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

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:

MATH 140 College Algebra
MATH 143 Preparation for Calculus
MATH 160 Survey of Calculus
MATH 165 Calculus I
MATH 181 Calculus and Mathematical Modeling for the Life Sciences I

Select at least 3 credits from:

STAT 101 Principles of Statistics
STAT 104 Introduction to Statistics

Total Credits 6-8

Physical Sciences: 13-17 cr.

Select from:

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

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:

FS HN 110 Professional and Educational Preparation
KIN 252 Disciplines and Professions in Kinesiology and & KIN 253 Health 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 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 Regulation of Metabolism 3
HS 110 Personal and Consumer Health 3
KIN 258 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: 44 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 2
KIN 345 Management of Health-Fitness Programs and Facilities 3
KIN 358 Physiology of Exercise 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 Quantity Food Production Management 3
HSP M 380L Quantity Food Production and Service Management Experience 3
HSP M 392 Foodservice Systems Management II 3
NUTRS 563 Community Nutrition * 3
NUTRS 564 Medical Nutrition and Disease II * 3

Total Credits: 44

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
Select 3-6 credits (FSHN students select 3 credits, KIN students select 6 credits) from:
- KIN 511
- KIN 550 Advanced Physiology of Exercise I
- KIN 567 Exercise and Health: Behavior Change
- KIN 570 Physical Activity Assessment for Health Related Research
- KIN 551 Advanced Physiology of Exercise II 3
- KIN 558 Physical Fitness - Principles, Programs and Evaluation 3
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
- STAT 587 Statistical Methods for Research Workers 4

* Course counts toward both bachelor’s and master’s degrees.
** Requirement for students in the FS HN Department.

Go to FS HN courses.
Go to KIN courses.

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

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits Spring</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FS HN 110, or KIN 252 and 253</td>
<td>1-2 FS HN 167</td>
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<tr>
<td>CHEM 163 or 177 (if CHEM 177 taken) or Elective</td>
<td>4 CHEM 178</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 163L or 177L</td>
<td>1 BIOL 212</td>
<td>3</td>
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<tr>
<td>BIOL 211</td>
<td>3 PSYCH 101</td>
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<tr>
<td>ENGL 150</td>
<td>3 H S 110</td>
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<td>LIB 160</td>
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### Second Year

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<th>Spring Credits</th>
<th>Summer Credits</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM 231</td>
<td>3 FS HN 265</td>
<td>3 A TR 220 (Or, H S 305 in spring or fall)</td>
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<tr>
<td>CHEM 231L</td>
<td>1 BBMB 301</td>
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<td>BIOL 255</td>
<td>3 BIOL 256</td>
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<tr>
<td>BIOL 255L</td>
<td>1 BIOL 256L</td>
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<td>PSYCH 230</td>
<td>3 FS HN 214</td>
<td>3</td>
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<tr>
<td>ENGL 250</td>
<td>3 FS HN 115 or 215</td>
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<tr>
<td>MICRO 201</td>
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### Third Year

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<th>Summer Credits</th>
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<tbody>
<tr>
<td>FS HN 340</td>
<td>1 Acceptance into the program required before spring of the third year</td>
<td>KIN 599 or FS HN 599 or KIN 699 or NUTRS 699</td>
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<tr>
<td>FS HN 360</td>
<td>3 FS HN 361</td>
<td>2 STAT 587</td>
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<td>KIN 258</td>
<td>2 FS HN 367</td>
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<tr>
<td>PHYS 115 (4 cr) or 111 (5 cr)</td>
<td>4-5 H S 380</td>
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<td>SP CM 212</td>
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<td>STAT 101, 104, or 226</td>
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<td>KIN 259</td>
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<tr>
<td>Humanities/</td>
<td>KIN 511 (offered odd years), 550, 567, or 570</td>
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<tr>
<td>International Perspectives</td>
<td>KIN 558 (offered odd years)</td>
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<td></td>
<td>NUTRS 561</td>
<td>4 NUTRS 564</td>
<td>3</td>
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<td></td>
<td>NUTRS 563</td>
<td>3 FS HN</td>
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<td></td>
<td>(Time conflict with NUTRS 501 next fall)</td>
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<td></td>
<td>FS HN 682</td>
<td>0 Humanities/ Ethics course (FSHN Dept)</td>
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### Fourth Year

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<tr>
<td>KIN 505</td>
<td>2 KIN 462</td>
<td>3 KIN 599 or FS HN 599 or KIN 699 or NUTRS 699</td>
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<td>1-3</td>
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<tr>
<td>KIN 511</td>
<td>3 KIN 501</td>
<td>3 FS HN 403</td>
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### Fifth Year

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<tbody>
<tr>
<td>FS HN 411</td>
<td>2 FS HN 466</td>
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<tr>
<td>KIN 355, 360, 366, or 372</td>
<td>3 FS HN 590C (FSHN Dept)</td>
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<tr>
<td>Additional course: KIN 511, 550, 567, 570 (KIN Dept)</td>
<td>3 HSP M 392</td>
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<tr>
<td>NUTRS 501</td>
<td>4 KIN 345</td>
<td>3</td>
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<tr>
<td>KIN 358</td>
<td>3 KIN 699 or NUTRS 699 or KIN 599 or FS HN 599</td>
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### Note
- MATH 140, 143, 160, 165, or 181

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**Diet and Exercise (H SCI)**

**Credits**

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**Humanities/Ethics course**

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**KIN 358**

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**Fifth Year**

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**Fall**

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**Spring**

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**Summer**

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**Credits**

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**Note:** Apply for admission to the BS/MS program by Oct. 1
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.