

BS DEGREE IN BIOLOGICAL SCIENCES

General Biology

Purdue University North Central

(Adopted as of Fall 2009)

A MINIMUM OF 124 TOTAL CREDIT HOURS ARE NECESSARY TO GRADUATE†*

GENERAL EDUCATION (45 CR):

ENGLISH (6 CR):

ENGL 101 _____ English Composition I
ENGL 102 _____ English Composition II

FOREIGN LANGUAGE/CULTURE (12 CR):

Please refer to the Biology Department's Cultural Diversity Requirement statement.

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SOCIAL SCIENCE/LITERATURE/HUMANITIES (18 CR)

Other sequence available – see Advisor

Group A (6CR) Must choose one sequence

HIST 102, 103 _____ History (choose two)
104, or 105

HIST 271/272 _____ Latin American Survey
PHIL 330/331 _____ Religions West/East

Group B (6CR) Must choose 2

GS 191 _____ Freshman Year Experience I
PSY 120 _____ Elementary Psychology
SOC 100 _____ Introductory Sociology

Group C (6CR) Must choose 2

POL 101 _____ American Government And Politics
ECON 210 _____ Principles Of Economics
PHIL 110 _____ Introduction To Philosophy
ANTH 100 _____ Introduction To Anthropology
COM 114 _____ Fundamentals of Speech Communication

COMPUTER PROGRAMING/LOGIC (9CR);

MA 223 _____ Introductory Analysis I
CS 220 _____ Programming I For Engineers And Scientists
STAT 301 or _____ Elementary Statistical Methods *or*
STAT 503 _____ Statistical Methods for Biology

CHEMISTRY and PHYSICS (20 CR)

CHM 115 _____ General Chemistry
CHM 116 _____ General Chemistry
CHM 255/L _____ Organic Chemistry & Lab
CHM 256/L _____ Organic Chemistry & Lab
PHYS 220/L _____ General Physics & Lab

BIOLOGY CORE (23 CR):

BIOL 121/116 _____ Biology I: Diversity, Ecology and
Behavior and Lab
BIOL 131/118 _____ Biology II: Development, Structure
and Function and Lab
BIOL 231/232 _____ Biology III: Cell Structure and
Function and Lab
BIOL 241/242 _____ Biology IV: Genetics and
Molecular Biology and Lab
BIOL 286/288 _____ Introduction to Ecology and
Evolution and Lab
BIOL 407 _____ Senior Capstone Experience

BIOLOGY ELECTIVES (24+ CR): Students must complete a minimum of 24 credit hours of upper division courses from the following list. Students must select *at least two* courses from each of the four main subject areas:

Molecular & Cellular

BIOL 322/323 _____ Microbiology & Lab
BIOL 409 _____ Immunobiology
BIOL 415 _____ Molecular Biology
BIOL 417 _____ Biotechnology
BIOL 423 _____ Physical Principles of Biological
Chemistry
CHM 321 _____ Analytical Chemistry
CHM 333 _____ Biochemistry
CHM 420 _____ Lab in Molecular Biochemistry

Structure & Function

BIOL 404 _____ Gross Anatomy
BIOL 405 _____ Herpetology
BIOL 455/456 _____ Animal Physiology & Lab
BIOL 466 _____ Developmental Biology
BIOL 492 _____ Mycology
BTNY 210 _____ Introduction to Plant Sciences

Evolution

BIOL 311 _____ Evolution
BIOL 433 _____ Population Genetics
BIOL 402 _____ Biogeography
BIOL 447 _____ Animal Behavior
BIOL 448 _____ Sociobiology

Ecology & Environmental

BIOL 385 _____ Ecology
BIOL 442 _____ Ecology of Shallow Lakes
BIOL 450 _____ Wetlands Ecology
BIOL 483 _____ Environ. & Cons. Biology
BTNY 555 _____ Aquatic Botany
CHM 481 _____ Environmental Chemistry

FREE ELECTIVES: APPROXIMATELY 12 CR

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† In addition to the requirements listed above, all students must complete at least 3 credits of “experiential learning” including:

- courses with a recognized “service learning” component (inquire with the Biology/Chemistry Department);
- an internship (for academic credit) arranged through, or approved by, the Biology/Chemistry Department; or
- undergraduate research for academic credit (e.g., BIOL 295, 395, or 495)

*** TO GRADUATE YOU NEED AT LEAST 32 CREDIT HOURS OF PURDUE UNIVERSITY (non-transfer) CREDIT, AND AT LEAST 32 CREDIT HOURS AT THE 300-LEVEL OR ABOVE, 2.0 GRADE POINT AVERAGE IN ALL BIOLOGY COURSES, AND A MINIMUM GRADUATION INDEX OF 2.0**

Cultural Diversity Requirement

Students will satisfy their cultural diversity requirement by completing one of the following 12-credit options:

- (1) 2 years foreign language (12 cr.; all courses must be in the same language)
- (2) 1 year foreign language (6 cr.) plus two courses from the approved culture/diversity list (6 cr.; see below)
- (3) 1 year foreign language (6 cr.) plus a department-approved travel-study course (6 cr.)
 - a) Must take place outside of the United States
 - b) Must consist of coursework and educationally valuable activities
 - c) Must have significant immersion in local culture and language independent of any US-based program.

Culture/Diversity Courses at PNC approved by the faculty of the Biology/Chemistry Department*

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| ANTH 303 - Gender Across Cultures | HIST 386 – History of American Foreign Relations |
| ASL 201 – American Sign Language III | IDIS 280 – Women’s Studies: An Introduction |
| A&D 255 – Art Appreciation | IDIS 380 – Gender and Multiculturalism |
| GBG 450 – Women in Business | OLS 454 – Gender & Diversity in Management |
| GBI 301 – Introduction to International Business | PHIL 225 – Philosophy of Women |
| COM 250 – Mass Communication and Society | PHIL 330 – Religions of the East |
| COM 376 - Communication and Gender | PHIL 331 – Religions of the West |
| ECON 370 – International Trade | POL 130 – Introduction to International Relations |
| ECON 466 – International Economics | POL 141 – Governments of the World |
| ECDI 285 – Multiculturalism & Education | PSY 239 – Women: A Psychological Perspective |
| EDCI 265 – The Inclusive Classroom | SWRK 359 – Macro Practice: Human Service Organizations and the Community |
| EDCI 585 – Multicultural Education | SWRK 361 – Institution of Social Welfare |
| ENGL 230 – Great Narrative Works | SOC 310 – Racial & Ethnic Diversity |
| ENGL 240 – Survey of British Literature: from the Beginnings through the Neoclassical Period | SPAN 235 – Latin American Literature in Translation |
| ENGL 241 – Survey of British Literature: from the Rise of Romanticism to the Modern Period | SPAN 241 – Introduction to the Study of Hispanic Literature |
| ENGL 257 – Literature of Black America | SPAN 335 – Literature of the Spanish Speaking Peoples in the United States |
| ENGL 262 – Greek & Roman Classics in Translation | SPAN 341 – Hispanic Literature I: Poetry and Drama |
| ENGL 266 – World Literature: from the Beginnings to 1700 A.D. | SPAN 342 – Hispanic Literature II: Prose |
| ENGL 267 – World Literature: from 1700 A.D. to the Present | SPAN 480 – Spanish Civilization |
| ENGL 360 – Gender in Literature | SPAN 481 – Spanish Culture |
| HIST 102♦ – Introduction to the Ancient World | SPAN 482 – Latin American Civilization |
| HIST 103♦ – Introduction to the Medieval World | SPAN 557 – Argentine Literature |
| HIST 104♦ – Introduction to the Modern World | THTR 201 – Theater Appreciation |
| HIST 290 – Russia: Yesterday, Today and Tomorrow | |

*This list is not exhaustive, and is subject to periodic review by the Biology faculty. Other courses that fit the spirit of the requirement will be considered.

♦These courses *cannot* be used for both the “Cultural Diversity Requirement” and the “Social Science /Literature /Humanities-Group A Requirement.”