

# DIET AND EXERCISE (HSCI)

## OVERVIEW

### Diet and Exercise, B.S./M.S.

Administered by the Department of Food Science and Human Nutrition and Department of Kinesiology.

This is an accelerated program with concurrent enrollment in the undergraduate and graduate degree programs. Courses included have been approved as meeting the academic requirements of the Didactic Program in Dietetics (DPD) in preparation for admission to accredited dietetics internship programs; the DPD is accredited by the Accreditation Council for Education in Nutrition and Dietetics, the accrediting agency of the Academy of Nutrition and Dietetics. There is a \$30 fee for the verification statement of completion of the accredited dietetics program. Additionally, courses are included to meet the American College of Sports Medicine (ACSM) requirements for certification at the level of Certified Exercise Physiologist.

### Student Learning Outcomes

Upon graduation, students should be able to:

- Communicate effectively in their field of study using written, oral, visual and/or electronic forms.
- Demonstrate proficiency in ethical data collection and interpretation, literature review and citation, critical thinking and problem solving.
- Participate effectively in a group or team.
- Integrate creativity, innovation, or entrepreneurship in ways that produce value.
- Describe sociocultural competence relative to diversity, equity and/or inclusion.
- Explain how human activities impact the natural environment and how societies are affected.
- Meet program specific learning outcomes for the Diet & Exercise major.

## Degree Requirements

**Total Degree Requirements: 120 cr. for bachelor's degree and 36-40 cr. for master's degree**

**International Perspectives: 3 cr.**

**U.S. Cultures and Communities (Formerly U.S. Diversity): 3 cr.**

Students must fulfill International Perspectives and U.S. Cultures and Communities (formerly U.S. Diversity) requirements by selecting coursework from approved lists. These courses may also be used to fulfill other area requirements.

**Communications and Library: 10 cr.**

ENGL 1500	Critical Thinking and Communication	3
ENGL 2500	Written, Oral, Visual, and Electronic Composition	3

LIB 1600	Introduction to College Level Research	1
SPCM 2120	Fundamentals of Public Speaking	3
<b>Total Credits</b>		<b>10</b>

**Social Sciences: 6 cr.**

PSYCH 1010	Introduction to Psychology	3
KIN 3660	Exercise Psychology	3
<b>Total Credits</b>		<b>6</b>

**Mathematical Sciences: 6-8 cr.**

Select at least 3 credits from: 3-4

MATH 1400	College Algebra	
MATH 1430	Preparation for Calculus	
MATH 1600	Survey of Calculus	
MATH 1650	Calculus I	

Select at least 3 credits from: 3-4

STAT 1010	Principles of Statistics	
STAT 1040	Introduction to Statistics	
STAT 2260	Introduction to Business Statistics I	

**Total Credits 6-8**

**Physical Sciences: 13 cr.**

Select from: 5

CHEM 1630 & 1630L	College Chemistry and Laboratory in College Chemistry	
or CHEM 171 & 1770L	General Chemistry I and Laboratory in General Chemistry I	
CHEM 2310	Elementary Organic Chemistry	3
CHEM 2310L	Laboratory in Elementary Organic Chemistry	1
PHYS 1150	Physics for the Life Sciences	4
or PHYS 1310	General Physics I	

**Total Credits 13**

**Biological Sciences: 13 cr.**

BBMB 3010	Survey of Biochemistry	3
BIOL 2550	Fundamentals of Human Anatomy	3
BIOL 2550L	Fundamentals of Human Anatomy Laboratory	1
BIOL 2560	Fundamentals of Human Physiology	3
BIOL 2560L	Fundamentals of Human Physiology Laboratory	1
MICRO 2010	Introduction to Microbiology	2

**Total Credits 13**

**Diet and Exercise undergraduate courses to be completed or in progress when applying for admission to the program: 21-23 cr.**

Select from:		1-2
FSHN 1100	Professional and Educational Preparation	

or KIN 2520	Introduction to the Discipline of Kinesiology and Orientation and Learning Community in & KIN 2530 Kinesiology and Health	
FSHN 1670	Introductory Human Nutrition and Health	3
FSHN 2140	Scientific Study of Food	3
FSHN 2150	Advanced Food Preparation Laboratory	1-2
or FSHN 1150	Food Preparation Laboratory	
FSHN 2650	Nutrition for Active and Healthy Lifestyles	3
FSHN 3400	Foundations of Dietetic Practice	2
FSHN 3600	Advanced Nutrition and the Regulation of Metabolism in Health and Disease	3
HS 1100	Personal and Consumer Health	3
KIN 2580	Principles of Physical Fitness and Conditioning	2
<b>Total Credits</b>		<b>21-23</b>

**Acceptance into the B.S./M.S. PROGRAM is required BEFORE spring semester of the THIRD year.**

**Humanities and Ethics: 6-9 cr.**

Select 6 credits from approved Humanities list	6
Select 3 credits from approved Ethics list	3

Note: If ethics course is on the humanities list, it can meet both requirements.

**Diet and Exercise remaining undergraduate courses to complete the bachelor's degree requirements: 42 cr.**

HS 3800	Worksite Health Promotion	3
ATR 2200	Basic Athletic Training	2
or HS 3050	Instructor's First Aid and Cardiopulmonary Resuscitation	
KIN 2590	Leadership Techniques for Fitness Programs	3
KIN 3450	Management of Health-Fitness Programs and Facilities	3
or FSHN 3920	Food and Nutrition Services Management	
KIN 3580	Exercise Physiology	3
KIN 3590	Exercise Physiology Lab	1
Select two from:	6	
KIN 3550	Biomechanics	
KIN 3600	Sociology of Physical Activity and Health	
KIN 3720	Motor Control and Learning Across the Lifespan	
KIN 4580	Principles of Fitness Assessment and Exercise Prescription	
KIN 4620	Medical Aspects of Exercise	3
FSHN 3610	Nutrition and Health Assessment	2
FSHN 3670	Medical Terminology for Health Professionals	1
FSHN 4300	U.S. Health Systems and Policy	2

FSHN 4660	Nutrition Counseling and Education Methods	3
HSPM 1330	Food Safety Certification	1
HSPM 3800	Food Production Management	3
HSPM 3800L	Food Production Management Experience	3
NUTRS 5630	Community Nutrition and Health *	3
<b>Total Credits</b>		<b>42</b>

**Diet and Exercise graduate courses to complete the master's degree requirements: 36-40 cr.**

FSHN 5900C	Special Topics: Teaching **	1
FSHN 6810	Seminar **	1
FSHN 6820	Seminar Reflection **	
NUTRS 5010	Biochemical and Physiological Basis of Nutrition: Macronutrients and Micronutrients	4
NUTRS 5610	Medical Nutrition and Disease I	4
NUTRS 5630	Community Nutrition and Health *	3
NUTRS 5640	Medical Nutrition and Disease II *	4
KIN 5010	Research Methods in Physical Activity	3
KIN 5050	Research Laboratory Techniques in Exercise Physiology	3
KIN 5500	Advanced Physiology of Exercise I	3
or KIN 5510	Advanced Physiology of Exercise II	
STAT 5870	Statistical Methods for Research Workers	4
Select 3-6 additional credits (FSHN students select 3 credits, KIN students select 6 credits) from:	3-6	
KIN 5500	Advanced Physiology of Exercise I	
KIN 5510	Advanced Physiology of Exercise II	
KIN 5670	Exercise and Health: Behavior Change	
KIN 5700	Physical Activity Assessment for Health Related Research	
Select 2-3 credits for creative component or 6 credits for thesis research:	2-6	
FSHN 5990	Creative Component	
KIN 5990	Creative Component	
KIN 6990	Research	
NUTRS 6990	Research in Nutritional Sciences	

\* Course counts toward both bachelor's and master's degrees.

\*\* Requirement for students in the FSHN Department.

Go to FSHN courses. ([http://catalog.iastate.edu/azcourses/fs\\_hn/](http://catalog.iastate.edu/azcourses/fs_hn/))

Go to KIN courses. (<http://catalog.iastate.edu/azcourses/kin/>)

**Diet and Exercise, B.S./M.S.****First Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
FSHN 1100 or KIN 2520 <i>and</i> KIN 2530	1-2	ENGL 2500	3
CHEM 1630 or 1770	4	FSHN 1670	3
CHEM 1630L or 1770L	1	HS 1100	3
ENGL 1500	3	KIN 2580	2
LIB 1600	1	STAT 1010, 1040, or 2260	3-4
MATH 1400, 1430, 1600, or 1650	3-4		
PSYCH 1010	3		
<b>16-18</b>		<b>14-15</b>	

**Second Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>	<b>Summer</b>	<b>Credits</b>
BIOL 2550	3	BBMB 3010	3	SPCM 2120	3
BIOL 2550L	1	BIOL 2560	3	U.S. Cultures and Communities (formerly U.S. Diversity)	3
CHEM 2310	3	BIOL 2560L	1		
CHEM 2310L	1	FSHN 2650	3		
KIN 2590	3	FSHN 2140	3		
ATR 2200 or HS 3050	2	FSHN 1150 or 2150	1-2		
MICRO 2010	2	HSPM 1330	1		
<b>15</b>		<b>15-16</b>		<b>6</b>	

**Third Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>	<b>Summer</b>	<b>Credits</b>
FSHN 3400	2	Acceptance into the program required before spring of the third year		KIN 5990, FSHN 5990, KIN 6990, or NUTRS 6990	1-3
FSHN 3600	3	FSHN 3610	2	STAT 5870	4
KIN 3580	3	FSHN 3670	1		
KIN 3590	1	HSPM 3800	3		
Select from: KIN 3600 or 3720	3	HSPM 3800L	3		
PHYS 1150 or 1310	4	Select from: KIN 3550 or 4580	3		
Apply for admission to the BS/MS program by Oct. 1					
<b>16</b>		<b>15</b>		<b>5-7</b>	

**Fourth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>	<b>Summer</b>	<b>Credits</b>
KIN 5050	3	NUTRS 5640	4	KIN 5990, FSHN 5990, KIN 6990, or FSHN 6990	1-3
KIN 5500, 5510, 5670, or 5700	3	KIN 5010	3		
FSHN 4300	2	KIN 5510	3		
FSHN 6820 (FSHN Dept)	R	KIN 4620	3		
NUTRS 5610	4	FSHN 5810 (FSHN Dept)			

NUTRS 5630 (Time conflict with NUTRS 5010 next fall)	3 FSHN 6820 (FSHN Dept)	R	
	<b>15</b>	<b>13</b>	<b>1-3</b>

**Fifth Year**

<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
NUTRS 5010	4	KIN 3450 or FSHN 3920	3
FSHN 6820 (FSHN Dept)	R	KIN 6990, NUTRS 6990, KIN 5990, or FSHN 5990	2
Additional: KIN 5500, KIN 5510, KIN 5670, or KIN 5700	3	FSHN 4660	3
HS 3800	3	FSHN 5900C (FSHN Dept)	1
Humanities/ Ethics course	3	FSHN 6810 (FSHN Dept)	1
		Humanities/ International Perspectives	3
	<b>13</b>		<b>13</b>

Planned course offerings may change, and students need to check the online Schedule of Classes each term to confirm course offerings: <http://classes.iastate.edu/>. This sequence is only an example.