | 3 | _____ | CHE | 212 | Organic Chemistry II Lecture (S) | 3 |
| For the Mind | | | | | _____ | CHE | 212 | Organic Chemistry II Laboratory (S) | 1 |
| _____ | GEN | 099 | Whole Person Assessment | 0 | _____ | CHE | 300 | Quantitative Analysis Lecture (S) | 2 |
| _____ | CHE | 111 | General Chemistry I Lecture | 3 | _____ | CHE | 300 | Quantitative Analysis Laboratory (S) | 2 |
| _____ | CHE | 111 | General Chemistry I Laboratory | 1 | _____ | CHE | 303 | Physical Chemistry I Lecture (F) | 3 |
| _____ | CHE | 112 | General Chemistry II Lecture | 3 | _____ | CHE | 303 | Physical Chemistry I Laboratory (S) | 1 |
| _____ | CHE | 112 | General Chemistry II Laboratory | 1 | _____ | CHE | 304 | Physical Chemistry II Lecture (S) | 3 |
| _____ | CHE | 112 | General Chemistry II Honors Lab | 1 | _____ | CHE | 400 | Chemical Instrumentation Lecture (F) | 2 |
| _____ | COM | 101 | Oral Communication | 3 | _____ | CHE | 400 | Chemical Instrumentation Laboratory (F) | 2 |
| _____ | COMP | 102 | Reading and Writing in the Liberal Arts | 3 | _____ | CHE | 449 | Chemistry Research (S) | 1 |
| _____ | COMP | 303 | Critical Reading and Writing (S Junior Year) | 3 | _____ | CHE | 452 | Seminar (S) | 1 |
| _____ | GOV | 101 | American Government | 3 | _____ | CHE | 499 | Individual Research and Senior Paper (F) | 3 |
| _____ | HIS | 101 | American History | 3 | Chemistry Electives | | | | |
| _____ | MAT | 201 | Calculus I | 4 | Choose three of the following courses. | | | | |
| _____ | HUM | 101 | Introduction to Humanities | 3 | _____ | CHE | 454 | Recombinant DNA (S) | 3 |
| _____ | HUM | 301 | Christian Worldview and Culture | 3 | _____ | CHE | 455 | Oncological Chemistry (S) | 3 |
| _____ | _____ | _____ | Humanities Electives (2 required) | 6 | _____ | CHE | 459 | Biochemistry Lecture (F) | 3 |
| | | | HUM 222 | | _____ | CHE | 473 | Synthesis (*F) | 3 |
| | | | HUM 233 | | _____ | CHE | 456 | Inorganic Chemistry (*S) | 3 |
| | | | HUM 244 | | | | | | |
| | | | HUM 233 | | | | | | |
| | | | HONR 102 | | | | | | |
| _____ | _____ | _____ | Social Sciences Elective (1 required) | 3 | | | | | |
| | | | BUS 101 Principles of Economics (F) | | | | | | |
| | | | FIN 244 Personal Financial Planning | | | | | | |
| | | | MUS 208 Music in World Cultures | | | | | | |
| | | | PSY 201 Introduction to Psychology | | | | | | |
| | | | SOC 101 Introduction to Sociology | | | | | | |
| | | | SOC 201 Marriage and the Family | | | | | | |
| | | | SOC 323 Child and Family in the Social Context | | | | | | |
| | | | SWK 202 Introduction to Social Work | | | | | | |
| For the Body | | | | | | | | | |
| Freshman | | | | | | | | | |
| _____ | HPE | 001 | Health Fitness I | 1 | | | | | |
| _____ | HPE | 002 | Health Fitness II | 1 | | | | | |
| _____ | PRF | 070 | Swimming Course or Proficiency | 0 | | | | | |
| Sophomore | | | | | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| Junior | | | | | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| Senior | | | | | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| _____ | _____ | _____ | HPE Activity | 0.5 | | | | | |
| General Elective Suggestions | | | | | | | | | |
| 17 Credit Hours Required | | | | | | | | | |
| Students are strongly urged to minor in biology, mathematics, computer science, physics, foreign language, business or environmental studies. | | | | | | | | | |

COGNATE REQUIREMENTS

18 Credit Hours Required

| | | | | | | | | | |
|---|-----|-----|------------------------------------|---|--|--|--|--|--|
| _____ | MAT | 202 | Calculus II | 4 | | | | | |
| _____ | MAT | 211 | Differential Equations (S) | 3 | | | | | |
| _____ | CSC | 111 | Introduction to Computing | 3 | | | | | |
| Choose one from the following pairs: | | | | | | | | | |
| _____ | PHY | 101 | General Physics I Lec and Lab (F) | 4 | | | | | |
| _____ | PHY | 102 | General Physics II Lec and Lab (S) | 4 | | | | | |
| or | | | | | | | | | |
| _____ | PHY | 111 | Physics I Lec and Lab (S) | 4 | | | | | |
| Calculus Based | | | | | | | | | |
| _____ | PHY | 112 | Physics II Lec and Lab (F) | 4 | | | | | |
| Calculus Based | | | | | | | | | |