

## College of Agriculture and Life Sciences Bachelor of Science: Human Nutrition, Foods and Exercise Major SCIENCE OF FOOD, NUTRITION AND EXERCISE OPTION (SFNE) For students graduating in the calendar year 2020

Curriculum for Liberal Education (Areas 1-7)	36 Credits
Area 1: Writing and Discourse. 6 credits (Choose one of the sequences below)	
ENGL 1105-1106 First Year Writing or COMM 1015-10161 Communication Skills	3 3
Area 2: Ideas, Cultural Traditions and Values. 6 credits	
	3
	3
Area 3: Society and Human Behavior. 6 credits	
PSYC 1004 Introductory Psychology	3
	3
Area 4: Scientific Reasoning and Discovery. 8 credits	
◆CHEM 1035 <sup>2,3</sup> , 1045 <sup>2</sup> General Chemistry Lecture and Lab	3 1
♦CHEM 1036 <sup>2,3</sup> , 1046 <sup>2</sup> General Chemistry Lecture and Lab	3 1
Area 5: Quantitative and Analytic Reasoning. 6 credits	
MATH 1025 <sup>4</sup> Elementary Calculus	3
MATH 10264 Elementary Calculus	3
Area 6: Creativity and Aesthetic Experience. 1 credit	
	1
Area 7: Critical Issues in a Global Context. 3 credits; may also fulfill another area	
	3

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.

♦ Department of Human Nutrition, Foods and Exercise Curriculum		47 Credits	
HNFE 1114 or ALS 1234	Orientation to HNFE or CALS First Year Seminar	1	
HNFE 1004 <sup>3</sup>	Foods, Nutrition and Exercise	3	
BIOL 1105,1115 <sup>5</sup>	Principles of Biology, Principles of Biology Lab	3 1	
BIOL 1106,1116 <sup>5</sup>	Principles of Biology, Principles of Biology Lab	3 1	
HNFE 2014	Nutrition Across the Life Span (Pre: HNFE 1004, CHEM 1035, Co: CHEM 1036)	3	
HNFE 2804	Exercise and Health (Pre: HNFE 1004)	3	
STAT 2004 or 3615	Introductory Statistics or Biological Statistics (Pre: MATH 1014)	3	
BMSP 2135-2136	Human Anatomy & Physiology (Pre:1 yr BIOL)	33_	
CHEM 2514 <sup>3,6</sup> or 2535 <sup>3,6</sup>	Survey of Organic Chemistry or Organic Chemistry (Pre: CHEM 1036, CHEM 1046)	3	
BCHM 2024 <sup>7</sup>	Concepts of Biochemistry (Pre: CHEM 2514 or 2535)	3	
COMM 2004 <sup>1</sup> <b>or</b> ALCE 3634	Public Speaking (Soph standing req) or Communicating Agriculture & Life Sciences in Speaking	3	
HNFE 3034	Methods of Human Health Assessment (Pre: HNFE 2014, BMSP 2136, BCHM 2024)	2	
HNFE 4025-4026	Metabolic Nutrition (Pre: HNFE 2014, BCHM 2024, BMSP 2136)	3 3	
HNFE 4004	Seminar in HNFE: Writing & Discourse (Pre: COMM 2004 or ALCE 3634, Co: HNFE 4025)	3	

<sup>1</sup> Students who complete the COMM 1015-1016 sequence should take ALCE 3634. Credit cannot be received for both COMM 1016 and COMM 2004.

University GPA Graduation Requirement: Minimum Overall GPA: 2.0; In-Major GPA: 2.5.

HNFE Satisfactory Progress GPA Requirements: Minimum In-major GPA requirement: 2.5; HNFE SFNE Overall GPA 2.5 (see page 3 for requirements).

<sup>&</sup>lt;sup>2</sup> Acceptable substitutions for General Chemistry: CHEM 1055/1065 and 1056/1066 General Chemistry for Majors.

<sup>&</sup>lt;sup>3</sup>A minimum grade of "C" is required in both CHEM 1035 and 1036; CHEM 2514 OR 2535; and HNFE 1004.

<sup>&</sup>lt;sup>4</sup> Acceptable substitutions: MATH 1225 or 1525 for 1025; and 1226 or 1526 for 1026.

<sup>&</sup>lt;sup>5</sup> Acceptable substitutions: BIOL 1005/1015 or BIOL 1205H or BIOL 1205 for BIOL 1105/1115; BIOL 1006/1016 or 1206H or 1206 for BIOL 1106/1116.

<sup>&</sup>lt;sup>6</sup> Students should choose organic chemistry based on what is required for professional programs. Medicine, dentistry, and pharmacy commonly require 8 credits of organic chemistry; some (not all) programs in nursing and physician assistant may also require more than 3 credits of organic chemistry.

<sup>&</sup>lt;sup>7</sup> Acceptable substitution: BCHM 3114 or 4115 (preferred for Medical and Dental schools. BCHM 4115 limited to Biochemistry double majors and is a 4-credit class ♦ In-major GPA. These courses are included in the in-major GPA calculation (continued on page 2).

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SCIENCE OF FOOD, NUTRITION AND EXERCISE

♦ GROUP A: SFNE Curriculum: Complete ALL of the following courses.		7 Credits
BMSP 2145-2146	Human Anatomy and Physiology Lab	1 1
HNFE 3804	Exercise Physiology (Pre: BMSP 2136)	3
HNFE 49647 or 4974	Independent Learning Experience8: Field Study or Independent Study or Undergraduate	2
or 4994 or 3954	Research or Study Abroad (2 total credits needed, may be different experiences)	

GROUP B: Science Foundations - Minimum of 4 credits. Additional credits (3cr max) count in Group D		4 Credits
BIOL 2604	General Microbiology (Pre: CHEM 1036 , 1 yr BIOL)	3
BIOL 2614	General Microbiology Lab (Pre/Co: BIOL 2604.)	2
CHEM 2536	Organic Chemistry (Pre: CHEM 2535)	3
CHEM 2545	Organic Chemistry Lab (Pre: CHEM 1046; Co: 2535)	1
CHEM 2546	Organic Chemistry Lab (Pre: CHEM 2545; Co: 2536)	1
PHYS 2205	General Physics (Pre: MATH 1016 or 2015)	3
PHYS 2206	General Physics (Pre: PHYS 2205 or 2305)	3
PHYS 2215	General Physics Lab (Co: PHYS 2205)	1
PHYS 2216	General Physics Lab (Co: PHYS 2206)	1

♦ GROUP C: HNFE Electives- Minimum 12 credits, at least 6 must be at the 3000-4000 level. All courses in		
this section must be HNFE courses; non-HNFE courses cannot be substituted.9		
HNFE 2204	Medical Terminology (Pre: 1 yr BIOL)	3
<b>FST 2014 &amp; HNFE</b>	Introduction to Food Science*, Science of Food Preparation Lab (Pre: FST 2014)	2 .2
3024	(FST 2014 will fit into Group D if HNFE 3024 is not subsequently taken)	
HNFE 2334	Intro to Integrative Health	3
HNFE 2544	Functional Foods for Health	3
HNFE 2664 <sup>10</sup>	Behavioral Nutrition and Physical Activity	3
HNFE 2774*	Topics in HNFE (variable credit)	1-3
HNFE 2824	Prevention and Care of Athletic Injuries	2
HNFE 3634	Epidemiologic Concepts of Health and Disease	3
HNFE 3824	Kinesiology (Pre: BMSP 2136, PHYS 2205)	3
HNFE 4174	Nutrition and Physical Performance (Pre: HNFE 1004, 3804)	3
HNFE 4224	Alternative and Complementary Nutrition Therapy (Pre: 1 yr BIOL; CHEM 1036, CHEM	2
	3025)	
HNFE 4644	Health Counseling (Junior standing required)	3
HNFE 4774*	Advanced Topics in HNFE (variable credit)	1-3
HNFE 4844	Exercise and Neuromuscular Performance (Pre: HNFE 3804)	3

♦ GROUP D: Tech	inical Electives- Minimum 6 credits.	6 Credits
(Seats in these cou	rses cannot be guaranteed)	
AAEC 4814	Food and Health Economics (Senior standing required)	3
BCHM 2114	Biochemical Calculations (Pre: CHEM 2535 or 2565)	2
BCHM 4116 <sup>6,7</sup>	General Biochemistry (Pre: C- or better in CHEM 2535 and 2536; BCHM 4115)	3
BIOL 2004	Genetics (Pre: 1 yr BIOL; CHEM 1036)	3
BIOL 2104	Cell and Molecular Biology (Pre: 1 yr BIOL; CHEM 1036)	3
BIOL 3104	Cell and Molecular Biology Lab (Pre: BIOL 2104)	1
BIOL 3124	Cell Physiology (Pre: BIOL 2104; CHEM 2536)	3
BIOL 3134	Human Genetics (Pre: BIOL 2004 or BIOL 2104)	3
BIOL 3774	Molecular Biology (Pre: BIOL 2104 or ALS 3104)	3
BIOL 4674	Pathogenic Bacteriology (Pre: BIOL 2004, BIOL 2104, BIOL 2604, BIOL 2614)	3
BIOL 4704	Immunology (Pre: CHEM 2536)	3
BIOL 4714	Immunology Lab (Pre: BIOL 2104, CHEM 2536. Co: CHEM 4704)	1
BIOL 4724	Pathogenic Bacteriology Lab (Pre: BIOL 2004, BIOL 2104, BIOL 2604, BIOL 2614 Co: BIOL 4674)	1
BIOL 4734	Inflammation Biology (Pre: BIOL 2104)	3
BIOL 4874	Cancer Biology (Pre: BIOL 2004, BIOL 2104)	3
CHEM 2114	Analytical Chemistry (Pre: CHEM 1036, Co: 2124)	3



CHEM 2124	Analytical Chemistry Lab (Pre: CHEM 1046, Co: 2114)	1
CHEM 3615	Physical Chemistry (Pre: CHEM 1036, PHYS 2306, MATH 2224)	3
CHEM 3616	Physical Chemistry (Pre: CHEM 3615, MATH 2214, PHYS 2306)	3
CHEM 4554	Drug Chemistry (Pre: CHEM 2536)	3
CHEM 4615	Physical Chemistry for the Life Sciences (Pre: 1 yr CHEM, PHYS, MATH/calculus)	3
FST 4504	Food Chemistry (Pre: CHEM 2536, BCHM 2024)	3
FST 4634	Epidemiology Foodborne Disease (Co: FST 4604 or BIOL 4674)	3
HORT 2834	Sustainable Agriculture Practicum	3
PHIL 3324	Biomedical Ethics	3
PSYC 3054	Health Psychology (Pre: PSYC 1004 or 2004)	3
SPAN 3514	Spanish for Medical Professionals (Pre: SPAN 3304)	3
STAT 3616	Biological Statistics (Pre: STAT 3615)	3

TOTAL CREDITS REQUIRED FO	DR GRADUATION	
	SUBTOTAL FOR CURRICULUM FOR LIBERAL EDUCATION:	36 credits
	SUBTOTAL FOR HNFE DEPARTMENT CURRICULUM:	47 credits
	SUBTOTAL FOR SFNE OPTION:	29 credits
	FREE ELECTIVES <sup>11</sup> :	8 credits
	TOTAL CREDITS REQUIRED FOR GRADUATION11:	120 credits

<sup>&</sup>lt;sup>7</sup>BIOL 3504 Health Professions Preceptorship is an acceptable substitution for HNFE 4964.

♦ In-major GPA. These courses are included in the in-major GPA calculation (continued on page 2).

University GPA Graduation Requirement: Minimum Overall GPA: 2.0; In-Major GPA: 2.5.

HNFE Satisfactory Progress GPA Requirements: Minimum In-major GPA requirement: 2.5; HNFE SFNE Overall GPA 2.5 (see page 3 for requirements).

**Note:** Completion of this option does <u>not</u> qualify a student to apply to an Accreditation Council for Education in Nutrition and Dietetics (ACEND) Accredited Dietetic Internship. Students interested in becoming a Registered Dietitian must complete the Dietetics option of the HNFE program.

Prerequisites for courses are listed in the Undergraduate Course Catalog and associated with the CRN hyperlink on the on-line Timetable. It is the responsibility of the student to make sure the prerequisites for each course have been met. HNFE checks for prerequisites both during course request and at the beginning of the semester. Students who enroll in a course for which they clearly have not satisfied the prerequisites or equivalent <a href="may be dropped">may be dropped</a> from the course. Deliberately false statements testifying to the satisfaction of prerequisites constitute a violation of the honor code.

HNFE is a restricted major. Students who wish to change into, transfer into, and/or continue to study within HNFE must have and maintain the following: SATISFACTORY PROGRESS TOWARDS THE DEGREE: An HNFE (SFNE Option) student will be considered to have made satisfactory progress toward the degree when he/she has successfully completed:

- 1. In-major GPA ≥ 2.5.
- 2. Overall GPA ≥ 2.5.
- 3. Grade of C\* or better in HNFE 1004, CHEM 1035\*, CHEM 1036 and CHEM 2535 or 2514. (\*C- or better in CHEM 1055 Chem for Majors)
- 4. 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.

Students not meeting Satisfactory Progress will have one probationary semester in which to resolve their standing. Students who do not return to good standing at the end of the probationary semester must leave the major. Internal or external transfers will be required to create a plan of study that demonstrates how the student will attain Satisfactory Progress in regards to coursework. The GPA threshold will stand for all students regardless of transfer status.

<sup>8</sup> Meet with your faculty mentor and 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. Only 2 credits will count towards in-major GPA.

<sup>&</sup>lt;sup>9</sup> 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 12 hours of HNFE electives, with at least 6 at the 3000-4000 level.

<sup>&</sup>lt;sup>10</sup> HNFE 2664 cannot be used as an HNFE elective if used for CLE Area 3.

<sup>&</sup>lt;sup>11</sup> 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.

<sup>\*</sup>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 the department communications and the timetable of classes.