

Associate in Science Degree
Northern Oklahoma College
Division of Agricultural Sciences

Bachelor of Science Degree
Northwestern Oklahoma State University
School of Arts & Sciences

Agricultural Sciences-Pre-Vet Option

The Associate in Science degree program in Agricultural Sciences consists of 60 hours designed to provide the student with the first two years of general education and program requirements for transfer seamlessly to the Bachelor of Science degree in Agribusiness at Northwestern Oklahoma State University.

Pre-Veterinary Medicine Program
Biology Major/Chemistry Minor

(Note: Could be completed with a Chemistry major/Biology minor.)
 Transfer students who have completed an Associate in Science degree in Agricultural Sciences from Northern Oklahoma College will have met the NWSU General Education Requirements.

PROGRAM REQUIREMENTS

Credit Hours

GENERAL EDUCATION -----	37
ENGLISH COMPOSITION	
ENGL 1113 English Composition I -----	3
ENGL 1213 English Composition II -----	3
HISTORY AND GOVERNMENT	
HIST 1483 American History to 1865 (or)	
HIST 1493 American History since 1865 -----	3
POLI 1113 American National Government -----	3
HUMANITIES	
Electives -----	6
*One 3-hour course to be chosen from those listed with International Dimension and 3 hours of humanities elective.	
MATHEMATICS	
MATH 1513 College Algebra (or)	
MATH 1493 Math Applications -----	3
SCIENCE	
BISI 1114 General Biology (or)	
BISI 1124 General Biology for Majors -----	4
CHEM 1314 General Chemistry I -----	4
COMPUTER SCIENCE	
BSAD 1113 Digital/Financial Literacy -----	3
(or other approved course)	
ORIENTATION	
ORNT 1101 Freshman Orientation -----	1
GENERAL EDUCATION ELECTIVES -----	4
Select courses from: Language Arts, Natural Sciences, Foreign Languages, Fine Arts, Humanities, Mathematics, Behavior or Social Sciences. It is advised that if a student takes a <u>three</u> credit hour course to apply to this requirement, the fourth credit hour may be counted from the overage hours taken from the Recommended Program Electives below.	
PROGRAM REQUIREMENTS -----	18
AGRI 1113 Agricultural Economics -----	3
AGRI 1124 Intro to Animal Sciences -----	4
AGRI 1223 Intro to Plant/Soil Science -----	3
BISI 2124 Microbiology -----	4
CHEM 1414 General Chemistry II -----	4
Substitutions may be made with prior approval.	
RECOMMENDED PROGRAM ELECTIVES -----	5
ACCT 2103 Accounting I-Financial -----	3
ACCT 2203 Accounting II-Managerial -----	3
AGRI 1013 Introduction to Horticulture -----	3
AGRI 2103 Agriculture Leadership -----	3
AGRI 2123 Livestock Feeding -----	3
AGRI 2523 Intro to Sheep Prod & Mgmt. -----	3
BISI 1314 General Botany -----	4
BISI 1414 General Zoology -----	4
BISI 2024 Entomology -----	4
SPCH 1713 Intro to Oral Communication -----	3
MATH 2023 Elementary Statistics -----	3
MATH 1613 Trigonometry -----	3
TOTAL CREDIT HOURS -----	60

PROGRAM REQUIREMENTS

Credit Hours

BIOLOGY MAJOR REQUIREMENTS -----	40
Health Science Option	
*BIOL 1224 General Zoology -----	4
BIOL 3814 Human Anatomy OR	
BIOL3235 Comparative Vertebrate Anatomy -----	4-5
BIOL 3194 Human Physiology -----	4
BIOL 3343 Genetics -----	3
*BIOL 3115 Microbiology -----	5
BIOL 3011 Science Fair Judging -----	1
BIOL 4011 Biology Seminar -----	1
BIOL 4021 Senior Seminar -----	1
Upper-level Biology electives+-----	16-17
+Recommended Electives:	
BIOL 3352 Genetics Laboratory	
BIOL 3363 Cell and Molecular Biology	
BIOL 3502 Medical Terminology	
BIOL 4103 Vertebrate Embryology	
BIOL 4265 Animal Parasitology	
BIOL 4323 Immunology	
BIOL 4115 Pathogenic Microbiology and Immunology	
BIOL 4143 Biochemistry	
BIOL 4470 Independent Study	
BIOL 4490 Readings in Biology	
BIOL 4503 Pathophysiology	
NOTE: Biology and Health Science Option majors must complete as part of his/her requirements:	
* CHEM 1115 General Chemistry I	
* CHEM 1215 General Chemistry II	
* MATH 1513 College Algebra	
* MATH 1613 College Trigonometry	
CMSC 1103 Microcomputer Applications	
	Credit Hours
CHEMISTRY MINOR REQUIREMENTS -----	20
CHEM 1215 General Chemistry II -----	5
CHEM 3114 Organic Chemistry I -----	4
CHEM 3015 Classical Chem Analysis -----	5
+Advanced Chemistry Electives -----	6
+Recommended Electives:	
CHEM 4114 Organic Chemistry II	
CHEM 4143 Biochemistry	
*Students who complete these courses as part of the Associate in Science in Agricultural Sciences degree requirements at NOC are not required to take them again at NWSU.	