

## ADVANCED SCIENCE REQUIREMENT

The following courses will meet the Advanced Science requirement of the Biochemistry Degree program:

### Animal Science:

- 3212 - 5 credits **FALL** - Principles of Animal Nutrition
- 3254 - 5 credits **WINTER** - Physiology of Domestic Animals
- 4314 - 3 credits **WINTER** - Physiology of Reproduction
- 4312 - 3 credits **FALL** - Monogastric Nutrition
- 4332 - 3 credits **WINTER** - Ruminant Nutrition

### Biochemistry:

- 4374 - 3 credits **WINTER** - Molecular Biology Laboratory (WI)
- 4376 - 3 credits **FALL** - Computer Assisted Sequence Analysis and Molecular Modeling

### Biological Science:

- 2300 - 4 credits **BOTH** - Cell Biology
- 3750 - 4 credits **WINTER** - Basic Microbiology
- 3780 - 2 credits **FALL** - Genetics Laboratory
- 3700 - 5 credits **BOTH** - Animal Physiology
- 4600 - 3 credits **BOTH** - Evolution
- 4300 - 3 credits **WINTER** - Analysis of Macromolecules
- 4328 - 3 credits **FALL** - Introductory Radiation Biology
- 4972 - 3 credits **BOTH** - Developmental Biology
- 4990 - 5 credits **WINTER** - Vertebrate Hist. and Micro. Anatomy
- 4500 - 3 credits **FALL** - Neurobiology
- 4976 - 3 credits **BOTH** - Molecular Biology

### Chemical Engineering:

- 4315 - 3 credits **WINTER** - Introduction to Biochemical Engineering

### Food Science:

- 2172 - 3 credits **WINTER** - Elements of Food Microbiology

### Chemistry:

- 2400 - 3 credits **FALL** - Fundamentals of Inorganic Chemistry
- 2140 - 2 credits **WINTER** - Organic Chemistry Laboratory
- 3330 - 3 credits **WINTER** - Physical Chemistry
- 3340 - 3 credits **WINTER** - Physical Chemistry Laboratory
- 4200 - 3 credits **FALL** - Instrumental Methods of Analysis
- 4170 - 3 credits **WINTER** - Medicinal Chemistry
- 4280 - 3 credits **WINTER** - Environmental Chemistry
- 4290 - 3 credits **FALL** - Topics in Environmental-Toxicology Chemistry
- 4600 - 3 credits **WINTER** - Introduction to Radiochemistry

### Microbiology (Med):

- 3200 - 4 credits **BOTH** - Fundamentals of Medical and Public Health Microbiology
- 4300 - 3 credits **FALL** - Microbiology - Bacteriology
- 4303 - 3 credits **FALL** - Medical Virology
- 4304 - 3 credits **FALL** - Immunology

### Nutritional Sciences:

- 2340 - 3 credits **WINTER** - Human Nutrition I
- 4340 - 3 credits **FALL** - Human Nutrition II

### Medical Pharmacology & Physiology:

- 3204 - 3 credits **BOTH** - Elements of Pharmacology
- 3202 - 5 credits **BOTH** - Elements of Physiology

### Plant Science:

- 4315 - 3 credits **WINTER** - Crop Physiology
- 4320 - 3 credits **WINTER** - Plant Physiology

NOTE: This list is not all inclusive. Other courses can be used to satisfy the Advanced Science requirement with permission of the Director of Undergraduate Studies. The semesters indicated are the current practice and subject to change without notice.