

# DIET AND EXERCISE (H SCI)

## Curriculum in 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.

### Total Degree Requirements: 125 cr. for bachelor's degree and 37-41 cr. for master's degree

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

#### International Perspectives: 3 cr.

#### U.S. Diversity: 3 cr.

#### Communications and Library: 10 cr.

ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
LIB 160	Information Literacy	1
SP CM 212	Fundamentals of Public Speaking	3
<b>Total Credits</b>		<b>10</b>

#### Social Sciences: 6 cr.

PSYCH 101	Introduction to Psychology	3
PSYCH 230	Developmental Psychology	3
<b>Total Credits</b>		<b>6</b>

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

Select at least 3 credits from: 3-4

MATH 140	College Algebra	
MATH 143	Preparation for Calculus	
MATH 160	Survey of Calculus	
MATH 165	Calculus I	
Select at least 3 credits from:		3-4
STAT 101	Principles of Statistics	
STAT 104	Introduction to Statistics	

STAT 226 Introduction to Business Statistics I

**Total Credits** 6-8

#### Physical Sciences: 13-17 cr.

Select from: 5-8

CHEM 163 & 163L	College Chemistry and Laboratory in College Chemistry	
CHEM 177 & 177L & CHEM 178	General Chemistry I and Laboratory in General Chemistry I and General Chemistry II	
CHEM 231	Elementary Organic Chemistry	3
CHEM 231L	Laboratory in Elementary Organic Chemistry	1
PHYS 115 or PHYS 111	Physics for the Life Sciences General Physics	4-5

**Total Credits** 13-17

#### Biological Sciences: 19 cr.

BBMB 301	Survey of Biochemistry	3
BIOL 211	Principles of Biology I	3
BIOL 212	Principles of Biology II	3
BIOL 255	Fundamentals of Human Anatomy	3
BIOL 255L	Fundamentals of Human Anatomy Laboratory	1
BIOL 256	Fundamentals of Human Physiology	3
BIOL 256L	Fundamentals of Human Physiology Laboratory	1
MICRO 201	Introduction to Microbiology	2

**Total Credits** 19

#### Diet and Exercise undergraduate courses to be completed or in progress when applying for admission to the program: 20-22 cr.

Select from: 1-2

FS HN 110	Professional and Educational Preparation	
KIN 252 & KIN 253	Introduction to the Discipline of Kinesiology and Orientation and Learning Community in Kinesiology and Health	
FS HN 167	Introduction to Human Nutrition	3
FS HN 214	Scientific Study of Food	3
FS HN 215 or FS HN 115	Advanced Food Preparation Laboratory Food Preparation Laboratory	1-2
FS HN 265	Nutrition for Active and Healthy Lifestyles	3
FS HN 340	Foundations of Dietetic Practice	1
FS HN 360	Advanced Nutrition and the Regulation of Metabolism	3
H S 110	Personal and Consumer Health	3
KIN 258	Principles of Physical Fitness and Conditioning	2

**Total Credits** 20-22

**Acceptance into the BS/MS 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: 45 cr.**

H S 380	Worksite Health Promotion	3
A TR 220	Basic Athletic Training	2
or H S 305	Instructor's First Aid and Cardio-pulmonary Resuscitation	
KIN 259	Leadership Techniques for Fitness Programs	3
KIN 345	Management of Health-Fitness Programs and Facilities	3
KIN 358	Exercise Physiology	3
Select from:		3
KIN 355	Biomechanics	
KIN 360	Sociology of Physical Activity and Health	
KIN 366	Exercise Psychology	
KIN 372	Motor Control and Learning Across the Lifespan	
KIN 462	Medical Aspects of Exercise	3
FS HN 361	Nutrition and Health Assessment	2
FS HN 367	Medical Terminology for Health Professionals	1
FS HN 403	Food Laws and Regulations	2
FS HN 411	Food Ingredient Interactions and Formulations	2
FS HN 466	Nutrition Counseling and Education Methods	3
HSP M 380	Food Production Management	3
HSP M 380L	Food Production Management Experience	3
HSP M 392	Foodservice Systems Management II	3
NUTRS 563	Community Nutrition *	3
NUTRS 564	Medical Nutrition and Disease II *	3
<b>Total Credits</b>		<b>45</b>

**Diet and Exercise graduate courses to complete the master's degree requirements: 37-41 cr.**

FS HN 581	Seminar **	1
FS HN 590C	Special Topics: Teaching **	1
FS HN 681	Seminar **	1
FS HN 682	Seminar Reflection **	R
NUTRS 501	Biochemical and Physiological Basis of Nutrition: Macronutrients and Micronutrients	4
NUTRS 561	Medical Nutrition and Disease I	4
NUTRS 563	Community Nutrition *	3

NUTRS 564	Medical Nutrition and Disease II *	3
KIN 501	Research Methods in Physical Activity	3
KIN 505	Research Laboratory Techniques in Exercise Physiology	2
KIN 550	Advanced Physiology of Exercise I	3
or KIN 551	Advanced Physiology of Exercise II	
KIN 558	Physical Fitness - Principles, Programs and Evaluation	3
STAT 587	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 511	Physical Activity Strategies for Youth	
KIN 550	Advanced Physiology of Exercise I	
KIN 551	Advanced Physiology of Exercise II	
KIN 567	Exercise and Health: Behavior Change	
KIN 570	Physical Activity Assessment for Health Related Research	
Select 2-3 credits for creative component or 6 credits for thesis research:		2-6
FS HN 599	Creative Component	
KIN 599	Creative Component	
KIN 699	Research	
NUTRS 699	Research in Nutritional Sciences	

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

\*\* Requirement for students in the FS HN Department.

Go to FS HN courses. ([http://catalog.iastate.edu/previouscatalogs/2021-2022/azcourses/fs\\_hn/](http://catalog.iastate.edu/previouscatalogs/2021-2022/azcourses/fs_hn/))

Go to KIN courses. (<http://catalog.iastate.edu/previouscatalogs/2021-2022/azcourses/kin/>)

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

Fall	Credits	Spring	Credits
FS HN 110, or KIN 252 and 253	1-2	FS HN 167	3
CHEM 163 or 177	4	CHEM 178 (if CHEM 177 taken; or Elective)	3
CHEM 163L or 177L	1	BIOL 212	3
BIOL 211	3	PSYCH 101	3

ENGL 150	3 H S 110	3
LIB 160	1	
MATH 140, 143, 160, or 165	3-4	

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<b>16-18</b>	<b>15</b>
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**Second Year**

Fall	Credits	Spring	Credits	Summer	Credits
CHEM 231		3 FS HN 265		3 A TR 220 (Or H S 305 in spring or fall)	2
CHEM 231L		1 BBMB 301		3	
BIOL 255		3 BIOL 256		3	
BIOL 255L		1 BIOL 256L		1	
PSYCH 230		3 FS HN 214		3	
ENGL 250		3 FS HN 115 or 215		1-2	
MICRO 201		2			
<b>16</b>		<b>14-15</b>		<b>2</b>	

**Third Year**

Fall	Credits	Spring	Credits	Summer	Credits
FS HN 340		1 Acceptance into the program required before spring of the third year		KIN 599, FS HN 599, KIN 699, or NUTRS 699	1-3
FS HN 360		3 FS HN 361		2 STAT 587	4
KIN 258		2 FS HN 367		1	
PHYS 115 or 111		4-5 H S 380		3	
SP CM 212		3 HSP M 380		3	
STAT 101, 104, or 226		3-4 HSP M 380L		3	
Apply for admission to the BS/MS program by Oct. 1		KIN 259		3	
		KIN 358		3	
<b>16-18</b>		<b>18</b>		<b>5-7</b>	

**Fourth Year**

Fall	Credits	Spring	Credits	Summer	Credits
KIN 505		2 KIN 462		3 KIN 599, FS HN 599, KIN 699, or FS HN 699	1-3
KIN 511 (offered odd years), 550, 567, or 570		3 KIN 501		3 FS HN 403	2
KIN 558 (offered odd years)		3 KIN 551		3	
NUTRS 561		4 NUTRS 564		3	
NUTRS 563 (Time conflict with NUTRS 501 next fall)		3 FS HN 581 or 682 (FS HN Dept)		1	
FS HN 682 (FS HN Dept)		R Humanities/ Ethics course		3	
<b>15</b>		<b>16</b>		<b>3-5</b>	

**Fifth Year**

Fall	Credits	Spring	Credits
FS HN 411		2 FS HN 466	3
KIN 355, 360, 366, or 372		3 FS HN 590C (FS HN Dept)	1
KIN 511, 550, 567, or 570 (KIN Dept)		3 HSP M 392	3
NUTRS 501		4 KIN 345	3
Humanities/ International Perspectives		3 KIN 699, NUTRS 699, KIN 599, or FS HN 599	2
FS HN 682 (FS HN Dept)		R FS HN 681	1
<b>15</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.