2012-2014 UNDERGRADUATE CATALOG
ALTERNATIVE NATURAL SCIENCE COURSES
FALL 2012

• A maximum of 6 hours from Sections 1 & 2 may be used to satisfy Natural Science requirements.
• A maximum of 3 hours from Section 2 may be used to satisfy Natural Science requirements.
• The courses on this list are not offered every semester and may have restrictions or additional prerequisites.

Section 1: Alternative Science Courses

ANT 310L**, PRIMATE COGNITION
ANT 324L**, 33-GIS/REM SNS FOR ARCHAEO/LPALEO
ANT 432L, PRIMATE ANATOMY
ANT 346L, PRIMATE SOCIAL BEHAVIOR
ANT 346M, COMPARATIVE PRIMATE ECOLOGY
ANT 347C, METHODS IN PRIMATE BIOLOGY
ANT 348, CURRENT TOPICS IN PALEOANTHRO
ANT 349C, HUMAN VARIATION
ANT 349D, ANTHROPOLOGICAL GENETICS
ANT 350C, PRIMATE SENSORY ECOLOGY
ANT 351E, PRIMATE EVOLUTION
ANT 366, ANAT AND BIO OF HUMAN SKELETON
BME 301, WORLD HEALTH AND BIOTECNOLOGY
CSD 311K, PHONETIC DESCRIPTION OF SPEECH
CSD 313L, HEARING SCIENCE
CSD 358, ANAT/PHYS SPEECH/HEARING MECH
GRG 333C, SEVERE AND UNUSUAL WEATHER
GRG 333K, CLIMATE CHANGE
GRG 334C, ENVIRONMENTAL HAZARDS
GRG 334K, SOILS
GRG 335C, QUATERNARY LANDSCAPES
GRG 335K, MOUNTAIN GEOECOLOGY
GRG 335N, LANDSCAPE ECOLOGY
GRG 338C, RIV/LANDSCP: FLUVIAL GEOMORPH
GRG 339, PROCESS GEOMORPHOLOGY
GRG 366C, COMPARATIVE ECOSYSTEMS
GRG 366K, BIOGEOGRAPHY
GRG 367K, VEGETATION ECOLOGY
HIS 365G**, SCIENCE, ETHICS, & SOCIETY

HIS 366N**, BIOLOGY, BEHAVIOR, & INJUSTICE
KIN 324K, APPLIED HUMAN ANATOMY
LIN 313, LANGUAGE AND COMPUTERS
LIN 344K, PHONET: PROD/PERCPT SPE SOUNDS
LIN 350**, 1-LANGUAGE AND THE BRAIN
LIN 353C, INTRO TO COMPUTATION LING
LIN 358S, FUNDAMENTALS OF SPEECH SCIENCE
PHL 312*, INTRODUCTION TO LOGIC
PHL 313*, INTRODUCTORY SYMBOLIC LOGIC
PHL 313K*, LOGIC, SETS, AND FUNCTIONS
PHL 313Q*, LOGIC AND SCIENTIFIC REASONING
PHL 344K, INTERMEDIATE SYMBOLIC LOGIC
PHL 358, PHILOSOPHICAL LOGIC
PSY 308, BIOPSYCHOLOGY
PSY 318, STATISTICS & RESEARCH DESIGN
PSY 323, PERCEPTION
PSY 323P, PERCEP SYS: NEURONS/BEHAV/EVOL
PSY 325S, SEX DFS IN COGNITN/PERCEPTN
PSY 325K, ADVANCED STATISTICS
PSY 332, BEHAVIORAL NEUROSCIENCE
PSY 332C, HORMONES AND BEHAVIOR
PSY 353K, PSYCHOPHARMACOLOGY
PSY 458, EXPERIMENTAL PSYCHOLOGY
PSY 371, LEARNING AND MEMORY
R S 373**, BIOMEDICINE, ETHICS & CULTURE
SOC 308**, 2-WOM’S REPROD HLTH NONSCI MAJ
SOC 317L, INTRO TO SOCIAL STATISTICS
T C 310*, MODES OF REASONING

Section 2: History or Philosophy of Science Courses

ANT 324L**, ANTHROPOL OF HEALTH & ILLNESS
HIS 322D, SCIENTF REVOLUTN OF 17TH CEN
HIS 322G, HIST OF MODERN LIFE SCIENCES
HIS 322M, HISTORY OF MODERN SCIENCE
HIS 350L**, BIO/L/HUMAN NATURE SNCE DARWIN
HIS 350L**, EINSTEIN IN AGE OF CONFLICTS
HIS 350L**, SCIENCE, TECHNOLOGY, AND WAR

PHL 316K, SCIENCE AND PHILOSOPHY
PHL 322, SCIENCE AND THE MODERN WORLD
PHL 325M, MEDICINE, ETHICS, AND SOCIETY
PHL 329U, PERSPECTVS OF SCIENCE AND MATH
PHL 344M, PHILOSOPHY OF MATHEMATICS
PHL 363, SCIENTIFIC METHOD
PHL 363L***, TOPICS IN PHILOSOPHY OF SCIENCE

* Only one of the following may be counted: PHL 312, 313, 313K, 313Q, T C 310.
** PHL 312 may not be taken if credit for PHL 313, 313K, 313Q, or 344K has previously been earned.
*** Only this specified topic title may be used to satisfy the requirement.
**** All topic titles may be used to satisfy the requirement.
### Mathematics (Core 020 / Liberal Arts)

Three semester hours chosen from:
- **Mathematics:** M 302, 303D, 403K, 305G, 408C, 408K, 408N, 408R, 316
- **Statistics and Scientific Computation:** SSC 302, 303, 304, 305, 306, 318

M 310P (Plan II only)

**NOTE:** M 301 may fulfill the Core Mathematics requirement but it does not count for the Liberal Arts math requirement or total hours for the degree.

### Science & Technology, Part I (Core 030)

Six hours in a single field of study chosen from:
- **non-science major options**
- **Astronomy:** AST 301, 309, 309L, 309Q, 309R, 309S, 309T
- **Biology:** BIO 301D, 301L, 301M
- **Chemistry:** CH 304K, 305
- **Geological Science:** GEO 302C, 302D, 302E, 302K, 302M, 302P, 307
- **Marine Science:** MNS 307, 308
- **Natural Sciences:** NSC 306J, 306K, 306L, 306M
- **Physical Science:** P S 303, 304
- **Physics:** PHY 309K, 309L

**additional science options**
- **AST 302, 303, 307**
- **BIO 311C, 311D, 315H, 325H, 326M, 446L, 365S**
- **CH 301, 302, 301H, 302H, 314N**
- **GEO 401, 303, 404C, 405, 305E, 420H**
- **PHY 301, 302K, 302L, 303K, 303L, 316, 317K, 317L**
- **BIO 301E and PHY 321 (Plan II only)**

**NOTE:** Consult the course descriptions in the Course Schedule to identify prerequisites and course duplications.

### Science and Technology, Part II (Core 031)

Three semester hours chosen from the list below or from Science and Technology, Part I list. The course must be in a field of study different from field used for Science and Technology, Part I.
- **Anthropology:** ANT 301, 304
- **Biology:** BIO 301C, 305E, 305F, 406D, 307D, 309D, 309F
- **Computer Science:** C S 302, 307, 312
- **Electrical Engineering:** E E 302, 306
- **Geography:** GRG 301C, 301K, 304E

**NOTE:** NSC 306J and NSC 306K for Part I cannot pair with CH, GEO, P S or PHY for Part II. P S or PHY for Part I cannot pair with NSC 306J for Part II.

### Additional Natural Science (Liberal Arts)

Six additional semester hours in natural science selected from Astronomy, Biology, Chemistry, Geology, Marine Science, Nutrition, Physical Science, Physics, Mathematics, Computer Science, Statistics and Scientific Computation or approved list of alternatives. Courses from the Science and Technology, Part I and Part II lists may also be used.

**NOTE:** Only nine hours in a single field may be used for math and science requirements. Only three hours of history or philosophy of science may be used.

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### Core Mathematics

### Core Science & Technology, Part I (single field)

### Core Science & Technology, Part I (single field)

### Core Science & Technology, Part II (different field)

### Additional Natural Science

### Additional Natural Science

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### NOTE FOR ALL MAJORS:

There is a **limit of 9 hours in a single field** for courses used for math and science requirements.

There is a **limit of 3 hours in either the history of science or philosophy of science.**

### NOTE FOR ECONOMICS MAJORS:

Economics majors must complete M 408C and M 408D or M 408K and M 408L with a grade of at least C- in each.

### NOTE FOR URBAN STUDIES MAJORS:

Urban Studies majors must complete M 408C or M 408K, and M 316 or SSC 305, with a grade of at least C- in each.

### NOTE FOR BS ENVIRONMENTAL SCIENCE AND BS PSYCHOLOGY MAJORS:

This worksheet is **NOT** for students seeking a Bachelor of Science in Psychology or Bachelor of Science in Environmental Science with a major in Geographical Sciences.