

**College of Agriculture and Life Sciences**  
**Bachelor of Science: Human Nutrition, Foods and Exercise**  
**MAJOR: Exercise and Health Sciences (EAHS)**  
**Date of entry under the UG Catalog year 2024-2025**

<b>Pathways General Education</b>		<b>44 Credits</b>
<b>Concept 1: Discourse</b> 9 credits		
1f: Foundational Discourse: ENGL 1105-1106 First Year Writing or other approved sequence		3__ 3__
1a: Advanced / Applied Discourse: COMM 2004 <sup>1</sup> Public Speaking or ALCE 3634 Communicating in Agriculture & Life Science		3__
<b>Concept 2: Critical Thinking in the Humanities</b> 6 credits		
(select from timetable)		3__
(select from timetable)		3__
<b>Concept 3: Reasoning in the Social Sciences</b> 6 credits		
PSYC 1004 Introductory Psychology		3__
(select from timetable)		3__
<b>Concept 4: Reasoning in the Natural Sciences</b> 8 credits		
◆CHEM 1035, 1045 <sup>2,3</sup> General Chemistry Lecture and Lab		3__ 1__
◆CHEM 1036, 1046 <sup>2,3</sup> General Chemistry Lecture and Lab		3__ 1__
<b>Concept 5: Quantitative and Computational Thinking</b> 9 credits		
5f: Foundational: MATH 1025 <sup>3</sup> Elementary Calculus		3__
5f or 5a: Foundational or Applied (select from timetable)		3__
5a: Applied: STAT 3615 Biological Statistics (Pre: MATH 1025 or equivalent <sup>3</sup> )		3__
<b>Concept 6: Critique and Practice in Arts and Design</b> 6 credits		
6a: Critique and Practice in the Arts (select from timetable)		3__
6d: Critique and Practice in Design (select from timetable)		3__
<b>Concept 7: Critical Analysis of Identity and Equity in the United States</b>		
(select course that meets Concept 7 <b>and</b> another Concept. If course meets only Concept 7, Pathways credit reaches 47)		

<b>◆ Department of Human Nutrition, Foods and Exercise Common Degree Core</b>		<b>39 Credits</b>
HNFE 1114*	Orientation to HNFE	1__
HNFE 1004 <sup>2</sup>	Foods, Nutrition and Exercise	3__
BIOL 1105,1115 <sup>3</sup>	Principles of Biology, Principles of Biology Lab	3__ 1__
BIOL 1106,1116 <sup>3</sup>	Principles of Biology, Principles of Biology Lab	3__ 1__
HNFE 2014	Nutrition Across the Life Span (Pre: (HNFE 1004, CHEM 1035) or CHEM 1055 or ISE 1106)	3__
HNFE 2484	Evidence-Based Practice in Health Science (Pre: HNFE 1004)	1__
BMSP 2135	Human Anatomy & Physiology (Pre: (BIOL 1105 or BIOL 1106)	3__
BMSP 2136	Human Anatomy & Physiology (Pre: BMSP 2135)	3__
HNFE 2804	Exercise and Health (Pre: HNFE 1004, BMSP 2135)	3__
CHEM 2514 <sup>2,4</sup> or 2535 <sup>2,4</sup>	Survey of Organic Chemistry or Organic Chemistry (Pre: One year General Chemistry)	3__
BCHM 2024 <sup>3</sup>	Concepts of Biochemistry (Pre: CHEM 2514 or 2535)	3__
HNFE 3034	Methods of Human Health Assessment (Pre: HNFE 2014, BMSP 2136)	2__
HNFE 4025	Metabolic Nutrition - Macronutrients (Pre: (HNFE 2014, BMSP 2136, BCHM 2024)	3__
HNFE 4026 or 4027	Metabolic Nutrition - Micronutrients or Exercise Metabolism & Disease (Pre: HNFE 4025)	3__

## EXERCISE AND HEALTH SCIENCES (EAHS) MAJOR COURSE REQUIREMENTS

◆ GROUP A: EAHS Curriculum - Complete ALL of the following courses.		7 Credits
BMSP 2145-2146	Human Anatomy and Physiology Lab (Co: 2135 for 2145; 2136 for 2146)	1__ 1__
HNFE 3804	Exercise Physiology (Pre: BMSP 2136, HNFE 2804)	3__
HNFE 4964 or 4974 or 4994 or 3954	Independent Learning Experience <sup>5</sup> : Field Study (Pass/Fail only) or Independent Study or Undergraduate Research or Study Abroad (2 total credits needed, may be different experiences)	1__ 1__

◆ GROUP B: Science Foundations - Minimum of 4 credits.		4 Credits
BIOL 2604	General Microbiology (Pre: BIOL 1105 or ISC 2105) and BIOL 1106 and (CHEM 1036 or CHEM 1056 or CHEM 1056H or ISC 2105)	3__
BIOL 2614	General Microbiology Lab (Pre: (BIOL 1105 or ISC 2105) and BIOL 1106 and (CHEM 1036 or CHEM 1056 or CHEM 1056H or ISC 2105))	2__
CHEM 2536	Organic Chemistry (Pre: CHEM 2535 or CHEM 2565H)	3__
CHEM 2545	Organic Chemistry Lab (Pre: CHEM 1046 or CHEM 1066 or ISC 1116; Co: 2535, 2536)	1__
CHEM 2546	Organic Chemistry Lab (Pre: CHEM 2545; Co: 2536)	1__
PHYS 2205 <sup>3</sup>	General Physics (Pre: MATH 1016 or MATH 1016H or MATH 1025 or MATH 2015 or MATH 1026 or MATH 1205 or MATH 1205H or MATH 1525 or MATH 1535 or MATH 1225 or MATH 1225H)	3__
PHYS 2206 <sup>3</sup>	General Physics (Pre: PHYS 2215 or PHYS 2305)	3__
PHYS 2215 <sup>3</sup>	General Physics Lab (Co: PHYS 2205)	1__
PHYS 2216 <sup>3</sup>	General Physics Lab (Co: PHYS 2206)	1__

◆ GROUP C: HNFE Electives- Minimum 15 credits, at least 9 must be at the 3000-4000 level with at least one designated Capstone <sup>6</sup> . All courses in this section must be HNFE courses; non-HNFE courses cannot be substituted. <sup>7</sup>		15 Credits
HNFE 1804	Principles of Sport Science ( <i>Note: only available for Summer Academy students</i> )	3__
HNFE 2104 <sup>8</sup> (DANC 2104)	Moving Body, Moving Mind	3__
HNFE 2204	Medical Terminology (Pre: (BIOL 1005 or BIOL 1105 or BIOL 1205H), (BIOL 1006 or BIOL 1106 or BIOL 1206H) or (ISC 2106 or ISC 2106H))	3__
FST 2014	Introduction to Food Science, (Pre: (HNFE 1004, CHEM 1035) or CHEM 1055 or ISC 1106) ( <i>Note: FST 2014 counts as free elective if HNFE 3024 is not subsequently taken</i> )	2__
HNFE 3024	Science of Food Preparation Lab (Pre: HNFE 1004 and (CHEM 1036 or CHEM 1056 or ISC 2106) and FST 2014)	2__
HNFE 2314 <sup>8</sup> (SPIA 2314)	Active Transportation for a Healthy, Sustainable Planet	3__
HNFE 2334	Intro to Integrative Health	3__
HNFE 2544 (FST 2544)	Functional Foods for Health	3__
HNFE 2664 <sup>8</sup>	Behavioral Theory in Health Promotion	3__
HNFE 2774 <sup>9</sup>	Topics in HNFE (variable credit) (Pre: HNFE 1004)	1-3 __
HNFE 2824	Prevention and Care of Athletic Injuries	2__
HNFE 3634 (PHS 3634)	Epidemiologic Concepts of Health and Disease	3__
HNFE 3824	Kinesiology (Pre: BMSP 2135, BMSP 2136; Co: PHYS 2205 or PHYS 2305)	3__
HNFE 4004 <sup>6</sup> Capstone	Seminar in HNFE: Writing & Discourse (Pre: COMM 2004 or ALCE 3634; Co: HNFE 4025)	3__
HNFE 4114 <sup>6</sup> Capstone	Food and Nutritional Toxicology (Pre: BMSP 2136, BCHM 2024)	3__
HNFE 4174	Nutrition and Physical Performance (Pre: HNFE 2804; Co: HNFE 4025)	3__
HNFE 4224 Capstone	Alternative and Complementary Nutrition Therapy (Pre: (BIOL 1005 or BIOL 1105 or BIOL 1205H), (BIOL 1006 or BIOL 1106 or BIOL 1206H), (CHEM 1036 or CHEM 1056) or ISC 2104))	2__
HNFE 4354 Capstone	Dietary Supplements and Health (Pre: (BCHM 2024 or BCHM 3114), (BMSP 2136 or BIOL 2406))	3__

HNFE 4514 <sup>6</sup> <i>Capstone</i>	Nutritional Genomics	3__
HNFE 4644	Health Counseling	3__
HNFE 4754	Advanced Human Anatomy and Pathophysiology (Pre: BMSP 2136, BMSP 2146)	3__
HNFE 4774 <sup>6,9</sup> <i>Capstone</i>	Advanced Topics in HNFE (variable credit) (Pre: HNFE 2014 or 2014H)	1-3 __
HNFE 4814	Advanced Athletic Injuries (Pre: HNFE 2824, HNFE 3804)	2__
HNFE 4824 <sup>6</sup> <i>Capstone</i>	Advanced Kinesiology (Pre: HNFE 3824)	3__
HNFE 4844 <i>Capstone</i>	Exercise and Neuromuscular Performance (Pre: HNFE 3804)	3__

TOTAL CREDITS REQUIRED FOR GRADUATION		
SUBTOTAL FOR GENERAL EDUCATION:		44 credits
SUBTOTAL FOR HNFE DEPARTMENT CURRICULUM:		39 credits
SUBTOTAL FOR EAHS OPTION:		26 credits
FREE ELECTIVES <sup>10</sup> :		11 credits
TOTAL CREDITS REQUIRED FOR GRADUATION:		120 credits

**Foreign Language Requirement:** A sequence of two foreign language courses is required for graduation unless two years of high school credits of the same foreign language or 6 transfer credits of one foreign language have been earned. These credits do not count towards graduation.

**Footnotes:**

- ◆\* Courses are included in the in-major GPA with the exception of HNFE 1114.
- 1. Credit cannot be received for both COMM 1016 and COMM 2004 if COMM 1015-1016 taken for Concept 1f.
- 2. A minimum grade of "C" is required in HNFE 1004, and a "C-" or better is required in CHEM 1035, 1036 and CHEM 2514 or 2535.
- 3. Acceptable substitutions:
  - BCHM 2024: BCHM 3114 Biochemistry for Biotechnology and the Life Sciences (appropriate for pre-med, pre-dental) or BCHM 4115 General Biochemistry (for BCHM – HNFE double majors)
  - CHEM 1035: CHEM 1055 General Chemistry for Majors
  - CHEM 1036: CHEM 1056 General Chemistry for Majors
  - CHEM 1045: CHEM 1065 General Chemistry Lab for Majors
  - CHEM 1046: CHEM 1066 General Chemistry Lab for Majors
  - HNFE 2014H: Nutrition Across the Lifespan Honors
  - MATH 1025: MATH 1225 Calculus of a Single Variable **or** 1525 Elementary Calc with Matrices **or** ISC 1105 Integrated Science
  - PHYS 2205, 2215: PHYS 2305 Foundations of Physics I
  - PHYS 2206, 2216: PHYS 2306 Foundations of Physics II
- 4. Students should choose Organic Chemistry based on what is required for their career and professional pathway.
- 5. Meet with your academic advisor early to discuss which option would be best for your career goals and allow time to line-up an opportunity. Two credits are required for graduation, but students may do additional credits as free electives.
- 6. Students must either take HNFE 4004 or a course that is a designated Capstone.
- 7. New HNFE courses or HNFE Special Study (HNFE 2984 or HNFE 4984) courses are allowed in this section and can be substituted for courses on this list. No courses outside of HNFE will be substituted. Students must have at least 15 hours of HNFE electives, with at least 9 at the 3000-4000 level.
- 8. Course also part of Pathways to General Education and can be counted in both locations.
- 9. HNFE 2774: Topics in HNFE and HNFE 4774: Advanced Topics in HNFE are not taught on a regular basis. Students would be notified of opportunities through department communications and the timetable of classes. Note: 1 credit 4774 Advanced Topics courses do not meet the Capstone requirement.
- 10. Free electives may be any course available to the student. Prerequisites for courses still apply. Students should be careful not to exceed the university maximum of pass/fail credits (See Academic Policies in the Undergraduate Catalog). A total of 120 credits must be completed for graduation, regardless of a course counting in two checked areas. This may require more Free Electives than listed.

**Note:** Completion of this major does not qualify a student to apply to an Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited Dietetic Internship.

**University GPA Graduation Requirement:** Minimum Overall GPA: 2.0; In-Major GPA: 2.0

**SATISFACTORY PROGRESS TOWARDS THE DEGREE:** Students in the Exercise and Health Sciences major must have and maintain the following:

1. Overall GPA  $\geq$  2.5.
2. A minimum grade of "C" is required in HNFE 1004, and a "C-" or better is required in CHEM 1035, 1036 and CHEM 2514 or 2535.
3. These courses must be completed by the time the student has attempted 72 hours:
  - BIOL 1105-1106 or equivalent.
  - CHEM 1035-1036 or equivalent.
  - CHEM 2535 or 2514.
  - HNFE 1004.

**SUGGESTED FREE ELECTIVES:** Select free elective courses based on interests, long-term goals, and minor(s) or second majors.

The majority of students in HNFE pursue continuing education in the health professions. Free electives can be selected based on admission requirements and recommendations for those programs. Students additionally may select free electives that count toward a minor or second major. Students can find lists of suggested free electives and maps of complementary majors and minors on the HNFE Advising site in Canvas.