

# Nutritional Sciences

## University of Florida -College of Agricultural and Life Sciences

Nutritional Sciences graduates have entered medical, dental, pharmacy, optometry, veterinary, physician assistant and other professional programs. The curriculum emphasizes the basic sciences and includes prerequisite courses for most professional schools. Courses in nutritional sciences emphasize the role of nutrition in growth, development, health, disease risk reduction and disease treatment. The curriculum is excellent preparation for graduate study in nutrition, health and other science fields.

To remain on track, first year students must complete the appropriate critical-tracking courses, which appear in bold, with a 2.5 GPA or better. Students are required to complete a Quest 1 course in semester 1 or 2.

| Fall                                                                                            | Credits      | Spring                                                                                       | Credits      |
|-------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------|--------------|
| <b>CHM 2045 &amp; 2045L General Chemistry I (3) and Laboratory (1) (GE-P)</b>                   | <b>4</b>     | <b>CHM 2046 &amp; 2046L General Chemistry II (3) and Laboratory (1) (GE-P)</b>               | <b>4</b>     |
| <b>MAC 2311 Analytic Geometry &amp; Calculus I (GE-M)</b>                                       | <b>4</b>     | Quest 1 (GE-H)                                                                               | 3            |
| Composition (GE-C) (WR)                                                                         | 3            | Economics: ECO 2013, ECO 2023, or AEB 2014                                                   | 3-4          |
| Humanities w/Diversity Designation (GE-H/D)                                                     | 3            | Elective                                                                                     | 4            |
| Elective                                                                                        | 1            |                                                                                              |              |
| <b>Total</b>                                                                                    | <b>15</b>    | <b>Total</b>                                                                                 | <b>14-15</b> |
| Fall                                                                                            | Credits      | Spring                                                                                       | Credits      |
| <b>BSC 2010 &amp; 2010L Integrated Principles of Biology 1 (3) and Laboratory (1) (GE-B)</b>    | <b>4</b>     | <b>BSC 2011 &amp; 2011L Integrated Principles of Biology 2 (3) and Laboratory (1) (GE-B)</b> | <b>4</b>     |
| + CHM2210 Organic Chemistry I                                                                   | 3            | CHM 2211 Organic Chemistry II (3) and CHM2211 Lab (2)                                        | 5            |
| STA 2023 Introduction to Statistics (GE-M)                                                      | 3            | HUN2201 Fundamentals of Human Nutrition                                                      | 3            |
| Elective                                                                                        | 3            | Quest 2 w / International Designation (GE-S/N)                                               | 3            |
| Composition (GE-C) (WR)                                                                         | 3            |                                                                                              |              |
| <b>Total</b>                                                                                    | <b>16</b>    | <b>Total</b>                                                                                 | <b>15</b>    |
| Fall                                                                                            | Credits      | Spring                                                                                       | Credits      |
| <b>PHY 2053 &amp; PHY 2053L Physics 1 (4) and Lab (1)</b>                                       | <b>5</b>     | <b>PHY 2054 &amp; PHY 2054L Physics 2 (4) and Lab (1)</b>                                    | <b>5</b>     |
| BCH 3025 Fundamentals of Biochemistry or BCH 4024 Biochemistry and Molecular Biology            | 4            | HUN3403 Nutrition thru the Life Cycle                                                        | 2            |
| FOS3042 Intro to Food Science                                                                   | 3            | Genetics: AGR 3303 (3) or PCB 3063 (4)                                                       | 3-4          |
| AEC3030C Effective Oral Communication or SPC2608 Intro to Public Speaking                       | 3            | Elective                                                                                     | 5            |
| <b>Total</b>                                                                                    | <b>15</b>    | <b>Total</b>                                                                                 | <b>15-16</b> |
| Fall                                                                                            | Credits      | Spring                                                                                       | Credits      |
| HUN4445 Nutrition and Disease I                                                                 | 2            | HUN4446 Nutrition and Disease II                                                             | 3            |
| ** Approved Science Course                                                                      | 3-4          | HUN 4221 Nutrition and Metabolism                                                            | 3            |
| ** Approved Science Lab                                                                         | 1-2          | MCB3020 and MCB3020L Biology of Microorganisms and Lab                                       | 4            |
| PCB4723C Phys./Molecular Biology of Animals (5) <u>OR</u> APK2105C Applied Human Physiology (4) | 4-5          | Advanced Communication Writing: AEC3033C, ENC2210 or ENC3254 (WR)                            | 3            |
| Elective                                                                                        | 4            | Elective                                                                                     | 3            |
| <b>Total</b>                                                                                    | <b>14-17</b> | <b>Total</b>                                                                                 | <b>16</b>    |

**Minimum credits required for graduation: 120 credits**

+ A grade of C or better must be attained within two attempts (including withdrawals) in CHM2210.

\*\*Please refer to other side for approved science courses and labs

# Nutritional Sciences

The Nutritional Sciences curriculum is designed for pre-professional students who plan to enter medical, dental, pharmacy, optometry or other health-related professional schools or graduate school. The curriculum develops a strong, broad background in biology, chemistry, and math. Its requirements closely match the prerequisites for most professional schools, and it provides a background in nutrition that is an asset for any health profession. It also provides an excellent foundation for graduate study in nutrition, health, and other science fields. Graduation requires 120 credits, and ALL courses listed below are required. Students are responsible for completing necessary prerequisites before enrolling in required courses; prerequisite information can be found in Undergraduate Catalog course descriptions, online.

## CURRICULUM

### FSHN Courses

|         |                                              |
|---------|----------------------------------------------|
| HUN2201 | Fundamentals of Human Nutrition (3) F/S/SS-B |
| HUN3403 | Nutrition thru the Life Cycle (2) F/S/SS-A   |
| HUN4221 | Nutrition and Metabolism (3) F/S             |
| HUN4445 | Nutrition and Disease I (2) F/S              |
| HUN4446 | Nutrition and Disease II (3) F/S             |
| FOS3042 | Intro to Food Science (3) F/S/SS-A           |

### Biology Courses

|          |                                  |
|----------|----------------------------------|
| BSC2010  | Principles of Biology I (3)      |
| BSC2010L | Principles of Biology Lab (1)    |
| BSC2011  | Principles of Biology II (3)     |
| BSC2011L | Principles of Biology II Lab (1) |

### Chemistry Courses

|          |                              |
|----------|------------------------------|
| CHM2045  | General Chemistry (3)        |
| CHM2045L | General Chemistry Lab (1)    |
| CHM2046  | General Chemistry II (3)     |
| CHM2046L | General Chemistry II Lab (1) |
| +CHM2210 | Organic Chemistry I (3)      |
| CHM2211  | Organic Chemistry II (3)     |
| CHM2211L | Organic Chemistry II Lab (2) |
| BCH4024  | Biochem./Molecular Bio (4)   |
| OR       |                              |
| BCH3025  | Fund. Biochemistry-web (4)   |

+ C or better in two attempts including withdrawals

### Advanced Communication (CALs Requirement)

|          |                                 |
|----------|---------------------------------|
| AEC3030C | Oral Communications (3)         |
| SPC2608  | OR Intro to Public Speaking (3) |
| AEC3033C | Advanced Comm. Writing (3)      |
| OR       |                                 |
| ENC2210  | Technical Writing (3)           |
| OR       |                                 |
| ENC3254  | Professional Communications (3) |

### Economics (choose one)

|         |                                |
|---------|--------------------------------|
| AEB2014 | Economic Issues Food & You (3) |
| ECO2013 | Macroeconomics (4)             |
| ECO2023 | Microeconomics (4)             |

### Math and Statistics

|         |                                    |
|---------|------------------------------------|
| STA2023 | Intro to Statistics (3)            |
| MAC2311 | Calculus & Analytical Geometry (4) |

### Other Science Courses

|          |                                   |
|----------|-----------------------------------|
| MCB3020  | Biology of Microorganisms (3)     |
| MCB3020L | Biology of Microorganisms Lab (1) |
| PHY2053  | Physics I (4)                     |
| PHY2053L | Physics I Lab (1)                 |
| PHY2054  | Physics II (4)                    |
| PHY2054L | Physics II Lab (1)                |
| AGR3303  | Genetics (3)                      |
| PCB3063  | Genetics (4)                      |
| MCB4304  | Genetics of Microorganisms (3)    |
| PCB4522  | Molecular Genetics (3)            |
| PCB4723C | Phys/Molec Biology of Animals (5) |
| APK2105C | Applied Human Physiology (4)      |

### Upper Level Science Course w/Lab

|           |                                           |
|-----------|-------------------------------------------|
| ZOO3713C  | Functional Vertebrate Anatomy (4)         |
| ANS3006/L | Intro to Animal Sciences & Lab (3/1)      |
| BOT3503/L | Physiology & Molecular Biology of Plants  |
| BSC4434C  | Bioinformatics                            |
| CHM3120/L | Analytical Chemistry & Lab (3/1)          |
| FAS4202C  | Biology of Fishes (4)                     |
| FOS4321C  | Food Analysis (4) F                       |
| FOS4222/L | Food Microbiology & Lab (3/2) S           |
| FOS4311/L | Food Chemistry & Lab (3/1) S              |
| ZOO3603C  | Evolution Developmental Biology (4)       |
| HUN4813C  | Lab Techniques in Molecular Nutrition (3) |

### OR two from below (one lab permitted)

|                                        |                                                        |
|----------------------------------------|--------------------------------------------------------|
| ANS3440 Animal Nutrition               | CHM4300L Lab in Biochemistry and Molecular Biology (2) |
| APK3163 Sports Nutrition (3)           |                                                        |
| CHM4034 Advance Biochemistry (4)       |                                                        |
| CHM4304 Chem. Asp. Cell Control (3)    |                                                        |
| MCB4203 Bact/Viral Pathogens (3)       |                                                        |
| MCB4503 Virology                       | PSY3213L Lab Methods in Psych. (3)                     |
| MCB4422 Probiotics (3) (NEW)           |                                                        |
| PCB3134 Eukaryotic Cell Structure (3)  |                                                        |
| PCB4233 Immunology (3)                 | FOS4936 Grain Technology (3)                           |
| PCB4553 Population Genetics (4)        |                                                        |
| PSB3002 Physiological Psych. (3)       |                                                        |
| PSB3340 Behavioral Neuroscience (3)    | FOS4936 Fats & Oils (3)                                |
| ZOO4232 Human Parasitology (3)         |                                                        |
| FOS49318 Flavor Chemistry (3) F - Even |                                                        |

Key to when classes are offered: F=fall, S=spring, SS= summer A, B, C  
Subject to change, please contact advisor

## TRANSFER ENTRANCE REQUIREMENTS

Transfer admission requires a minimum GPA of 3.0 and C grades in all prerequisite courses (in **boldface**), and an overall minimum GPA of 2.00.

## CAREER OPPORTUNITIES

Graduates from this curriculum have entered medical, dental, pharmacy, osteopathic, podiatry, optometry, chiropractic, physician assistant, veterinary and other professional programs. Research oriented students have entered graduate programs in nutrition or biochemistry. Other career opportunities include pharmaceutical sales, extension nutrition education, nutrition policy development, and employment with government agencies. Students should contact the Office of Admissions of the schools in which they are interested for information on the average GPA, MCAT, DAT or other test scores and specific admission dates and policies. (8.20)