

# Microbiology Courses

---

## Courses

### **MICR 2141. Gen Microbiology Laboratory.**

General Microbiology Laboratory. Techniques and analyses used in the study of microorganisms. Prerequisites: MATH 1508; BIOL 1305/1107 and CHEM 1306/1106 MATH 1508 and CHEM 1306/1106 may be taken concurrently with MICR 2141. Course fee required.

**Department:** Microbiology

**1 Credit Hour**

**3 Total Contact Hours**

3 Lab Hours

0 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 1107 w/C or better AND BIOL 1305 w/C or better AND CHEM 1105 w/C or better AND CHEM 1305 w/C or better AND MATH 1310 w/C or better ) OR (MATH 1508 w/C or better)

**Corequisite(s):** MICR 2340

### **MICR 2330. Microorganisms and Disease.**

Microorganisms and Disease (3-0) A survey of microorganisms important to humans with emphasis on pathogens; laboratory demonstrations of diagnostic procedures for pathogenicity of and immune responses to the more common pathogens. A terminal course not to be used as a prerequisite for any other course. A course for non-majors, including those in the nursing program. Prerequisite: BIOL 1305-1107.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 1107 w/D or better AND BIOL 1305 w/D or better)

### **MICR 2340. General Microbiology.**

General Microbiology (3-3) Survey of microorganisms and their characteristics; aspects of biochemical cytology, physiology, and genetics; introduction to applied microbiology. Prerequisites: MATH 1508 and BIOL 1305/1107 and CHEM 1306/1106. MATH 1508 and CHEM 1306/1106 may be taken concurrently with MICR 2340.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 1107 w/C or better AND BIOL 1305 w/C or better ) AND (CHEM 1105 w/C or better AND CHEM 1305 w/C or better ) AND (MATH 1310 w/C or better ) OR (MATH 1508 w/C or better)

**Corequisite(s):** MICR 2141

### **MICR 3144. Pathogenic Microbiology Lab.**

Pathogenic Microbiology Laboratory. Diagnostic procedures for isolating and identifying pathogens. Prerequisites: MICR 2340/2141 or 2440. Course fee required.

**Department:** Microbiology

**1 Credit Hour**

**3 Total Contact Hours**

3 Lab Hours

0 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2141 w/C or better AND MICR 2340 w/C or better ) OR (MICR 2440 w/C or better)

**Corequisite(s):** MICR 3343

**MICR 3146. Microbial Physiology Lab.**

Microbial Physiology Laboratory. Techniques and analyses for studying physiological activities of microbial cells. Prerequisites: MICR 2340/2141 or 2440 and CHEM 2325/2125. Course fee required.

**Department:** Microbiology

**1 Credit Hour**

**3 Total Contact Hours**

3 Lab Hours

0 Lecture Hours

0 Other Hours

**Prerequisite(s):** (CHEM 2124 w/C or better AND CHEM 2324 w/C or better AND MICR 2141 w/C or better AND MICR 2340 w/C or better)

**Corequisite(s):** MICR 3345

**MICR 3150. Prokaryotic Mol Genetic Lab.**

Lab for molecular biology of prokaryotes. Transfer of genetic information, structure and organization of the prokaryotic genome, regulation of gene expression, and genetic engineering.

**Department:** Microbiology

**1 Credit Hour**

**3 Total Contact Hours**

3 Lab Hours

0 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 3320 w/C or better ) AND (MICR 2440 w/C or better ) AND (MICR 2141 w/C or better AND MICR 2340 w/C or better)

**Corequisite(s):** MICR 3349

**MICR 3343. Pathogenic Microbiology.**

Pathogenic Microbiology (3-3). Epidemiology, pathogenicity, and host response to disease-producing microorganisms. Prerequisites: MICR 2340/2141 or 2440.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2141 w/C or better AND MICR 2340 w/C or better ) OR (MICR 2440)

**Corequisite(s):** MICR 3144

**MICR 3345. Microbial Physiology.**

Microbial Physiology (3-3) Biochemical cytology, growth, nutrition, metabolism, and genetics of microorganisms. Prerequisites: MICR 2340/2141 or 2440 and CHEM 2325/2125.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2141 w/C or better AND MICR 2340 w/C or better ) OR (CHEM 2124 w/C or better AND CHEM 2324 w/C or better AND MICR 2340 w/C or better)

**Corequisite(s):** MICR 3146

**MICR 3349. Prokaryotic Molecular Genetic.**

Molecular biology of prokaryotes. Transfer of genetic information, structure and organization of the prokaryotic genome, regulation of gene expression, and genetic engineering.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 3320 w/C or better ) AND (MICR 2440 w/C or better ) AND (MICR 2141 w/C or better AND MICR 2340 w/C or better)

**Corequisite(s):** MICR 3150

**MICR 3449. Prokaryotic Molecular Genetics.**

Prokaryotic Molecular Genetics (3-3) Molecular biology of prokaryotes. Transfer of genetic information, structure and organization of the prokaryotic genome, regulation of gene expression, and genetic engineering. Prerequisites: BIOL 3320 or MICR 2440. Course fee required.

**Department:** Microbiology

**4 Credit Hours**

**6 Total Contact Hours**

3 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (BIOL 3320 w/C or better AND MICR 2340 w/C or better ) OR (MICR 2141 w/C or better ) OR (MICR 2440 w/C or better)

**MICR 4154. Immunology Laboratory.**

Immunology Laboratory. Laboratory techniques and analyses in immunology. Prerequisites: MICR 2340/2140 or 2440 and CHEM 2325/2125. Course fee required.

**Department:** Microbiology

**1 Credit Hour**

**3 Total Contact Hours**

3 Lab Hours

0 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2141 w/C or better AND MICR 2340 w/C or better ) OR (CHEM 2124 w/C or better AND CHEM 2324 w/C or better AND MICR 2440 w/C or better)

**Corequisite(s):** MICR 4353

**MICR 4329. Epidemiology.**

Epidemiology (3-0) Distribution and determinants of health-related states or events in specific populations and their applications to the control of health problems. Basic concepts and methodologies used in epidemiological research are also covered. MICR 3443 is recommended, and may be taken concurrently. Prerequisites: MICR 2440 and CHEM 1306-1408 each with a grade of "C" or better.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Classification Restrictions:**

Restricted to class of JR,SR

**Prerequisite(s):** (MICR 2440 w/C or better ) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better ) AND (CHEM 1106 w/C or better AND CHEM 1306 w/C or better)

**MICR 4351. General Virology.**

General Virology (3-0) Biochemistry and virus-host interactions of animal, bacterial, insect, and plant viruses. Prerequisites: MICR 2440, BIOL 3320, and MICR 4152. MICR 4152 may be taken concurrently with MICR 4351. MICR 3445 is also recommended.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2440 w/D or better ) OR (BIOL 3320 w/D or better AND MICR 3240 w/D or better ) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)

**MICR 4353. Immunology.**

Immunology (3-3) Antigens and antibodies, humoral and cellular immunity, transplantation, complement, diseases of the immune system. Prerequisites: MICR 2340/2141 or 2440 and CHEM 2325/2125.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 2141 w/C or better AND MICR 2340 w/C or better ) OR (CHEM 2124 w/C or better AND CHEM 2324 w/C or better AND MICR 2440 w/C or better)

**Corequisite(s):** MICR 4154

**MICR 4355. Medical Mycology.**

Medical Mycology (3-0) A study of the fungi of medical importance. Prerequisites: MICR 2440.

**Department:** Microbiology

**3 Credit Hours**

**3 Total Contact Hours**

0 Lab Hours

3 Lecture Hours

0 Other Hours

**Prerequisite(s):** (MICR 1241 w/D or better AND MICR 3240 w/D or better ) OR (MICR 2440 w/D or better ) OR (MICR 2141 w/C or better AND MICR 2340 w/C or better)