

Ranching Systems Degree - Curriculum

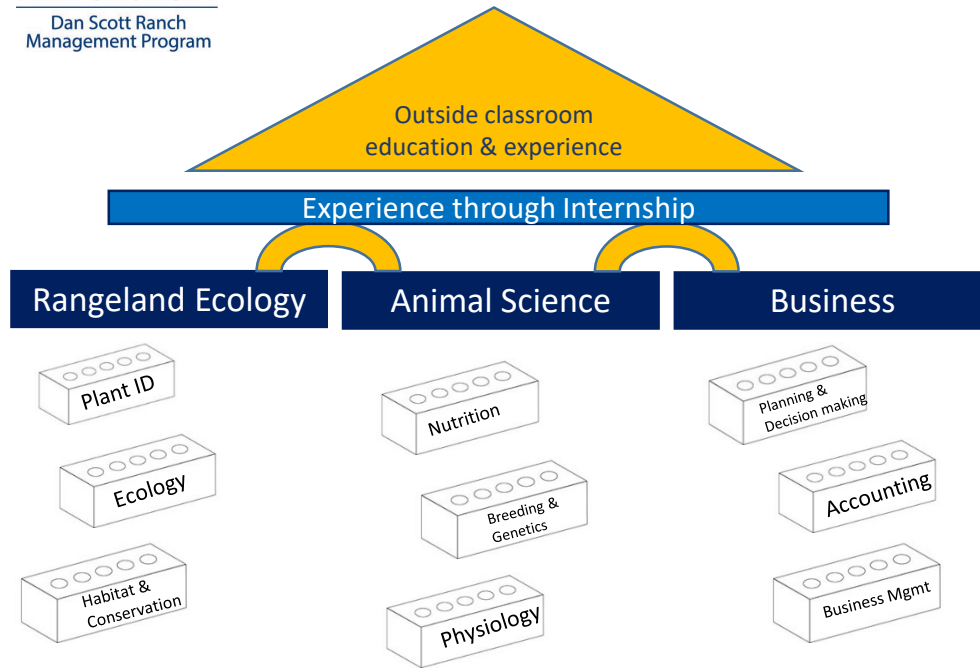


Figure Above: Individual classes are the bricks that lay a solid foundation in each of 3 disciplines; rangeland ecology, animal science and business. The work-learn internship ties the disciplines together through experience, and additional education and experience outside the classroom continue to build on the foundation of the Ranching Systems degree.

Ranching Systems Courses (under development)

RS 306 - Livestock Management and Human Resources in Ranching Systems
 RS 316 - Forage Management and Natural Resource Stewardship in Ranching Systems
 RS 406 – Finance and Planning in Ranching Systems
 RS 416 - Systems Thinking for Ranches

Internships

2 terms on the same ranch

- Summer 1 – livestock goals and forage management
- Summer 2 – Finances and ranch planning
 - Ranch management project
- Internship Structure
 - Paid positions – employee of the host ranch
 - Serve May – August
 - Specific learning objectives
 - Writing assignments and reports

Internship Learning Objectives:

1. Describe the host operation, including its structure, history, philosophies, and commodity production. (Knowledge)
2. Demonstrate work ethic and recognize how daily tasks such as spraying weeds, fixing fence, and animal husbandry are relevant to the operation and industry. (Knowledge, Application)
3. Recognize, extend, and apply knowledge of animal, rangeland, and economic learning acquired during course work to ranch operations and describe how internship enhanced understanding and use of discipline theories. (Knowledge, Comprehension and Understanding, Application)
4. Describe how the internship has provided understanding and skills not covered in course work and explain why these skill are important for ranch managers. (Comprehension, Application)
5. Identify a specific opportunity for improvement in the ranching operation and write a summary of how implementing changes in that area could enhance the operation's efficiency, natural resource stewardship or economic returns. Create a final synthesis describing whether the plan will be implemented and summarizing the reasons for the decision. (Analysis, Synthesis, Evaluation)

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<http://http://animalrange.montana.edu/danscottmanagementprogram.html>

| Course | Title |
|-------------------------------------|--|
| Freshman Year | |
| AGED 140US Or COMX 111US | Leadership Dev for Ag & Individual Employee <i>or</i> Public Communication |
| BIOB 170 | Princ of Biological Diversity |
| CHMY 121IN | Intro General Chemistry |
| NRSM 101 | Natural Resource Conservation |
| NRSM 102 | Montana Range Plants Lab |
| ANSC 100 | Intro to Animal Science |
| BIOB 160 | Princ of Living Systems |
| ECNS 101IS | Econ Way of Thinking |
| WRIT 101W | College Writing I |
| Sophomore Year | |
| ACTG 201 | Principles of Financial Acct |
| ANSC 202 | Livestock Feeding |
| NRSM 240 | Natural Resource Ecology |
| CHMY 123 | Intro to Organic & Biochem |
| ENSC 245IN | Soils |
| STAT 216Q | Intro to Statistics |
| ACTG 202 | Principles of Managerial Acct |
| ANSC 234 | Livestock Mgmt Beef 1 |
| ANSC 265 | Anatomy & Physiology of Dom Animals |
| ANSC 266 | Anatomy & Physiology of Dom Animals Laboratory |
| BGEN 242D | Intro to International Business |
| BMIS 211 | Speadsheet and Database Skills |

| Program Admission Required * | |
|------------------------------|--|
| Junior Year | |
| RS 398 | Livestock and Forage Mgmt in RS – Internship |
| BMGT 335 | Management & Organization |
| ANSC 320 | Animal Nutrition |
| ANSC 321 | Physiology of Reproduction |
| RS 306 | Livestock Mgmt in Ranching Systeme,s |
| IA or IH core | University required core course |
| ANSC 322 | Princ Animal Breeding & Genetics |
| ANSC 337 | Disease of Domestic Lvstk |
| AGBE 210 | Economics of Ag Business |
| BIOO 230 | Identification of Seed Plants |
| RS 316 | Forage Mgmt in RS |
| Senior Year | |
| RS 498 | Finances & Decision Making in RS – Internship |
| IA or IH core | University required core course |
| ANSC 434R | Beef Cattle Mgmt |
| AGSC 342 | Forages |
| RS 406 | Finances & Decision Making in RS |
| BMGT 406 | Negotiation/Dispute Resolution |
| NRSM 353 | Grazing Ecology and Mgmt |
| WILD 420 Or | Range & Wildlife Policy and Planning <i>or</i> |
| NRSM 430 | NRSM 430 Natural Resource Law |
| WILD 426 | Wildlife Habitat Mgmt |
| NRSM 455 Or | Riparian Ecology & Mgmt <i>or</i> |
| ENSC 272CS | Water Resources |
| RS 416 | Systems Thinking for Ranch Managers |

Credits by Discipline

| | |
|--------------------|------------|
| Econ / Bus | 27 |
| Animal Science | 28 |
| Rangeland Eco | 29 |
| Math / Biol / Chem | 19 |
| Ranching Systems | 7 |
| Electives / Core | 9 |
| Total | 119 |

* The Ranching Systems Degree at Montana State University is a limited enrollment program with the goal of providing the high-quality, individually tailored educational opportunities to prepare students to be tomorrow's ranch managers. Sophomore students who have a minimum of 40 credits (including currently enrolled classes) of required courses for the Ranching Systems Degree plan and have a current GPA of 3.0 or better are eligible to apply.

Questions?

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