

Life Sciences / Biology (BIO)
Life Sciences Department
School of Natural & Social Sciences
Carhart Science Building

Objectives: The Biology/Life Sciences major provides students with career choices in pre-health science including pre-medicine, pre-physician assistant, pre-physical therapy, pre-dentistry and dental hygiene, as well as biotechnology, organismal biology, environmental biology, or biology education. The Biology/ Life Sciences program also offers courses to students preparing for further study in Clinical Laboratory Science, Mortuary Science, Respiratory Therapy, other health science fields, Agriculture, Forestry, or Wildlife Management. Courses in Biology offer majors and non-majors the background required to think critically about the role of the living world in their lives.

Life Sciences Major (BA or BS) 42-55 hours
Life Sciences Core: 12 hours

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|-----|-------------------------------|---|
| BIO | 110 Biology Concepts..... | 4 |
| CHE | 106 General Chemistry I..... | 4 |
| PHY | 201 General Physics I..... | 3 |
| | 321 Physics Laboratory I..... | 1 |

Biology/Food Science Concentration: 38 hours
+ 12 hour core

Students graduating with a biology/food science concentration major must complete MAT 180 Applied Probability and Statistics (3) to satisfy the Block 2 Mathematics General Education requirement. Students must take BIO 370 before taking BIO 394 or 465.

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|------|---|-----|
| BIO | 200 Zoology..... | 4 |
| | 210 Botany | 4 |
| | 320 Molecular Genetics..... | 4 |
| | 370 Introduction to Research..... | 2 |
| | 385 Microbiology..... | 4 |
| | 425 Evolution..... | 3 |
| | 394 Biology Cooperative Education or | |
| | 465 Continuing Research | 1 |
| | 469 Senior Seminar in Biology or | |
| | 470 Research Project | 1 |
| CHE | 107 General Chemistry II..... | 4 |
| | 314 Organic Chemistry..... | 4 |
| FDST | 405 Food Microbiology..... | 3** |
| | 406 Food Micro Lab..... | 2** |
| | 451 Seminar..... | 2** |

UNL classes (**)

Students completing this major are strongly encouraged to take CHE 315 Organic Chemistry II (4), CHE 326 Biochemistry I (4) and MAT 140 Calculus I (5) before transferring to UNL.

In addition to the required courses above, students must complete a minimum of 40 credit hours of 300 level or above course work and a minimum of 125 credit hours for a biology degree from WSC. WSC will waive the requirement that 24 of the last 30 hours be completed at WSC, as long as the student completes 95 credit hours* prior to transferring to the University of Nebraska-Lincoln to complete the Biology/Food Science Major. *Note: 30 of the 95 credit hours must be taken at WSC.

The courses listed below are required of the Food Science program at the University of Nebraska-Lincoln and will be accepted by WSC toward the appropriate minimum credit hour requirements.

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|------|--------------------------------|---|
| FDST | 203 Food Composition..... | 2 |
| | 207 Food Analysis..... | 3 |
| | 403 Quality Assurance..... | 2 |
| | 448 Food Chemistry..... | 3 |
| | 449 Food Chem Lab..... | 1 |
| | 464 Heat/Mass Tran..... | 2 |
| | 465 Unit Operations..... | 3 |
| CHE | 221 Quantitative Analysis..... | 4 |

In addition to these courses, students must complete 6 credit hours of course work in any of the following 3 credit hour Food Science Commodities courses offered at UNL only (FDST 412 Cereal Science (3), 418 Eggs (3), 429 Dairy Prod. Technology (3), 420 Post-Harvest Physiology (3), 455 Bioprocessing of Foods (3), ASCI 310 Fresh Meats (3) or 410 Processed Meats (3). And take either NUTR 445 or ASCI 421.