



SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

INDIANA UNIVERSITY

Nutrition Science (AHSNSBS)

B.S. in Applied Health Science degree (124 minimum credits)

2.5 GPA req. for admission, 2.0 GPA req. for graduation

No Pass/Fail except for free electives

Effective for students matriculating summer 2011

Department of Applied Health Science – HPER 116 – (812) 855-3627

Students must complete all General Education requirements and all Major requirements. Any acceptable General Education course which is also required in the major may apply to (double-count in) both required areas. Courses common to the areas of World Cultures, Arts and Humanities, and Social and Historical Studies may also double count. However, credit for such courses counts only once toward the total required credits for a degree.

General Education (20 – 39 credits)

(General Education Bulletin at: www.indiana.edu/~bulletin/iub)

English Composition (0 to 3 credits, C- minimum required)

Complete one of the following options:

- ___ 3 CMLT-C 110 Writing the World
- ___ 3 ENG-W 131 Elementary Composition
- ___ 3 ENG-W 170 Projects in Reading and Writing
- ___ 0 ENG-W 131 EX Elementary Composition Exemption

Mathematical Modeling (3 to 4 credits)

Complete one of the following options:

- ___ 3 MATH-A 118 Finite Mathematics for the Soc and Behavior Sci
- ___ 4 MATH-D 116 **AND** MATH-D 117 Intro to Finite Mathematics I-II
- ___ 3 MATH-J 113 Introduction to Calculus with Applications
- ___ 3 MATH-M 118 Finite Mathematics
- ___ 3 MATH-M 119 Brief Survey of Calculus I
- ___ 4 MATH-M 211 Calculus I
- ___ 4 MATH-M 213 Accelerated Calculus
- ___ 3 MATH-S 118 Honors Finite Mathematics
- ___ 3 MATH-V 118 Finite and Consumer Mathematics:
- ___ 3 MATH-V 118 Finite Math for Social and Biological Sciences

Natural and Mathematical Sciences (5 credits)

Complete 5 credits from the list of approved N&M courses in the IUB General Education Bulletin. At least one course must be a natural science (as indicated by an asterisk in the GENED bulletin).

Arts and Humanities (6 credits)

Complete 6 credits from the list of approved A&H courses in the IUB General Education Bulletin.

Social and Historical Studies (6 credits)

Complete 6 credits from the list of approved S&H courses in the IUB General Education Bulletin.

World Languages and Cultures (0 to 14 credits)

Choose one of the following three options:

Complete 6 credits of world culture courses from the list of approved WC courses in the IUB General Education Bulletin.

OR

Achieve competency in a single foreign language equal to successful completion of the four semester sequence in a world language.

OR

Complete a 6-credit International experience in an approved study abroad. A list of approved course choices may be found in the IUB General Education Bulletin.

Major (91 credits)

Nutrition Core: (50 cr., C- min req each course)

Complete each of the following courses:

- ___ 3 HPER-N 120 Introduction to Foods *
- ___ 3 HPER-N 231 Human Nutrition (P: CHEM C101 & bio) **N&M**
- ___ 3 HPER-N 320 Food Chem **(P: HPER-N 120, CHEM-C 117 R:C341/R340)
- ___ 3 HPER-N 336 Community Nutrition * (P: HPER-N 231)
 - or HPER-N 317 Nutritional Epidemiology
- ___ 3 HPER-N 430 Adv Nutrition I * (P: HPER-N 231; CHEM-C 341 or R340)
- ___ 3 HPER-N 431 Med Nutr Thera ** (P: N 231, ANAT-A 215, PHSL-P 215)
- ___ 3 HPER-N 432 Adv Nutrition II ** (P: HPER-N 430)
- ___ 3 HPER-N 440 Research in Nutrition/Dietetics
 - or HPER-H 494 Research and Eval. Methods in Hlth & Safety
- ___ 5 CHEM-C 117 Prin of Chem & Biochem I (C 103 may be needed) **N&M**
- ___ 3 CHEM-C 341 Organic Chemistry Lectures 1 (P:CHEM-C 117)
- ___ 3 CHEM-C 342 Organic Chemistry Lectures 2 (P:CHEM-C 341)
- ___ 2 CHEM-C 343 Org Chem Lab 1 (P:CHEM-C 341; concurrent w/C 342)
- ___ 5 CHEM-N 330 Intermediate Inorganic Chem (P: C 341)
 - or CHEM-C 118 Prin of Chem and Biochem II (P:CHEM-C 117)
- ___ 2 CLAS-C 209 Medical Terms from Greek and Latin
- ___ 3 MATH-M 119 Brief Survey of Calculus 1 **N&M OR**
 - MATH-M 211 Calculus I (4cr.) **N&M**
- ___ 3 MATH/PSY-K 300 or K 310 Statistical Techniques

Specialization Courses (19 cr., C- min req each course)

Complete 19 credits from the following courses:

- ___ 3 BIOL-L 111 Intro to Biology: Evolution & Diversity # **N&M**
- ___ 3 BIOL-L 112 Intro to Biology: Biol Mchnsms # (P: hgh schl or coll chem) **N&M**
- ___ 3 BIOL-L 113 Biology Laboratory #(P: or C: BIOL-L 112 R: BIOL-L 111)
- ___ 3 BIOL-M 250 Microbiology * (P: 2 sem of college chem R: BIOL-L 211)
 - or BIOL-M 200 Microorg in Nature & Disease **
- ___ 2 BIOL-M 255 Microbiology Laboratory (P: corequisite BIOL-M 250)
 - or ___ 1 BIOL-M 215 Microorg Lab * (R:HS chem & bio; BIOL-M 200 concurrent)
- ___ 3 HPER-C 366 Community Health *
- ___ 3 HPER-N 325 Food Chemistry Laboratory ** (concurrent w/ N 320)
- ___ 3 HPER-N 331 Life Cycle Nutrition ** (R:HPER-N 220 or N 231)
- ___ 3 HPER-N 336 Community Nutrition (if not taken above)
- ___ 3 HPER-N 317 Nutritional Epidemiology (if not taken above)
- ___ 3 HPER-N 480 Mechanisms of Nutrient Action * (if not taken below)
- ___ 5 PHYS-P 201 Gen Physics I #(P:Collg algeb & trig. or HS equiv.) **N&M**
- ___ 5 PHYS-P 202 General Physics II #(P:PHYS-P 201) **N&M**

Biological Science Specialization(16 cr.)

Complete each of the following courses:

- ___ 5 ANAT-A 215 Basic Human Anatomy **N&M**

Requirements continue on the next page.

___ 3 BIOL-L 330 Biol of the Cell ** (P: college BIOL & CHEM)
 or HPER-N 480 Mechanisms of Nutrient Action in the Body
 or BIOL-L 312 Cell Biology (P: BIOL- 211)

___ 5 PHSL-P 215 Basic Human Physiology **N&M**

Complete one of the following courses:

___ 3 BIOL-L 211 Molecular Biology (P:BIOL-L 112)
 or BIOL-L 321 Immunology * (P:BIOL-L 211;CHEM-C 101 or C 117 ;R: L 312)
 or BIOL-L 331 Introduction to Human Genetics (P: course in genetics)
 or BIOL-M 350 Microbial Phsl & Biochem (P:BIOL-L112, CHEM-C 341)
 or CHEM-C 483 Biol Chemistry * (P: CHEM-C 342 or S 342 or R 340.
 R: both C 342 and N 330 strongly recommended)

Writing and Communication (6 cr.)

Complete each of the following courses:

___ 3 ENG-W 231 Professional Writing Skills
 ___ 3 CMCL-C 121 Public Speaking **A&H**
 or CMCL-C 122 Intrapersonal Communication **S&H**

= Pre Med/Dent requirements
 * = Fall only ** = Spring only

Visit the AHS website at www.indiana.edu/~aphealth

GENERAL EDUCATION 20-39
 MAJOR 91
COMPLETE A MINIMUM OF 124 CREDITS FOR THIS DEGREE.

**SUGGESTED COURSE SEQUENCE FOR NUTRITION SCIENCE
 (NOTE: N&M COURSES COVERED BY COURSE REQUIREMENTS)**

FRESHMAN YEAR

Fall Semester

ENG-W 131 (3)
 CHEM-C 117/MATH-M 119 (3-5)
 A&H/WLC elec (3)
 S&H elec. or N120 (3)
 Elec (maybe PSY) (1-3)

Spring Semester

CMCL-C 121/122 (3)
 CHEM-C117or math (3)
 HPER-N231 (3)
 A&H/WLC elec (3)
 BIOL-L 112 (3)
 Elec (1)

SOPHOMORE YEAR

Fall Semester

HPER-N 120 or S&H elec (3)
 CHEM-C 341 (3)
 BIOL-L 113 (3)
 ENG-W 231 (3)
 A&H/WLC elec (3)

Spring Semester

CHEM-C 342 (3)
 BIOL-L211 or 111 (3)
 A&H/WLC elec (3)
 CLAS-C 209 (2)
 S&H elec (3)

JUNIOR YEAR

Fall Semester

CHEM-C 343 (2)
 PHYS-P 201 (5)
 PSY-K 300 (3)
 HPER-N 336 (3)
 Elec (3)

Spring Semester

HPER-N320 (3)
 PHYS-P 202 (5)
 CHEM-N 330. (5)
 Elec or Spec. Course (3)

SENIOR YEAR

Fall Semester

HPER-N 430 (3)
 HPER-N 440/H494 (3)
 CHEM-C 483 (3)
 ANAT-A 215 (5)
 Elec (2)

Spring Semester

HPER-N 432 (3)
 HPER-N 431 (3)
 PHSL-P 215 (5)
 BIOL-L 330 (3)
 Elec (2)

Nutrition Science

About the Major: Nutrition as a Stepping Stone to Health Care or Public Health

Nutrition science integrates nutrition and the physical and life sciences, such as chemistry, biology, anatomy, and physiology, to promote healthy lifestyles. Students often choose this major for

- Pre-medical
- Pre-dental
- Pre-physician's assistant
- Pre-optometry
- Pre-chiropractic
- Pre-pharmacy

Also, this major can lead to a career in the food industry, research, or public health.

Opportunities in the Program

Students can minor in public health, chemistry, biology or medical science. They can join the student-run health organization Eta Sigma Gamma and participate in a number of student medical or dental organizations available on campus.

What You Can Do

Nutrition science majors

- work in medical science laboratories
- study for advanced degrees in science, medicine or public health
- plan nutrition initiatives for communities, states, or federal agencies
- do food research and communication

Where You Can Go

- agribusiness
- food industry
- insurance
- hospital labs
- government
- non-profit agencies
- pharmaceutical sales

What You Will Earn

Since most students with this major go on to advanced health care fields, it is not possible to provide a specific salary figure. Here are some sample salaries: physician assistant \$75k, dentist \$129k, general practice physician \$137k, pharmaceutical sales \$55k.