|  |  |  |  |
| --- | --- | --- | --- |
| NURS 262 | Substance Abuse as a Global Issue | 4 | F |
| NURS 264 | Status of the World's Children | 4 | F, Sp, Su |
| NURS 266 | Health and Cultural Diversity | 4 | F, Sp |
| PHIL 262 | Freedom and Responsibility | 4 | F, Sp, Su |
| PHIL 263 | The Idea of God | 4 | F, Sp, Su |
| PHIL 265 | Philosophical Issues of Gender and Sex | 4 | F, Sp |
| PHIL 266 | Asian Philosophies: Theory and Practice | 4 | F, Sp |
| POL 262 | Power and Community | 4 | F, Sp, Su |
| POL 266 | Investing in the Global Economy | 4 | F, Sp, Su |
| POL 267 | Immigration, Citizenship, and National Identity | 4 | Annually |
| SOC 262 | Sociology of Money | 4 | F, Sp, Su |
| SOC 264 | Sex and Power: Global Gender Inequality | 4 | F, Sp |
| SOC 267 | Comparative Perspectives on Higher Education | 4 | Even years |
| SUST 261 | Exploring Nature Through Art, Science, Technology | 4 | F, Sp |
| THTR 261 | Contemporary Black Theatre: Cultural Perspectives | 4 | Annually |

Distribution Courses

Distribution courses emphasize ways of thinking and methods of inquiry within various disciplines. Students are required to take one course in each of the following seven areas:

• Arts—Visual and Performing

• History

• Literature

• Mathematics

• Natural Science (lab required)

• Social and Behavioral Sciences

• Advanced Quantitative/Scientific Reasoning

Courses

Advanced Quantitative/Scientific Reasoning (AQSR)

Courses in the AQSR category have Mathematics or Natural Science prerequisites and often additional prerequisites. For the full list of prerequisites, see the course description section of this catalog.

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ANTH 235 | Bones and Stones: How Archaeologists Know | 4 | Annually |
| ANTH 306 | Primate Ecology and Social Behavior | 4 | F, Sp |
| ANTH 307 | Human Nature: Evolution, Ecology, and Behavior | 4 | F, Sp |
| BIOL 221 | Genetics | 4 | F |
| BIOL 335 | Human Physiology | 4 | F, Sp, Su |
| CHEM 104 | General Chemistry II | 4 | F, Sp, Su |
| CHEM 106 | General, Organic, and Biological Chemistry II | 4 | F, Sp, Su |
| CSCI 423 | Analysis of Algorithms | 4 | Sp |
| GEOG 201 | Mapping Our Changing World | 4 | F, Sp |
| GEOG 205 | Earth's Physical Environments | 4 | F, Sp |
| HIST 207 | Quantitative History Through Applied Statistics | 4 | Sp (alternate years) |
| HSCI 232 | Human Genetics | 4 | F |
| MATH 213 | Calculus II | 4 | F, Sp, Su |
| MATH 239 | Contemporary Topics in Mathematics II | 4 | F, Sp, Su |
| MATH 241 | Statistical Methods II | 4 | F, Sp |
| MATH 248 | Business Statistics I | 4 | F, Sp, Su |
| MATH 324 | College Geometry | 4 | F, Sp |
| PHIL 220 | Logic and Probability in Scientific Reasoning | 4 | F, Sp |
| PHYS 102 | General Physics II | 4 | Sp, Su |
| PHYS 120 | The Extraordinary Physics of Ordinary Things | 4 | Sp |
| PHYS 201 | Electricity and Magnetism | 4 | Sp |
| PHYS 309 | Nanoscience and Nanotechnology | 4 | F (odd years) |
| POL 300 | Methodology in Political Science | 4 | F, Sp |
| PSCI 204 | Understanding the Physical Universe | 4 | F, Sp, Su |
| PSCI 208 | Forensic Science | 4 | F, Sp |
| PSCI 214 | Introduction to Meteorology | 4 | F |
| SOC 302 | Social Research Methods | 4 | F, Sp, Su |
| SOC 404 | Social Data Analysis | 4 | F, Sp, Su |
| SWRK 303 | Social Work Research Methods II | 4 | F, Sp, Su |

Arts—Visual and Performing (A)

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ANTH 167 | Music Cultures of Non-Western Worlds | 4 | F, Sp |
| ART 101 | Drawing I: General Drawing | 4 | F, Sp |
| ART 104 | Design I: Two-Dimensional Design | 4 | F, Sp |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| ART 231 | Prehistoric to Renaissance Art | 4 | F, Sp, Su |
| ART 232 | Renaissance to Modern Art | 4 | F, Sp, Su |
| COMM 241 | Introduction to Cinema and Video | 4 | F, Sp, Su |
| COMM 244 | Digital Media Lab | 4 | F, Sp, Su |
| DANC 215 | Contemporary Dance and Culture | 4 | F, Sp |
| ENGL 113 | Approaches to Drama: Page to Stage | 4 | F, Sp |
| FILM 116 | Introduction to Film | 4 | F, Sp, Su |
| MUS 167 | Music Cultures of Non-Western Worlds | 4 | F, Sp |
| MUS 201 | Survey of Music | 4 | F, Sp, Su |
| MUS 203 | Elementary Music Theory | 4 | F, Sp, Su |
| MUS 223 | American Popular Music | 4 | F, Sp |
| MUS 225 | History of Jazz | 4 | F, Sp |
| PHIL 230 | Aesthetics | 4 | F, Sp, Su |
| THTR 240 | Appreciation and Enjoyment of the Theatre | 4 | F, Sp, Su |

## Elementary Education

Writing in the Discipline (p. 388)

**Department of Elementary Education**

**Department Chair:** Carolyn Obel-Omia

**B.A. in Elementary Education Program Coordinator:** Patricia Cordeiro

**B.S. in Elementary Education Program Coordinator:** Linda Capalbo

**Elementary Education Program Faculty: Professors** Goodrow, Halquist, Henshaw, Kniseley, Lawrence,  McGuire-Schwartz; **Associate Professors** Cotti, Horn, Obel-Omia, Sevey; **Assistant Professors** Capalbo, Zoll

Students in elementary education are awarded either a B.A. or a B.S. degree.

• The B.A. is awarded to students choosing a content major (Multidisciplinary Studies, English, General Science, Mathematics, or Social Studies).

• The B.S. is awarded to students electing a teaching concentration in special education.

Elementary Education B.A.

Some programs, including the middle grades certification program, will total more than 120 credits and may take longer than four years to complete.

Retention Requirements

1. A minimum overall GPA of 2.75 each semester.

2. A minimum grade of B- in ELED 300, and recommendation to continue from the instructor.

3. A minimum grade of B- in all other professional courses and a recommendation to continue from each instructor. Courses in the department may be repeated once with a recommendation to retake from the previous instructor.

4. A minimum grade of C in all prerequisite courses offered in the Faculty of Arts and Sciences.

Records of students who do not maintain good standing or who receive a Recommendation to Continue with Concerns are reviewed by the departmental retention committee. Students may be dismissed from the program. Appeal of a decision to dismiss a student is made to the dean of the Feinstein School of Education and Human Development.

Other Requirements

In addition to completing courses in elementary education, students must also complete the following requirements. See FSEHD website for additional information.

• A Preparing to Teach Portfolio

• Community service requirement

• Elementary physical education requirement

Course Requirements

Professional Courses

|  |  |  |  |
| --- | --- | --- | --- |
| CEP 315 | Educational Psychology | 3 | F, Sp, Su |
| ELED 300 | Concepts of Teaching Diverse Learners | 3 | F, Sp |
| ELED 400 | Curriculum and Assessment with Instructional Technology | 3 | F, Sp |
| ELED 420 | Children's Literature and the Integrated Arts | 3 | F, Sp |
| ELED 422 | Developmental Reading | 3 | F, Sp |
| ELED 435 | Language Arts and ELL Instruction | 3 | F, Sp |
| ELED 436 | Teaching Social Studies to Diverse Learners | 3 | F, Sp |
| ELED 437 | Elementary School Science and Health Education | 3 | F, Sp |
| ELED 438 | Teaching Elementary School Mathematics | 3 | F, Sp |
| ELED 439 | Student Teaching in the Elementary School | 9 | F, Sp |
| ELED 469 | Best Practices: Instruction, Assessment, Classroom Management | 3 | F, Sp |
| FNED 346 | Schooling in a Democratic Society | 4 | F, Sp, Su |
| SPED 433 | Adaptation of Instruction for Inclusive Education | 3 | F, Sp, Su |

Total Credit Hours: 46

Content Major Course Requirements

• Content majors include: (A) Multidisciplinary Studies, (B) English, (C) General Science, (D) Math, and (E) Social Studies.

• Students who would like to be eligible to pursue a middle grades certificate (5-8) must choose a content major in English, general science, social studies, or math. See Middle Grades Certification coursework (p. 164) for further information.

• Students who do not want to pursue a middle grades certificate may choose any content major, but multi-disciplinary studies is strongly recommended.

A. Content Major in Multidisciplinary Studies

In addition to completing required courses in elementary education, students electing a content major in multi-disciplinary studies must complete the following courses, with a minimum grade point average of 2.50 in the major. Students may not proceed to student teaching without the required GPA.

*Note: This content major does not fulfill requirements for middle grades certification.*

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| BIOL 100 | Fundamental Concepts of Biology | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |
| PSCI 103 | Physical Science | 4 | F, Sp, Su |

Note: ART 210, BIOL 100, MATH 144, POL 201, PSCI 103: These courses may also apply to General Education requirement.

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ENGL 120 | Studies in Literature and Identity | 4 | F, Sp, Su |
| ENGL 121 | Studies in Literature and Nation | 4 | F, Sp, Su |
| ENGL 122 | Studies in Literature and the Canon | 4 | F, Sp, Su |
| ENGL 123 | Studies in Literature and Genre | 4 | F, Sp, Su |

Note: ENGL 120, ENGL 121, ENGL 122, ENGL 123: These courses may also apply to General Education requirement.

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| HIST 103 | Multiple Voices: Europe in the World to 1600 | 4 | F, Sp, Su |
| HIST 104 | Multiple Voices: Europe in the World Since 1600 | 4 | F, Sp, Su |

Note: HIST 103, HIST 104: These courses may also apply to General Education requirement.

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| HSCI 232 | Human Genetics | 4 | F |
| PSCI 208 | Forensic Science | 4 | F, Sp |

Note: HSCI 232, PSCI 208: These courses may also apply to General Education requirement.

Total Credit Hours: 36

Content major courses in Multidisciplinary Studies

|  |  |  |  |
| --- | --- | --- | --- |
| ENGL 210 | Children’s Literature: Interpretation and Evaluation | 4 | F, Sp, Su |
| ENGL 212 | Adolescent Literature: Images of Youth | 4 | F, Sp, Su |

ONE GEOGRAPHY COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| GEOG 101 | Introduction to Geography | 4 | F, Sp, Su |
| GEOG 200 | World Regional Geography | 4 | F, Sp |

ONE SOCIAL STUDIES COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ANTH 101 | Introduction to Cultural Anthropology | 4 | F, Sp |
| ANTH 102 | Introduction to Archaeology | 4 | F, Sp |
| ECON 200 | Introduction to Economics | 4 | F, Sp, Su |
| ECON 214 | Principles of Microeconomics | 3 | F, Sp, Su |
| SOC 200 | Society and Social Behavior | 4 | F, Sp |
| SOC 202 | The Family | 4 | F, Sp, Su |
| SOC 204 | Urban Sociology | 4 | As needed |
| SOC 208 | The Sociology of Race and Ethnicity | 4 | F, Sp, Su |
| POL 203 | Global Politics | 4 | F, Sp |
| POL 204 | Introduction to Political Thought | 4 | F, Sp |

ONE SCIENCE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| HSCI 232 | Human Genetics | 4 | F |
| PSCI 208 | Forensic Science | 4 | F, Sp |
| PSCI 211 | Introduction to Astronomy | 4 | F, Sp |
| PSCI 212 | Introduction to Geology | 4 | F, Su |
| PSCI 217 | Introduction to Oceanography | 4 | Sp |

Note: HSCI 232, PSCI 208: These courses may also apply to General Education requirement.

TWO MATH COURSES from

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 209 | Precalculus Mathematics | 4 | F, Sp, Su |
| MATH 210 | College Trigonometry | 3 | Sp |
| MATH 212 | Calculus I | 4 | F, Sp, Su |
| MATH 220 | Formalizing Mathematical Thought | 4 | F |
| MATH 240 | Statistical Methods I | 4 | F, Sp, Su |
| MATH 324 | College Geometry | 4 | F, Sp |
| MATH 409 | Mathematical Problem Analysis | 4 | F |
| MATH 431 | Number Theory | 3 | F, Sp |

Note: MATH 324: This course may also apply to General Education requirement.

Total Credit Hours: 25-28

B. Content Major in English

In addition to completing required courses in elementary education, students electing a content major in English must complete the following courses, with a minimum grade point average of 2.75 in the major. Students may not proceed to student teaching without the required GPA.

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| BIOL 100 | Fundamental Concepts of Biology | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |
| PSCI 103 | Physical Science | 4 | F, Sp, Su |

Note: ART 210, BIOL 100, MATH 144, POL 201, PSCI 103 103. These courses may also apply to General Education requirement.

Total Credit Hours: 24

Content major courses in English

|  |  |  |  |
| --- | --- | --- | --- |
| ENGL 201 | Literary Studies: Analysis | 4 | F, Sp |
| ENGL 202 | Literary Studies: Theory and Criticism | 4 | F, Sp |
| ENGL 205 | British Literature to 1700 | 4 | As needed |
| ENGL 206 | British Literature since 1700 | 4 | As needed |
| ENGL 207 | American Literature, Beginnings to the present | 4 | F, Sp, Su |
| ENGL 210 | Children’s Literature: Interpretation and Evaluation | 4 | F, Sp, Su |
| ENGL 212 | Adolescent Literature: Images of Youth | 4 | F, Sp, Su |

Total Credit Hours: 28

Students pursuing middle grades certification must also take:

|  |  |  |  |
| --- | --- | --- | --- |
| SED 445 | The Teaching of Writing in Secondary Schools | 4 | F, Sp |

C. Content Major in General Science

In addition to completing required courses in elementary education, students electing a content major in general science must complete the following courses, with a minimum grade point average of 2.50 in the major. Students may not proceed to student teaching without the required GPA.

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| BIOL 111 | Introductory Biology I | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |
| PHYS 102 | General Physics II | 4 | Sp, Su |

Note: ART 210, BIOL 111, MATH 144, POL 201, PHYS 102: These courses may also apply to General Education requirement.

Total Credit Hours: 24

Content major courses in General Science

|  |  |  |  |
| --- | --- | --- | --- |
| BIOL 112 | Introductory Biology II | 4 | F, Sp, Su |
| PHYS 101 | General Physics I | 4 | F, Su |

ONE CHEMISTRY SEQUENCE from

|  |  |  |  |
| --- | --- | --- | --- |
| CHEM 103 | General Chemistry I | 4 | F, Sp, Su |
|  | -And- |  |  |
| CHEM 104 | General Chemistry II | 4 | F, Sp, Su |
|  |  |  |  |
|  | -Or- |  |  |
|  |  |  |  |
| CHEM 105 | General, Organic and Biological Chemistry I | 4 | F, Sp, Su |
|  | -And- |  |  |
| CHEM 106 | General, Organic, and Biological Chemistry II | 4 | F, Sp, Su |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| PSCI 212 | Introduction to Geology | 4 | F, Su |
| PSCI 217 | Introduction to Oceanography | 4 | Sp |
|  |  |  |  |
|  | TWO 200 level or above courses from BIOL, CHEM, HSCI, PHYS or PSCI | 8 |  |

Total Credit Hours: 28

D. Content Major in Mathematics

In addition to completing required courses in elementary education, students electing a content major in mathematics must complete the following courses, with a minimum grade point average of 2.50 in the major.

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| BIOL 100 | Fundamental Concepts of Biology | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| MATH 324 | College Geometry | 4 | F, Sp |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |
| PSCI 204 | Understanding the Physical Universe | 4 | F, Sp, Su |

Note: ART 210, BIOL 100, MATH 144, MATH 324, POL 201, PSCI 204: These courses may also apply to General Education requirement.

Total Credit Hours: 28

Content major courses in Mathematics

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 209 | Precalculus Mathematics | 4 | F, Sp, Su |
| MATH 210 | College Trigonometry | 3 | Sp |
| MATH 212 | Calculus I | 4 | F, Sp, Su |
| MATH 220 | Formalizing Mathematical Thought | 4 | F |
| MATH 240 | Statistical Methods I | 4 | F, Sp, Su |
| MATH 409 | Mathematical Problem Analysis | 4 | F |
| MATH 431 | Number Theory | 3 | F, Sp |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| MATH 418 | Introduction to Operations Research | 3 | Sp (even years) |
| MATH 436 | Discrete Mathematics | 3 | Sp |
| MATH 445 | Advanced Statistical Methods | 3 | Sp |

Total Credit Hours: 29

E. Content Major in Social Studies

In addition to completing the required courses in elementary education, students electing a content major in social studies must complete the following courses with a minimum grade point average of 2.75 in the major.

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| ART 210 | Nurturing Artistic and Musical Development | 4 | F, Sp |
| BIOL 100 | Fundamental Concepts of Biology | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |
| PSCI 103 | Physical Science | 4 | F, Sp, Su |

Note: ART 210, BIOL 100, MATH 144, POL 201, PSCI 103: These courses may also apply to General Education requirement.

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| HIST 103 | Multiple Voices: Europe in the World to 1600 | 4 | F, Sp, Su |
| HIST 104 | Multiple Voices: Europe in the World Since 1600 | 4 | F, Sp, Su |

Note: HIST 103, HIST 104: These courses may also apply to General Education requirement.

Total Credit Hours: 28

Content major courses in Social Studies

|  |  |  |  |
| --- | --- | --- | --- |
| HIST 331 | Rhode Island History | 4 | Sp |
| HIST 381 | Workshop: History and the Elementary Education Teacher | 1 | F |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| HIST 340 | The Muslim World from the Age of Muhammad to 1800 | 4 | Alternate years |
| HIST 341 | The Muslim World in Modern Times, 1800 to the Present | 4 | Alternate years |
| HIST 342 | Islam and Politics in Modern History | 4 | Alternate years |
| HIST 344 | History of East Asia to 1600 | 4 | As needed |
| HIST 345 | History of China in Modern Times | 4 | As needed |
| HIST 346 | Japanese History through Art and Literature | 4 | Alternate years |
| HIST 348 | Africa under Colonial Rule | 4 | Annually |
| HIST 349 | History of Contemporary Africa | 4 | Annually |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ANTH 101 | Introduction to Cultural Anthropology | 4 | F, Sp |
| ANTH 102 | Introduction to Archaeology | 4 | F, Sp |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| ECON 200 | Introduction to Economics | 4 | F, Sp, Su |
| ECON 214 | Principles of Microeconomics | 3 | F, Sp, Su |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| GEOG 101 | Introduction to Geography | 4 | F, Sp, Su |
| GEOG 200 | World Regional Geography | 4 | F, Sp |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| POL 203 | Global Politics | 4 | F, Sp |
| POL 204 | Introduction to Political Thought | 4 | F, Sp |

ONE COURSE from

|  |  |  |  |
| --- | --- | --- | --- |
| SOC 200 | Society and Social Behavior | 4 | F, Sp |
| SOC 202 | The Family | 4 | F, Sp, Su |
| SOC 204 | Urban Sociology | 4 | As needed |
| SOC 208 | The Sociology of Race and Ethnicity | 4 | F, Sp, Su |

Total Credit Hours: 28-29

Elementary Education B.S.

Retention Requirements

1. A minimum overall GPA of 2.75 each semester.

2. A minimum grade of B- in ELED 302 (or SPED 302), and recommendation to continue from the instructor.

3. A minimum grade of B- in all coursework, including an “acceptable” rating on primary course artifact. Courses in the department may be repeated once with a recommendation to retake from the previous instructor.

4. A minimum grade of C in all prerequisite courses offered in the Faculty of Arts and Sciences.

5. Positive recommendations from all education instructors based on academic work, fieldwork, and professional behavior.

Students must maintain acceptable standing in academic work, fieldwork, and demonstrate consistent professionalism (as described above), or risk suspension from the B.S. in Elementary Education program with teaching concentration in Special Education.

Course Requirements

Cognates

|  |  |  |  |
| --- | --- | --- | --- |
| BIOL 100 | Fundamental Concepts of Biology | 4 | F, Sp, Su |
| MATH 143 | Mathematics for Elementary School Teachers I | 4 | F, Sp, Su |
| MATH 144 | Mathematics for Elementary School Teachers II | 4 | F, Sp, Su |
| PSCI 204 | Understanding the Physical Universe | 4 | F, Sp, Su |
| POL 201 | Development of American Democracy | 4 | F, Sp, Su |

Note: BIOL 100, MATH 144, PSCI 204, POL 201: The course also applies to General Education requirement.

Professional Courses

|  |  |  |  |
| --- | --- | --- | --- |
| ELED 302 | Teaching All Learners: Foundations and Strategies | 4 | F |
|  | -Or- |  |  |
| SPED 302 | Teaching All Learners: Foundations and Strategies | 4 | Sp |
|  |  |  |  |
| CEP 315 | Educational Psychology | 3 | F, Sp, Su |
| FNED 346 | Schooling in a Democratic Society | 4 | F, Sp, Su |
| ELED 400 | Curriculum and Assessment with Instructional Technology | 3 | F, Sp |
| ELED 420 | Children's Literature and the Integrated Arts | 3 | F, Sp |
| ELED 422 | Developmental Reading | 3 | F, Sp |
| ELED 435 | Language Arts and ELL Instruction | 3 | F, Sp |
| ELED 436 | Teaching Social Studies to Diverse Learners | 3 | F, Sp |
| ELED 437 | Elementary School Science and Health Education | 3 | F, Sp |
| ELED 438 | Teaching Elementary School Mathematics | 3 | F, Sp |
| ELED 439 | Student Teaching in the Elementary School | 9 | F, Sp |
| ELED 469 | Best Practices: Instruction, Assessment, Classroom Management | 3 | F, Sp |

Note: Students cannot receive credit for both ELED 302 and SPED 302.

PHIL 491 - Independent Study I (3-4)

Students select a topic and undertake concentrated research or creative activity under the mentorship of a faculty member.

Prerequisite: Consent of instructor, department chair and dean, and admission to the philosophy honors program.

Offered: As needed.

PHIL 492 - Independent Study II (3-4)

This course continues the development of research or activity begun in PHIL 491. For departmental honors, the project requires final assessment from the department.

Prerequisite: PHIL 491 and consent of instructor, department chair and dean.

Offered: As needed.

## PSCI - Physical Science

PSCI 103 - Physical Science (4)

The processes and natural laws that control our physical environment are investigated. Emphasis is on laboratory experiment. Lecture and laboratory. Students cannot receive credit for both PSCI 103 and PHYS 101-PHYS 102. 6 contact hours.

General Education Category: Natural Science.

Offered: Fall, Spring, Summer.

PSCI 204 – Understanding the Physical Universe (4)

Fundamental principles in physical science such as force, energy, cycles and the structure of matter are introduced and used to investigate varied applications and current issues in the physical sciences. 5 contact hours

General Education Category: Advanced Quantitative/Scientific Reasoning.

Prerequisite: BIOL 100 and MATH 144 or consent of instructor.

Offered: Fall, Spring, Summer.

PSCI 207 - Introduction to Environmental Chemistry (3)

The flow of material and energy through the Earth system is introduced. Principles of element cycles, climate science, and coastal processes are also investigated.

Offered: Annually.

PSCI 208 - Forensic Science (4)

Students learn about modern forensic techniques used in crime scene analysis. Emphasis is on the methods used to collect and interpret crime scene data.

General Education Category: Advanced Quantitative/Scientific Reasoning.

Prerequisite: Any Mathematics or Natural Science.

Offered: Fall, Spring.

PSCI 211 - Introduction to Astronomy (4)

Our solar system, the sun and other stars, galaxies, and the universe are explored. Astronomical phenomena are explained using basic physical principles. Lecture and laboratory.

General Education Category: Natural Science.

Offered: Fall, Spring.

PSCI 212 - Introduction to Geology (4)

Focus is on the structure and composition of the earth and the processes that have shaped the earth. Topics include minerals, origin of magma, volcanic activity, and weathering and soil formation. Lecture and laboratory.

General Education Category: Natural Science.

Offered: Fall, Summer.

PSCI 214 - Introduction to Meteorology (4)

This class focuses on the structure, composition and phenomena of the atmosphere. Students examine local and global scale weather patterns, and century to millennial scale climate change.

General Education Category: Advanced Quantitative/Scientific Reasoning.

Prerequisite: Completion of any mathematics or natural science general education distribution.

Offered: Fall.

PSCI 217 - Introduction to Oceanography (4)

Topics include mapping the sea floor, formation of the ocean basins, sediments as recorders of ocean history, the composition and physical properties of seawater, ocean circulation, El Ninos, waves, and tides. Lecture and laboratory.

General Education Category: Natural Science.

Offered: Spring.

PSCI 340 - Field Methods in Geology (3)

Mapping and the interpretation of geological structures are introduced. Emphasis is on the geology of local areas. Included are identification of rocks and methods of recording field observations. Laboratory and field trips. 4 contact hours.

Prerequisite: PSCI 212 or consent of instructor.

Offered: As needed.

PSCI 357 - Historical and Contemporary Contexts of Science (3)

The development of science and technology is explored through case histories from the physical, biological, and environmental sciences. 4 contact hours.

Prerequisite: Any Natural Science course.

Offered: As needed.

PSCI 490 - Directed Study in Physical Science (3)

Designed to be a substitute for a traditional course under the instruction of a faculty member. A particular area of physical science is studied on the basis of the interest of the student and the instructor.

Prerequisite: Consent of instructor, department chair and dean.

Offered: As needed..