Bachelor of Science in Biology
Graduation Requirements

Prerequisites for the Exercise Science Major:

- *Biol 200/200L General Biology with Lab
- Biol 201 Introduction to Scientific Literature
- Biol 205/205L Biodiversity with Lab
- Chem 121/121L General Chemistry with Lab
- Chem 122/122L Organic and Biochemistry with Lab
- *Math 130 Pre-calculus or Math 251 Calculus (Recommended)
- Phys 201/201L or Phys 202/202L
- WR 320 Writing for the Discipline

*These courses may also fulfill General Education requirements.

General Requirements for Biology ................................................................. 40

- Biol 310 Genetics ...................................................................................... 4
- Biol 499 Senior Capstone .......................................................................... 2
- Biol 495 Internship or Biol 496 Research ................................................... 3
- Choose from list 25 credits not in your concentration area .......................... 25

- Biol 311/311L Human Anatomy and Physiology I
- Biol 317 Case Studies in Anatomy and Physiology
- Biol 320 Cell Biology
- Biol 330/330L Microbiology
- Biol 340 Endocrinology
- Biol 350 Ecology
- Biol 360 Vertebrate Zoology
- EXSC 310 Kinesiology
- EXSC 320 Exercise Physiology and Neuromuscular Conditioning
- EXSC 410 Biomechanics
- MATH 310 Statistics
- Other upper division biology or chemistry

- Choose one of the required concentrations listed below .............................. 6

Cell/Molecular Biology Concentration ................................................................ 6

- Biol 320 Cell Biology .................................................................................. 3
- Biol 410 Advanced Molecular Biology ......................................................... 3

Organismal/Ecological Biology Concentration .................................................. 6

- Biol 350 Ecology ......................................................................................... 3
- Biol 450 Advanced Organismal Biology ....................................................... 3

Graduation Requirements:

- Completion of 124 Credits
- Completion of 6 credits of mathematics or science beyond the general education (Core) requirements. These credits may be fulfilled with coursework from the major.
- Completion of General Education Core curriculum
- Completion of an Academic Major
- Minimum of 30 credits from NCU
- Minimum of 40 upper division credits (300 level of above)
- Minimum of 27 upper division credits in the major (one-third in case of minor)
- Cumulative GPA of 2.0 or better for all coursework, including transfer work
- At least a C- in each course in the major
- Satisfactory writing competency
- Applied to graduate
General Education Core Requirements-BS

- **Additional 6 (six) credits of Mathematics or Science (these courses can meet major courses)**
  - WR 121 English Composition .......................................................... 3
  - WR 123 English Composition .......................................................... 3

- **Interdisciplinary Studies** ................................................................. 11–12
  - Choose one from: HIST 151, HIST 161, IDS 151 .......................... 3
  - Choose one from: HIST 152, HIST 162 or IDS 152 ......................... 3
  - IDS 251 Engaging American Thought & Culture ............................. 3
  - IDS 251S Appreciation of American Thought & Culture Seminar .... 2
  - FYS 101 First-Year Seminar* ......................................................... 1
  (*Not required for transfer students with 24 or more earned semester credits)

- **Humanities** ..................................................................................... 6
  - PHL 210 Ethics ................................................................................. 3
  - Communications Elective (choose one of the following) .................. 3
    COMM 212 Public Speaking or COMM 213 Interpersonal Communication

- **Social Sciences** ............................................................................... 5–6
  - Choose courses from at least two of the following areas:
    - Anthropology
    - Business
    - Economics
    - Education
    - History
    - Psychology
    - Religion
    - Sociology

- **Math/Science/Computer** ................................................................. 6–9
  - Minimum six credits with at least one course in each of the following areas:
    - One science course with lab
    - One college-level mathematics course
    - One computer course—these NCU courses meet the computer requirement:
      - CIS 123 Word Processing, Spreadsheets and Presentations
      - CIS 125 Introduction to Web Page Design
      - CIS 130 Introduction to Computer Sciences and Organization Theory
      - EDUC 230 Technology for Teaching and Learning
      - MUS 118/119 Music Technology/Pro Tools 101

- **Diversity Studies** .......................................................................... *one course
  - Choose one course from approved electives in the following list:
    - ANTH 210 Cultural Anthropology
    - BTH 240 Christianity in America
    - BUS 120 History of Entrepreneurship
    - COMM 220 Intercultural Communication
    - EDUC 210 School Diversity
    - HIST 240 History of the Pacific Northwest
    - RELS 210 The Abrahamic Faiths of Judaism and Islam
    - RELS 220 Living Religious Traditions of the Far East
    - SOC 200 Introduction to Sociology
  *Some of the approved courses may also fulfill requirements in other areas of the general education core
  (e.g., communication, social sciences).

- **Bible & Christian Ministry Studies** ............................................... 12
  - BTH 101/102 Engaging with the Bible ............................................. 6
  - *CM 240 All Are Gifted, All Are Called .......................................... 2
  - Any BTH elective at the 200 level or above .................................... 4
  *EDUC 415 Faith Integration and Teaching Seminar is an approved alternative for Teacher Education majors.

- **Health/Physical Education** ............................................................. 2
  - Choose courses from Physical Education or Sports/Athletics

**Minimum General Education CORE for all majors** ......................................... 48