

# EXERCISE AND HEALTH SCIENCES MAJOR

## Program Curriculum

Code	Title	Credits
<b>Degree Core Requirements</b>		
HNFE 1114	Orientation to HNFE	1
HNFE 1004	Foods, Nutrition And Exercise (C) <sup>1</sup>	3
BIOL 1105	Principles of Biology <sup>1</sup>	3
BIOL 1115	Principles of Biology Laboratory <sup>1</sup>	1
BIOL 1106	Principles of Biology <sup>1</sup>	3
BIOL 1116	Principles of Biology Laboratory <sup>1</sup>	1
HNFE 2014	Nutrition Across the Life Span <sup>1</sup>	3
	or HNFE 2014H Nutrition Across the Life Span	
HNFE 2484	Evidence-Based Practice in Health Science <sup>1</sup>	1
BMSP 2135	Human Anatomy & Physiology <sup>1</sup>	3
BMSP 2136	Human Anatomy and Physiology <sup>1</sup>	3
HNFE 2804	Exercise and Health <sup>1</sup>	3
CHEM 2514	Survey of Organic Chemistry (C-) <sup>1</sup>	3
	or CHEM 2535 Organic Chemistry	
BCHM 2024	Concepts of Biochemistry <sup>1</sup>	3
	or BCHM 3114 Biochemistry for Biotechnology and the Life Sciences	
	or BCHM 4115 General Biochemistry	
HNFE 3034	Methods of Human Health Assessment <sup>1</sup>	2
HNFE 4025	Metabolic Nutrition <sup>1</sup>	3
HNFE 4026	Metabolic Nutrition <sup>1</sup>	3
Subtotal		39
<b>Major Requirements <sup>1</sup></b>		
BMSP 2145	Human Anatomy and Physiology Laboratory	1
BMSP 2146	Human Anatomy and Physiology Laboratory	1
HNFE 3804	Exercise Physiology	3
Select one of the following:		2
HNFE 4964	Field Study (Pass/Fail only)	
HNFE 4974	Independent Study	
HNFE 4994	Undergraduate Research	
	or HNFE 499 Undergraduate Research	
HNFE 3954	Study Abroad	
Subtotal		7
<b>Science Foundations <sup>1</sup></b>		
Complete a minimum of 4 credit hours from the following:		4
BIOL 2604	General Microbiology	
BIOL 2614	General Microbiology Laboratory	
CHEM 2536	Organic Chemistry	
CHEM 2545	Organic Chemistry Laboratory	
CHEM 2546	Organic Chemistry Laboratory	
PHYS 2205	General Physics	
	or PHYS 230 Foundations of Physics	
PHYS 2206	General Physics	
	or PHYS 230 Foundations of Physics	
PHYS 2215	General Physics Laboratory	

PHYS 2216	General Physics Laboratory	
<b>Restricted Electives <sup>1</sup></b>		
Complete a minimum of 15 credit hours. 9 credits must be at the 3000-4000 level and at least 2 credits of HNFE Capstone.		13
HNFE 1804	Principles of Sport Science	
HNFE 2104	Moving Body, Moving Mind <sup>3</sup>	
HNFE 2204	Medical Terminology	
FST 2014	Introduction to Food Science	
HNFE 3024	Science of Food Prep Lab	
HNFE 2314	Active Transportation for a Healthy, Sustainable Planet <sup>3</sup>	
HNFE 2334	Introduction to Integrative Health	
HNFE 2544	Functional Foods for Health	
HNFE 2664	Behavioral Theory in Health Promotion <sup>3</sup>	
HNFE 2774	Topics in HNFE <sup>4</sup>	
HNFE 2824	Prevention and Care of Athletic Injuries	
HNFE 3634	Epidemiologic Concepts of Health and Disease	
HNFE 3824	Kinesiology	
HNFE 4174	Nutrition and Physical Performance	
HNFE 4644	Health Counseling	
HNFE 4754	Advanced Human Anatomy and Pathophysiology	
HNFE 4814	Advanced Athletic Injuries	
Capstone. Minimum of 2 credits		2
HNFE 4004	Seminar in HNFE: Writing and Discourse in the Major	
HNFE 4114	Food and Nutritional Toxicology	
HNFE 4224	Alternative and Complementary Nutrition Therapies	
HNFE 4354	Dietary Supplements and Health	
HNFE 4514	Nutritional Genomics	
HNFE 4774	Advanced Contemporary Topics in HNFE <sup>4</sup>	
HNFE 4824	Advanced Kinesiology	
HNFE 4844	Exercise and Neuromuscular Performance	
Subtotal		19
<b>Free Electives</b>		
Select remaining credit hours required to fulfill degree requirements.		11
Subtotal		11
<b>Pathways to General Education</b>		
<i>Pathways Concept 1 - Discourse</i>		
ENGL 1105	First-Year Writing (1F) <sup>2</sup>	3
	or COMM 1015 Communication Skills	
ENGL 1106	First-Year Writing (1F) <sup>2</sup>	3
	or COMM 1016 Communication Skills	
COMM 2004	Public Speaking (1A) <sup>2</sup>	3
	or ALCE 3634 Communicating Ag and Life Sciences in Speaking	
<i>Pathways Concept 2 - Critical Thinking in the Humanities</i>		
Select six credits in Pathway 2 ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G02">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G02</a> )		6
<i>Pathways Concept 3 - Reasoning in the Social Sciences</i>		
PSYC 1004	Introductory Psychology	3
Select three credits in Pathway 3 ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G03">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G03</a> )		3
<i>Pathways Concept 4 - Reasoning in the Natural Sciences</i>		

CHEM 1035	General Chemistry (C-) <sup>1</sup>	3
or CHEM 1055	General Chemistry for Chemistry Majors	
CHEM 1045	General Chemistry Laboratory <sup>1</sup>	1
or CHEM 1065	General Chemistry for Chemistry Majors Lab	
CHEM 1036	General Chemistry (C-) <sup>1</sup>	3
or CHEM 1056	General Chemistry for Chemistry Majors	
CHEM 1046	General Chemistry Laboratory <sup>1</sup>	1
or CHEM 1066	General Chemistry for Chemistry Majors Lab	
<i>Pathways Concept 5 - Quantitative and Computational Thinking</i>		
MATH 1025	Elementary Calculus (5F)	3
or MATH 1225	Calculus of a Single Variable	
or ISC 1105	Integrated Science I	
STAT 3615	Biological Statistics (5A)	3
Select 3 credits of Pathway 5a ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G05A">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G05A</a> )		3
or Pathway 5f ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G05F">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G05F</a> )		
<i>Pathways Concept 6 - Critique and Practice in Design and the Arts</i>		
Select three credits in Pathway 6a ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06A">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06A</a> )		3
Select three credits in Pathway 6d ( <a href="https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06D">https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06D</a> )		3
<i>Pathways Concept 7 - Critical Analysis of Identity and Equity in the United States</i>		
Select course that meets Concept 7 and another Concept. If course meets only Concept 7, Pathways credit reaches 47		
Subtotal		44
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Included in in-major GPA.

<sup>2</sup> Credit cannot be received for both COMM 1016 and COMM 2004 if COMM 1015-COMM 1016 was taken for Concept 1f.

<sup>3</sup> Course is part of Pathways General Education and can be counted in both locations.

<sup>4</sup> Topics in HNFE (2774 and 4774) are not taught on a regular basis.

**Satisfactory Progress Towards the Degree:** An HNFE (Exercise and Health Sciences) student will be considered to have made satisfactory progress toward the degree when:

1. Overall GPA  $\geq 2.50$ .
2. A minimum grade of "C" is required in HNFE 1004 Foods, Nutrition And Exercise and a "C-" or better is required in CHEM 1035 General Chemistry and CHEM 1036 General Chemistry and CHEM 2535 Organic Chemistry or CHEM 2514 Survey of Organic Chemistry.
3. These courses must be completed by the time the student has attempted 72 hours:

BIOL 1105 Principles of Biology-BIOL 1106 Principles of Biology or equivalent.

CHEM 1035 General Chemistry-CHEM 1036 General Chemistry or equivalent.

CHEM 2535 Organic Chemistry or CHEM 2514 Survey of Organic Chemistry.

HNFE 1004 Foods, Nutrition And Exercise.

## Graduation Requirements

**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.

Graduation Requirement: Overall GPA  $\geq 2.50$ .

A minimum grade of "C" is required in HNFE 1004 Foods, Nutrition And Exercise and a "C-" or better is required in CHEM 1035 General Chemistry and CHEM 1036 General Chemistry and CHEM 2535 Organic Chemistry or CHEM 2514 Survey of Organic Chemistry.

## 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 six transfer credits of one foreign language have been earned. These credits do not count towards graduation.