

**COLLEGE OF AG, FOOD SYSTEMS & NATURAL RESOURCES**

**MINOR: MICROBIOLOGY**

**ACADEMIC YEAR: 2013-2014**

**REQUIRED CREDITS: 16**

**Required Courses – 5 Credits**

MICR 350/L	General Microbiology/Lab	3/2 cr
------------	--------------------------	--------

**Elective Courses – 11 Credits**

No more than 3 credits from MICR 490-499.

BIOC 487	Molecular Biology of Gene Expression	3 cr
MLS 435	Hematology	2 cr
MICR 379	Study Abroad	1-3 cr
MICR 445	Animal Cell Culture Techniques	2 cr
MICR 452	Microbial Ecology	3 cr
MICR 453	Food Microbiology	3 cr
MICR 460/L	Pathogenic Microbiology/Lab	3/2 cr
MICR 463	Clinical Parasitology	2 cr
MICR 470	Basic Immunology	3 cr
MICR 471	Immunology & Serology Lab	2 cr
MICR 472	Clinical Immunology	3 cr
MICR 474	Epidemiology (see SAFE)	3 cr
MICR 475	Animal Virology	3 cr
MICR 480	Bacterial Physiology	3 cr
MICR 482	Bacterial Genetics & Phage	3 cr
MICR 491	Seminar	1 cr
MICR 494	Individual Study	1-3 cr
MICR 496	Field Experience	1-3 cr
MICR 499	Special Topics	1-3 cr
PPTH 460	Fungal Biology	3 cr

**Minor Requirements and Notes:**

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a 2.50 minimum GPA for the minor with a grade of 'C' or better in the courses used to satisfy the minor requirements.