ADVANCED SCIENCE REQUIREMENT

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

Animal Science (AN_SCI):

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

Biochemistry (BIOCHM):

4460 - 3 credits **FALL** - Cancer Biology
4510 - 3 credits **FALL** - Single Molecule Biophysics
4376 - 3 credits **FALL** - Comptr Assist Seq Analysis
4950/4996H **BOTH** - Undergrad Research in Biochm
(up to **3** credits can be used for Advanced Science)

Biological Engineering (BIOL_EN):

2180 - 3 credits **FALL** - Engineering Analysis of Bioprocesses
4315 - 3 credits **SPRING** - Intro to Bioprocess Engineering

Biological Science (BIO_SC):

2300 - 4 credits **BOTH** - Cell Biology
3780 - 2 credits **FALL** - Genetics Laboratory
4328 - 3 credits **FALL** - Introductory Radiation Biology
4982 - 3 credits **FALL** - Human Inherited Diseases
4990 - 5 credits **SPRING** - Vertebrate Hist. and Micro. Anatomy
3700 - 5 credits **BOTH** - Animal Physiology
3800 - 3 credits **FALL** - Developmental Biology
4500 - 3 credits **FALL** - Neurobiology
4976 - 3 credits **BOTH** - Molecular Biology

Chemistry (CHEM):

2400 - 3 credits **FALL** - Fundamentals of Inorganic Chemistry
3200 - 4 credits **BOTH** - Quantitative Instrumental Analysis
3340 - 3 credits **SPRING** - Physical Chemistry Laboratory
4200 - 3 credits **FALL** - Instrumental Methods of Analysis
2140 - 2 credits **SPRING** - Organic Chemistry Laboratory
3330 - 3 credits **SPRING** - Physical Chemistry II
4170 - 3 credits **SPRING** - Medicinal Chemistry
4280 - 3 credits **SPRING** - Environmental Chemistry

Food Science (F_S):

2172 - 3 credits **SPRING** - Elements of Food Microbiology
4310 - 4 credits **FALL** - Food Chemistry and Analysis

Mathematics (MATH) **-** Any course beyond Math 1700

Medical Pharmacology & Physiology (MPP):

3202 - 5 credits **BOTH** - Elements of Physiology
4204 - 5 credits **BOTH** - Elements of Pharmacology

Microbiology (MICROB):

3200 - 4 credits **BOTH** - Medical Microbiology and Immunology
4304 - 3 credits **FALL** - Immunology

Nutritional Sciences (NUTR_S):

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

Pathology & Anatomical Science (PTH_AS)

2201 - 3 credits **BOTH** - Human Anatomy Lecture
4220 - 2 credits **SPRING** - Forensic Path and Death Investigation
2203- 2 credits **BOTH** - Human Anatomy Lab
4222- 7 credits **SUMMER** - Gross Human Anatomy

Plant Science (PLNT_S):

4313 - 3 credits **SPRING** - Soil Fertility & Plant Nutrition
4320 - 3 credits **FALL** - Plant Physiology
4315 - 3 credits **SPRING** - Crop Physiology
4500 - 4 credits **FALL** - Biology & Pathogenesis of Plant-Associated Microbes

Psychology (PSYCH):

4210 - 3 credits **BOTH** - Physiological Psychology
4570 - 3 credits **SPRING** - Pediatric Neuropsychology

Statistics (STAT):

2500 - 3 credits **BOTH** - Introduction to Probability and Statistics I

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 Advising. The semesters indicated are the current practice and subject to change without notice.