

DIET AND EXERCISE (H SCI)

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.

Facilitate and participate effectively in a group, team, or organization.

Plan life-long learning activities with the aim of improving professional skills.

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: 122 cr. for bachelor's degree and 34-38 cr. for master's degree

International Perspectives: 3 cr.

U.S. Diversity: 3 cr.

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.

Communications and Library: 10 cr.

ENGL 150	Critical Thinking and Communication	3
ENGL 250	Written, Oral, Visual, and Electronic Composition	3
LIB 160	Introduction to College Level Research	1
SP CM 212	Fundamentals of Public Speaking	3

Total Credits 10

Social Sciences: 6 cr.

PSYCH 101	Introduction to Psychology	3
PSYCH 230	Developmental Psychology	3

Total Credits 6

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 cr.

Select from: 5

CHEM 163 & 163L	College Chemistry and Laboratory in College Chemistry	
or CHEM 177 & 177L	General Chemistry I and Laboratory in General Chemistry I	
CHEM 231	Elementary Organic Chemistry	3
CHEM 231L	Laboratory in Elementary Organic Chemistry	1
PHYS 115	Physics for the Life Sciences	4
or PHYS 131	General Physics I	

Total Credits 13

Biological Sciences: 16 cr.

BBMB 301	Survey of Biochemistry	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 16

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		
or KIN 252	Introduction to the Discipline of Kinesiology		
& KIN 253	and Orientation and Learning Community in Kinesiology and Health		
FS HN 167	Introductory Human Nutrition and Health	3	
FS HN 214	Scientific Study of Food	3	
FS HN 215	Advanced Food Preparation Laboratory	1-2	
or FS HN 115	Food Preparation Laboratory		
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 in Health and Disease	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: 42 cr.

H S 380	Worksite Health Promotion	3
A TR 220	Basic Athletic Training	2
or H S 305	Instructor's First Aid and Cardiopulmonary Resuscitation	
KIN 259	Leadership Techniques for Fitness Programs	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 458	Principles of Fitness Assessment and Exercise Prescription	
KIN 462	Medical Aspects of Exercise	
FS HN 361	Nutrition and Health Assessment	2
FS HN 367	Medical Terminology for Health Professionals	1
FS HN 411	Food Ingredient Interactions and Formulations	2

FS HN 430	U.S. Health Systems and Policy	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 391	Foodservice Systems Management I	3
HSP M 392	Foodservice Systems Management II	3
NUTRS 563	Community Nutrition and Health *	3
NUTRS 564	Medical Nutrition and Disease II *	3
Total Credits		42

Diet and Exercise graduate courses to complete the master's degree requirements: 34-38 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 and Health *	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	
STAT 587	Statistical Methods for Research Workers	4

Select 3-6 additional credits (FSHN students select 3 credits, KIN students select 6 credits) from:

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/2022-2023/azcourses/fs_hn/)

Go to KIN courses. (<http://catalog.iastate.edu/previouscatalogs/2022-2023/azcourses/kin/>)

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First Year

Fall	Credits	Spring	Credits
FS HN 110 or KIN 252 <i>and</i> KIN 253	1-2	FS HN 167	3
CHEM 163 or 177	4	BIOL 212	3
CHEM 163L or 177L	1	H S 110	3
ENGL 150	3	PSYCH 230	3
PSYCH 101	3	Humanities/ Ethics course	3
LIB 160	1		
MATH 140, 143, 160, or 165	3-4		
16-18		15	

Second Year

Fall	Credits	Spring	Credits
CHEM 231	3	FS HN 265	3
CHEM 231L	1	BBMB 301	3
BIOL 255	3	BIOL 256	3
BIOL 255L	1	BIOL 256L	1
ENGL 250	3	FS HN 214	3
MICRO 201	2	FS HN 115 or 215	1-2
SP CM 212	3		
16		14-15	

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 131	4	H S 380	3		
STAT 101, 104, or 226	3-4	HSP M 380	3		
A TR 220 or H S 305	2	HSP M 380L	3		
Apply for admission to the BS/MS program by Oct. 1		KIN 259	3		
		KIN 358	3		
15-16			18		5-7

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		
NUTRS 561	4	KIN 551	3		
NUTRS 563 (Time conflict with NUTRS 501 next fall)	3	NUTRS 564	3		

4 Diet and Exercise (H SCI)

FS HN 682 (FS HN Dept)	R FS HN 430	2	
	FS HN 581 (FS HN Dept)	1	
	FS HN 682 (FS HN Dept)	R	
	12	15	1-3

Fifth Year

Fall	Credits	Spring	Credits
FS HN 411		2 FS HN 466	3
KIN 355, 360, 366, 372, or 458		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 699, NUTRS 699, KIN 599, or FS HN 599	2
FS HN 682 (FS HN Dept)		R FS HN 681 (FS HN Dept)	1
HSP M 391		3 Humanities/ International Perspectives	3
	15	13	

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.