

RANGE SCIENCE - BACHELOR OF SCIENCE IN AGRICULTURE

The following course work prepares you for study and management of rangelands through an integrated ecological approach with special emphasis on rangeland plants, livestock, wildlife, soils and watersheds. The course work is also well designed for those who want to continue study in graduate school. Any undergraduate student majoring in Range Science must earn a grade of C- or higher in Range Science (RGSC prefix) courses to satisfy degree requirements. Students earning a D or F in a Range Science (RGSC prefix) course will be expected to repeat that course until the student earns a grade of C- or higher.

Requirements

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300/3000 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

| Prefix | Title | Credits |
|--|---|-----------|
| General Education | | |
| <i>Area I: Communications</i> | | 10 |
| English Composition - Level 1 ¹ | | |
| English Composition - Level 2 ¹ | | |
| Oral Communication ¹ | | |
| ACOM 1130G | Effective Leadership and Communication in Agriculture | |
| or COMM 1115G Introduction to Communication | | |
| <i>Area II: Mathematics</i> ² | | |
| MATH 1220G | College Algebra | 3 |
| <i>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</i> | | |
| CHEM 1215G | General Chemistry I Lecture and Laboratory for STEM Majors | 4 |
| CHEM 1225G | General Chemistry II Lecture and Laboratory for STEM Majors | 4 |
| Select one from the following: | | 3 |
| ECON 1110G | Survey of Economics | |
| ECON 2110G | Macroeconomic Principles | |
| ECON 2120G | Principles of Microeconomics | |
| <i>Area V: Humanities</i> | | |
| PHIL 1145G | Philosophy, Law, and Ethics | 3 |
| or PHIL 2110G Introduction to Ethics | | |
| <i>Area VI: Creative and Fine Arts</i> ¹ | | 3 |
| <i>General Education Elective</i> | | |
| BIOL 2610G | Principles of Biology: Biodiversity, Ecology, and Evolution | 3 |
| Viewing A Wider World ³ | | 6 |
| Departmental/College Requirements | | |
| <i>Range Science Core</i> | | |
| RGSC 1110 | The Range Science Profession | 1 |
| RGSC 2110 | Introduction to Rangeland Management | 3 |
| RGSC 316 | Rangeland Plants | 3 |
| RGSC 317 | Rangeland Communities | 3 |
| RGSC 318 | Watershed Management | 3 |

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| RGSC 325 | Rangeland Restoration Ecology | 3 |
| RGSC 357 | Grass Taxonomy and Identification | 3 |
| RGSC 402 | Seminar | 1 |
| or RGSC 402 H Range Science Seminar | | |
| RGSC 440 | Rangeland Resource Ecology | 3 |
| RGSC 440 L | Rangeland Resource Ecology Lab | 1 |
| RGSC 452 | Vegetation Measurements for Rangeland Assessment | 4 |
| RGSC 460 | Rangeland and Natural Resource Planning and Management | 4 |
| Non-Departmental Requirements (in addition to Gen.Ed/VWW) | | |
| <i>Other Required Courses</i> | | |
| A ST 311 | Statistical Applications | 3 |
| ANSC 1170 | Introduction to Animal Metabolism | 3-4 |
| or CHEM 2115 Survey of Organic Chemistry and Laboratory | | |
| BIOL 2110G | Principles of Biology: Cellular and Molecular Biology | 3 |
| EPWS 314 | Plant Physiology | 3 |
| FWCE 2110 | Principles of Fish and Wildlife Management | 3 |
| Select one from the following: | | 4 |
| GEOG 381 Cartography and GIS | | |
| or FWCE 471 GIS for Natural Resource Scientists | | |
| A 300/400-level GIS Course | | |
| SOIL 2110 | Introduction to Soil Science | 3 |
| SOIL 2110L | Introduction to Soil Science Laboratory | 1 |
| SOIL 472 | Soil Morphology and Classification | 4 |
| <i>Natural Resource Management</i> | | |
| Choose two courses from the following: | | 6 |
| AEEC 3120V Natural Resource Economics | | |
| AEEC 3130V Water Resource Economics | | |
| AEEC 3280 Applied Production Economics | | |
| AEEC 4530 Case Studies in Food and Agribusiness Management | | |
| FWCE 1110G | Introduction to Natural Resources Management | |
| FWCE 2110 | Principles of Fish and Wildlife Management | |
| FWCE 437 | Wildlife Damage Management | |
| RGSC 302V | Forestry and Society | |
| <i>ANSC Elective</i> | | 3 |
| ANSC 1120 Introduction to Animal Science | | |
| or ANSC 1120H Introduction to Animal Science Honors | | |
| ANSC 304 | Feeds and Feeding | |
| ANSC 351V | Agricultural Animals of the World | |
| ANSC 422 | Animal Nutrition | |
| ANSC 426 | Beef Production: Cow-Calf Management | |
| ANSC 428 | Sheep and Wool Production | |
| ANSC 458 | Livestock Behavior, Welfare and Handling | |
| Second Language: (not required) | | |
| Electives, to bring the total credits to 120 ⁴ | | 12-13 |
| Total Credits | | 120 |

¹ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses

² MATH 1220G College Algebra is required for the degree but students may need to take any prerequisites needed to enter MATH 1220G first.

³ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses

⁴ Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.