NRM Curriculum of Study

MICROBIOLOGICAL SCIENCES

Graduate Program: **Natural Resources Management**
Specialty Area (Option): Biotic Resources Science
Participating Academic Unit: Microbiological Sciences
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Requirements

- **Background:**
  - A four-year degree in the natural sciences such as animal science, biochemistry, biology, chemistry, microbiology, or zoology.
  - Participating academic unit may require applicants to submit GRE scores. Check with the Veterinary and Microbiological Sciences department.
- **Coursework:** 30 semester units (minimum). Complete *Master's Degree Plan of Study and Supervisory Committee* form no later than the first week of second semester.
- **Oral Exam:** Student must be enrolled during the semester of the oral examination (usually the last semester.)
- **Additional:** Refer to the section titled *Degree Requirements Checklist* in these Guidelines (pages 5-6).

Required Units		Approved Courses/Disciplines*	Units	Approved Courses/Disciplines*	Units
Specialty Area	17 or more	ANSC 663 Physiology of Reproduction	4	MICR 675 Animal Virology	3
		ANSC 728 Advanced Reproductive Biology	3	MICR 680 Bacterial Physiology	3
		ANSC 730 Growth Biology	2	MICR 682 Bacterial Genetics and Phage	3
		MICR 645 Animal Cell Culture Techniques	3	NRM 653 Rangeland Resources Watershed Management	3
		MICR 652 Microbial Ecology	3	ZOO 658 Mammalogy	3
		MICR 653 Food Microbiology	2	ZOO 676 Wildlife Ecology and Management	3
		MICR 670 Basic Immunology	3	ZOO 682 Developmental Biology	3
		MICR 671 Immunology and Serology Laboratory	2		
Supporting Area: Physical/Earth Resources Science	3	GEOL 612 Geomorphology	3	SOIL 647 Microclimatology	3
		GEOL 614 Hydrogeology	3		
Supporting Area: Social Sciences	3	ECON 681 Natural Resource Economics	3	ECS 770 Environmental Law and Policy	3
		NRM 631 NEPA and Environmental Impact Assessment	3	HIST 634 History of Environmental Science	3
		NRM 632 Environmental Impact Statement	3	SOC 631 Environmental Sociology	3
Resource Analysis	3	ANSC 740 Data Analyses and Designs of Experiments	3	PLSC 751 Advanced Genetics	3
		RNG 765 Analysis of Ecosystems	3	STAT 660 Applied Survey Sampling	3
		ENT 742 Quantitative Biology	3	STAT 662 Introduction to Experimental Design	3
		PLSC 741 Cytogenetics	4		
Research *Select paper or thesis*	**2-4**	NRM 797 Master's Paper			
	6-10	NRM 798 Master's Thesis			
Seminar	**2**	NRM 690 Graduate Seminar (required course)			

***Approved courses from the various disciplines are listed on pages 27-28.**