# **KINESIOLOGY**

### **Mission**

We promote health and well-being by creating and disseminating knowledge about physical activity and active living. Through discovery, learning and engagement we improve the lives of citizens of lowa, the United States and the world.

### Goals

The department has identified the following goals to support this mission:

- We seek to improve the lives of citizens of lowa, the United States, and the world by the creation and dissemination of knowledge about physical activity and its relationship to health and well-being.
- We prepare scholars and professionals in the study of physical activity at the undergraduate and graduate levels.
- We educate the public and the University community in the scientific aspects of physical activity especially exercise, sport, and the role of movement throughout the lifespan.

### **UNDERGRADUATE STUDY**

The Department of Kinesiology offers a Bachelor of Science degree in Kinesiology & Health. The undergraduate curriculum major/option is comprised of three components: general education, required departmental courses and the major/option courses. The intent of the general education component is to promote intellectual and personal growth and to prepare students for success in the basic, advanced and major/option components. Required courses provide an introduction to the field and fundamental principles of physical activity, fitness, health and disease.

### **B.S. degree in Kinesiology & Health**

The Kinesiology & Health major includes five specialization options.

Options comprise a focused area of study within Kinesiology and Health.

Coursework within each specialization option builds upon personal and scholarly learning by enabling students to master content and skills specific to career applications. Options available are:

- 1. Community and Public Health
- 2. Exercise Science
- 3. Physical Activity and Health Promotion
- 4. Physical Education Teacher Education
- 5. Pre-Health Professions

# Academic options within the Kinesiology & Health major Students in the Community and Public Health option are prepared for professional employment at local, state or national health agencies,

medical centers, and other public or private organizations that seek to promote health in the population.

Students in the Exercise Science option are prepared for professional roles as health and fitness leaders or program managers. Employment opportunities include work in corporate fitness programs, health/fitness facilities, clinics, or hospitals. Graduates are able to plan, implement and supervise exercise programs which will improve fitness and health. Graduates also have a basic understanding of management issues related to business applications in the health and fitness field.

Students in the **Physical Activity and Health Promotion** option are prepared for careers focused on health and physical activity. This option provides more emphasis on behavioral and psychological aspects of physical activity. Students are prepared for careers in community based settings, including work sites, schools, hospitals, and other community agencies.

Students in the **Physical Education/Teacher Education** option are prepared to teach physical education in grades K-12 and to meet the State of Iowa learning outcomes for teachers. Graduates can plan developmentally appropriate physical education, and individualize instruction and assessment for diverse audiences.

Students in the **Pre-Health Professions** option utilize an interdisciplinary approach to the study of human movement. In so doing, they become prepared for graduate study in Kinesiology or advanced study leading to careers in human medicine, physical therapy, physician assistant or other healthcare professions.

# Student Learning Outcomes for the Undergraduate Degree

Despite the diversity of options, the learning outcomes comprise a common framework for each student as they progress through lowa State University.

The learning outcomes emphasized in academic coursework in the Department of Kinesiology are:

### COMMUNICATION

Uses clear and effective written, oral, visual, and electronic (WOVE) communication techniques to foster inquiry, collaboration, and engagement in physical activity and health related settings.

### LIFELONG LEARNING, ASSESSMENT, AND SELF-REFLECTION

Analyzes and evaluates one's own knowledge, abilities and actions relative to professional standards, seeks opportunities to grow professionally, and utilizes self-assessment and assessment of others to foster physical, cognitive, social, and emotional well-being.

### CONTENT KNOWLEDGE, DISCOVERY, AND CRITICAL THINKING

Understands fundamental concepts of physical activity and health, conducts scientific inquiry, and applies critical thinking to solve problems from personal, scholarly, and professional perspectives.

### ETHICS, DIVERSITY, AND SOCIAL JUSTICE

Demonstrates leadership and social responsibility to improve quality of life for others and ensures equitable access for diverse groups by creating appropriate environments to initiate and maintain a physically active, healthy lifestyle.

## Other Program Offerings:

### **ENDORSEMENT TO COACH INTERSCHOLASTIC ATHLETICS**

The State Department of Education has provided for the endorsement of licensed teachers for the coaching of athletic teams in schools. The endorsement does not lead to licensure to teach physical education. For requirements of the program, leading to the coaching endorsement, see School of Education, Teacher Education. More information can be found at: http://www.kin.hs.iastate.edu/

### **ENDORSEMENT TO TEACH HEALTH EDUCATION**

Those interested in teaching health education in the public schools may get a primary licensure or an additional endorsement. The State Department of Education has approved the Health Teaching Licensure for grades 5-12.

### **BASIC ACTIVITY INSTRUCTION PROGRAM**

The department offers a wide selection of beginning, intermediate, and advanced courses in the areas of aquatics, dance, fitness, martial arts, and sports. These courses are designed to serve general education purposes for all students.

#### DANCE

Coursework in dance provides opportunities for students to develop an understanding and appreciation of dance as part of a liberal education. Those interested in teaching dance and physical education in the public schools may major in Kinesiology and Health (Physical Education Teacher Education) and minor in Dance.

An interdisciplinary Performing Arts major with a Dance emphasis is available through the College of Liberal Arts and Sciences. For further information see Index: Performing Arts to find Performing Arts Major, Emphasis in Dance.

## **Curriculum in Athletic Training**

The athletic training major prepares students for a career as an athletic trainer in high school, college or professional settings or for work in other settings (such as sports medicine clinics, the military, industry, and fitness centers). Program details including course requirements, admission procedures and technical standards can be found at http://www.kin.hs.iastate.edu/programs/athletic-training/#program-information-and-requirements.

## **Curriculum in Kinesiology and Health**

The curriculum in Kinesiology and Health is designed for students preparing to enter professional areas related to the medical, health, physical activity, exercise or sport science fields. Students majoring in Kinesiology & Health may select one of five options:

- 1. Community and Public Health
- 2. Exercise Science
- 3. Physical Activity and Health Promotion
- 4. Physical Education Teacher Education
- 5. Pre-Health Professions

Minors in dance, exercise science, health promotion, and kinesiology, are available; see requirements under Kinesiology, Undergraduate Programs.

A major in Performing Arts with a dance emphasis is available; see requirements under Curriculum in Performing Arts Program, Dance.

### **Communication Proficiency**

In order to meet graduation requirements, all students must earn an average of C (2.0) or better in ENGL 150 and ENGL 250, with the ENGL 150 grade being no lower than a C- and the ENGL 250 grade no lower than a C. Students not meeting this condition must earn a C or better in an advanced writing course:

ENGL 302	Business Communication	3
or ENGL 314	Technical Communication	
LIB 160	Introduction to College Level Research	1
SP CM 212	Fundamentals of Public Speaking	3

### **U.S. Diversity and International Perspectives**

In order to meet graduation requirements, all students must complete 3 cr. of course work in U.S. Diversity and 3 cr. in International Perspectives. KIN 360 meets the U.S. Diversity requirement and Dance 270 meets the International Perspectives requirement. See university approved list for other courses.

### **General Education:**

### **Physical and Life Sciences:**

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

# Additional option-specific requirements are: Community and Public Health

BIOL 211	Principles of Biology I	3
BIOL 211L	Principles of Biology Laboratory I	1
CHEM 163	College Chemistry	4
CHEM 163L	Laboratory in College Chemistry	1

FS HN 167	Introductory Human Nutrition and Health	3	or STAT 10	1 Principles of Statistics	
MICRO 201	Introduction to Microbiology	2	or STAT 104	4 Introduction to Statistics	
MICRO 201L	Introductory Microbiology Laboratory	1	Pre-Health Profes	ssions	
Exercise Science			One of the follow		3-4
FS HN 167	Introductory Human Nutrition and Health	3	MATH 140	College Algebra	
PHYS 115	Physics for the Life Sciences	4	or MATH 14	4: Preparation for Calculus	
Physical Activity	and Health Promotion		or MATH 14	4:Applied Trigonometry	
BIOL 211	Principles of Biology I	3	or MATH 16	5{Calculus I	
BIOL 211L	Principles of Biology Laboratory I	1	From the following	ng:	3-4
CHEM 163	College Chemistry	4	STAT 101	Principles of Statistics	
CHEM 163L	Laboratory in College Chemistry	1	or STAT 104	4 Introduction to Statistics	
FS HN 167	Introductory Human Nutrition and Health	3	Social Sciences	: 9 cr. min required	
MICRO 201	Introduction to Microbiology	2	Option-specific re	equirements are:	
MICRO 201L	Introductory Microbiology Laboratory	1	Community and P PSYCH 101	Introduction to Psychology	3
Physical Education	on Teacher Education		PSYCH 230	Developmental Psychology	3
PHYS 115	Physics for the Life Sciences	4	SOC 134	Introduction to Sociology	3
Pre-Health Profe				mirodaction to occiology	O
PHYS 131	General Physics I	4-5	Exercise Science	to to distribute Describedo as	0
& 131L	and General Physics I Laboratory		PSYCH 101	Introduction to Psychology	3
or PHYS 115	Physics for the Life Sciences			Developmental Psychology	2
M-4b			SOC 134	Introduction to Sociology	3
Mathematics ar Community and F				and Health Promotion	
From the following		3-4	PSYCH 101	Introduction to Psychology	3
STAT 101	Principles of Statistics		or PSYCH 230	Developmental Psychology	
or STAT 10	4 Introduction to Statistics		SOC 134	Introduction to Sociology	3
Exercise Science			<b>Physical Educatio</b>	on Teacher Education	
From the following		3-4	PSYCH 230	Developmental Psychology	3
MATH 140	College Algebra		SOC 134	Introduction to Sociology	3
or MATH 1	4:Preparation for Calculus		Pre-Health Profes	ssions	
or MATH 1	4{Applied Trigonometry		PSYCH 101	Introduction to Psychology	3
or MATH 1	6{Calculus I		or PSYCH 230	Developmental Psychology	
From the following	ng:	3-4	SOC 134	Introduction to Sociology	3
STAT 101	Principles of Statistics		Humanities: 6 c	r. min required	
or STAT 10	4 Introduction to Statistics			artment approved list.	
Dhysical Activity	and Health Promotion		Communication	s: 13 cr. min required	
One of the follow		3-4	ENGL 150	Critical Thinking and Communication	3
STAT 101	Principles of Statistics	_	ENGL 250	Written, Oral, Visual, and Electronic Composition	3
	4 Introduction to Statistics		LIB 160	Introduction to College Level Research	1
			SP CM 212	Fundamentals of Public Speaking	3
One of the follow	on Teacher Education	3-4	One of the follow	ing	3
MATH 104	Introduction to Probability	5 4	ENGL 302	Business Communication	
111/11/11/10-1	o addition to 1 robubility				

or MATH 14(College Algebra

or ENGL 314 Technical Communication
or SP CM 31 Business and Professional Speaking

### **Program requirements:**

The following courses are required in all majors and options:

H S 110	Personal and Consumer Health	3
H S 350	Human Diseases <sup>(*)</sup>	3
KIN 252	Introduction to the Discipline of Kinesiology	1
KIN 253	Orientation and Learning Community in Kinesiology and Health	1
KIN 258	Principles of Physical Fitness and Conditioning	2
KIN 358	Exercise Physiology (*)	3
KIN 359	Exercise Physiology Lab (*)	1

<sup>\*</sup> A grade of C- or better is required.

Total cr. required to graduate: A minimum of 124 credits is required, with a minimum of 46 credits in courses numbered 300 or above.

### Courses for Kinesiology and Health Major Option 1. Community and Public Health

This option prepares students for a diverse array of careers in public and private health agencies as well as local, state and federal government programs. Students are qualified for careers in a variety of health and human service agencies, community organizations, and hospitals. This option also provides the ideal background training for credentials as a Certified Health Education Specialist (CHES).

### Option Requirements:

P R 220	Principles of Public Relations	3
or P R 305	Publicity Methods	
H S 105	First Aid and Emergency Care	2
H S 285	Pre-Internship in Kinesiology and Health	1-2
KIN 360	Sociology of Physical Activity and Health (*)	3
H S 310	Community and Public Health (*)	3
H S 385	Preparation and Search Strategies for Kinesiology and Health Internships	0.5
H S 430	Community Health Program Development	3
H S 464	Physical Activity Epidemiology	3
or VDPAM 428	Principles of Epidemiology and Population Health	
H S 485A	Internship in Health Studies: Community and Public Health	8-12
HD FS 270	Family Communications and Relationships	3
HD FS 449	Program Evaluation and Proposal Writing	3
or ENGL 309	Proposal and Report Writing	
PSYCH 485	Health Psychology	3

One of the follow	ing	
HD FS 377	Aging and the Family	3
or HD FS 395	Children, Families, and Public Policy	
Electives: 8-12 cr	edits	

<sup>\*</sup> A grade of C- or better is required.

### **Option 2. Exercise Science**

This option prepares students for careers in exercise/fitness promotion. Students are prepared as health/fitness specialists, personal trainers, strength and conditioning specialists, and health coaches. Students find work in fitness centers, worksite health programs, medical facilities, cardiac rehabilitation centers, and other agencies that provide fitness services. Students are eligible to sit for certification exams offered by the American College of Sports Medicine and the National Strength & Conditioning Association.

### Option Requirements:

KIN 259	Leadership Techniques for Fitness Programs	3
KIN 266	Advanced Strength Training and Conditioning	2
KIN 285	Pre-Internship in Kinesiology and Health	1-2
KIN 345	Management of Health-Fitness Programs and Facilities	3
KIN 355	Biomechanics (*)	3
KIN 366	Exercise Psychology (*)	3
KIN 372	Motor Control and Learning Across the Lifespan (*)	3
KIN 373	Biomechanics and Motor Control Laboratory	1
KIN 385	Preparation and Search Strategies for Kinesiology and Health Internships	0.5
KIN 458	Principles of Fitness Assessment and Exercise Prescription (*)	4
KIN 459	Internship in Exercise Leadership	1
KIN 462	Medical Aspects of Exercise	3
KIN 480	Functional Anatomy	3
KIN 485A	Internship in Exercise Science	8-12
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	
Flectives: 12-16 cr	redits	

Electives: 12-16 credits

## Option 3. Physical Activity and Health Promotion

This option prepares students for a variety of career outlets focused on health and physical activity promotion. The coursework provides

<sup>\*</sup> A grade of C- or better is required.

the ideal background for students interested in worksite wellness programming. Students are also well suited to pursue career opportunities in health coaching and health promotion in schools, community agencies, as well as clinical settings. This option provides ideal background training for students interested in pursuing the Physical Activity in Public Health Specialist Certification offered by the American College of Sports Medicine.

### Option Requirements:

FS HN 365	Obesity and Health	3
H S 285	Pre-Internship in Kinesiology and Health	1-2
H S 310	Community and Public Health (*)	3
H S 380	Worksite Health Promotion	3
H S 385	Preparation and Search Strategies for Kinesiology and Health Internships	0.5
H S 430	Community Health Program Development	3
H S 464	Physical Activity Epidemiology	3
H S 485B	Internship in Health Studies: Physical Activity and Health Promotion	8-12
KIN 259	Leadership Techniques for Fitness Programs	3
KIN 360	Sociology of Physical Activity and Health (*)	3
KIN 366	Exercise Psychology (*)	3
KIN 458	Principles of Fitness Assessment and Exercise Prescription (*)	4
KIN 467	Exercise and Health: Behavior Change	3

Electives: 15-19 credits

### **Option 4. Physical Education Teacher Education**

This option is for students seeking a license to teach K-12 physical education. All courses required for licensure have a minimum grade requirement of a C or C-. Students interested in a coaching and/or a health endorsement must complete additional coursework.

### Option Requirements:

KIN 231	Fundamentals of Tumbling and Gymnastics (*)	1
KIN 232	Fundamentals of Team Sports (*)	1
KIN 236	Fundamentals of Individual Sports and Fitness (*)	1
KIN 259	Leadership Techniques for Fitness Programs	3
KIN 280	Directed Field Experience in Elementary Physical Education	1
KIN 281	Directed Field Experience in Secondary Physical Education	1
KIN 282	Field Experience with Educational Outreach	1

KIN 312	Movement Education in Elementary School	3
	Physical Education (**)	
KIN 313	Teaching Secondary Physical Education (**)	3
KIN 355	Biomechanics (*)	3
KIN 365	Sport Psychology (*)	3
or KIN 366	Exercise Psychology	
KIN 372	Motor Control and Learning Across the Lifespan (*)	3
KIN 395	Adapted Physical Education (**)	3
KIN 417	Supervised Teaching in Physical Education in the	8
	Secondary School (**)	
KIN 418	Supervised Teaching in Physical Education in the	8
	Elementary School (**)	
KIN 471	Measurement in Physical Education (**)	3
KIN 475	Physical Education Curriculum Design and	3
	Program Organization (**)	
DANCE 211	Fundamentals and Methods of Social and World	1
	Dance (*)	
EDUC 204	Social Foundations of Education in the United	3
	States: Secondary	
EDUC 406	Social Justice Education and Teaching: Secondary	3
H S 105	First Aid and Emergency Care (*)	2
H S 305	Instructor's First Aid and Cardiopulmonary	2
	Resuscitation (*)	
Electives: 5 credits		

- A grade of C- or better is required.
- \*\* A grade of C or better is required.

### **Option 5. Pre-Health Professions**

This option is for students interested in graduate study or for those who are preparing for professional programs in medicine, physical therapy, physician assistant, and other healthcare professions. Course work provides background in human movement while completing the requirements for entry into graduate or professional school.

### Option Requirements:

BIOL 211	Principles of Biology I	3
BIOL 211L	Principles of Biology Laboratory I	1
BIOL 212	Principles of Biology II	3
BIOL 212L	Principles of Biology Laboratory II	1
KIN 242	Planning for Success in a Health Career	0.5
KIN 355	Biomechanics (*)	3
KIN 365	Sport Psychology (*)	3
or KIN 366	Exercise Psychology (*)	
KIN 372	Motor Control and Learning Across the Lifespan (*)	3

<sup>\*</sup> A grade of C- or better is required.

KIN 373	Biomechanics and Motor Control Laboratory	1	
9 cr. from the follo	owing	9	
H S 464	Physical Activity Epidemiology	3	
KIN 455	Research Topics in Biomechanics	3	
KIN 458	Principles of Fitness Assessment and Exercise Prescription	4	
KIN 462	Medical Aspects of Exercise	3	
KIN 466	Exercise for Mental Health	3	
KIN 467	Exercise and Health: Behavior Change	3	
KIN 472	Neural Basis of Human Movement	3	
KIN 473	Physical Dimensions of Aging	3	
KIN 480	Functional Anatomy	3	
Specialization Requirements: Other prerequisites as required by professional schools.			

Electives: 6-14 credits

Freshman

## **FOUR YEAR PLANS**

Students must complete a 3-credit course in US diversity and a 3-credit course in international perspectives. Check the ISU homepage for a list of approved courses. You must complete a minimum of 46 credits in 300/400 level courses and a total of 124 credits for graduation. Four year plans are arranged with courses in prerequisite sequence and within the term a course is usually offered. These are SAMPLE plans - use the degree audit as "official" documentation of progress toward your degree.

## Kinesiology and Health, B.S. - Community/Public Health

Fall	Credits Spring	Credits
BIOL 211	3 CHEM 163	4
BIOL 211L	1 CHEM 163L	1
ENGL 150	3 FS HN 167	3
H S 110	3 H S 105	2
KIN 252	1 KIN 258	2
KIN 253	1 PSYCH 230	3
LIB 160	1 Elective	1
PSYCH 101	3	
	16	16

Sophomore			
Fall	Credits Spring	Credits	
BIOL 255	3 BIOL 256	3	
BIOL 255L	1 BIOL 256L	1	
ENGL 250	3 H S 285	1-2	

HD FS 270	3 P R 220 or 305	3
SOC 134	3 SP CM 212	3
STAT 101 or 104	3-4 Elective	1
	<b>Humanities Choice</b>	3
	16-17	15-16
Junior		
Fall	<b>Credits Spring</b>	Credits

	17	15.5
Humanities Choice	3 Electives	3
Elective	1 PSYCH 485	3
KIN 359	1 MICRO 201L	1
KIN 358	3 MICRO 201	2
HD FS 377 or 395	3 KIN 360	3
H S 350	3 HD FS 449 or ENGL 309	3
H S 310	3 H S 385	0.5

Senior		
Fall	<b>Credits Spring</b>	Credits
ENGL 302, 314, or SP CM	3 H S 485A	8-12
312		
H S 430	3	
H S 464	3	
Electives	2	
Electives (300+ Level	6	
Courses)		
	17	8-12

Kinesiology and Health, B.S. - Exercise Science (http://catalog.iastate.edu/previouscatalogs/2023-2024/collegeofhumansciences/kinesiology/)

### Freshman

Fall	<b>Credits Spring</b>	Credits
ENGL 150	3 FS HN 167	3
H S 110	3 KIN 258	2
KIN 252	1 MATH 140, 143, 145, or 165	3-4
KIN 253	1 SOC 134	3
LIB 160	1 SP CM 212	3
PSYCH 101 or 230	3 Electives	2
Humanities Choice	3	
	15	16-17

Sophomore		
Fall	<b>Credits Spring</b>	Credits
BIOL 255	3 A TR 220 or H S 305	2
BIOL 255I	1 BIOL 256	3

<sup>\*</sup> A grade of C- or better is required.

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ENGL 250	3 BIOL 256L	1	BIOL 255L	1 BIOL 256L	1
KIN 259	3 KIN 266	2	ENGL 250	3 SP CM 212	3
KIN 285	1-2 STAT 101 or 104	3-4	KIN 259	3 STAT 101 or 104	3-4
Electives	2 Electives	3	KIN 285	1-2 Electives	3
Social Science Choice	3		MICRO 201	2 Social Science Choice	3
	16-17	14-15	MICRO 201L	1	
Junior			Elective	1	
Fall	Credits Spring	Credits		15-16	16-17
H S 350	3 H S 380	3	Junior		
KIN 345	3 KIN 355	3	Fall	Credits Spring	Credits
KIN 358	3 KIN 372	3	H S 310	3 FS HN 365	3
KIN 359	1 KIN 385	0.5	H S 350	3 H S 380	3
KIN 366	3 Electives	5	KIN 358	3 H S 385	0.5
PHYS 115	4 Humanities Choice	3	KIN 359	1 H S 464	3
	17	17.5	KIN 366	3 KIN 360	3
Senior			Elective	4 Humanities Choice	3
Fall	Credits Spring	Credits		17	15.5
ENGL 302, 314, or SP CM	3 KIN 485A	8-12	Senior		
312			Fall	Credits Spring	Credits
KIN 373	1		ENGL 302, 314, or SP CM	3 H S 485B	8-12
KIN 458	4		312		
KIN 459	1		H S 430	3	
KIN 462	3		KIN 458	4	
KIN 480	3		KIN 467	3	
Electives (300+ level cours	e) 3		Electives	3	
	18	8-12		16	8-12

# Kinesiology and Health, B.S. - Physical Activity and Health Promotion

### Freshman

Fall	<b>Credits Spring</b>	Credits
BIOL 211	3 CHEM 163	4
BIOL 211L	1 CHEM 163L	1
ENGL 150	3 FS HN 167	3
H S 110	3 KIN 258	2
KIN 252	1 SOC 134	3
KIN 253	1 Humanities Choice	3
LIB 160	1	
PSYCH 101 or 230	3	
	16	16

### Sophomore

Fall	<b>Credits Spring</b>	Credits
BIOL 255	3 BIOL 256	3

# Kinesiology and Health, B.S. - Physical Education Teacher Education

### Freshman

Fall	<b>Credits Spring</b>	Credits
EDUC 204	3 DANCE 211	1
ENGL 150	3 KIN 236	1
H S 110	3 KIN 258	2
KIN 252	1 KIN 280	1
KIN 253	1 MATH 104, 140, STAT 101 or STAT 104	, 3-4
LIB 160	1 SOC 134	3
PSYCH 230	3 Humanities (International Perspective)	3
	15	14-15

KIN 252

KIN 253

Sophomore			LIB 160	1	
Fall	Credits Spring	Credits		15	15-16
BIOL 255	3 BIOL 256	3	Sophomore		
BIOL 255L	1 BIOL 256L	1	Fall	Credits Spring	Credits
ENGL 250	3 H S 305	2	BIOL 255	3 BIOL 256	3
H S 105	2 KIN 282	1	BIOL 255L	1 BIOL 256L	1
KIN 231	1 SP CM 212	3	CHEM 331	3 BBMB 301 or CHEM 332 <b>an</b>	<b>d</b> 3-4
KIN 232	1 Electives	3		CHEM 332L	
KIN 259	3 Humanities (American	3	CHEM 331L	1 SOC 134	3
	History)		ENGL 250	3 SP CM 212	3
KIN 281	1		KIN 242	0.5 Humanities Choice	3
	15	16	KIN 258	2	
Junior			PSYCH 101 or 230	3	
Fall	<b>Credits Spring</b>	Credits		16.5	16-17
KIN 312	3 ENGL 302, 314, or SP CM	3	Junior		
	312		Fall	Credits Spring	Credits
KIN 372	3 H S 350	3	KIN 366 or 365	3 H S 350	3
PHYS 115	4 KIN 313	3	KIN 372	3 KIN 355	3
Electives	3 KIN 358	3	PHYS 131	4 PHIL 331	3
Social Science Choice	3 KIN 359	1	PHYS 131L	1 Electives (300+ Level	6
	KIN 471	3		Courses)	
	16	16	STAT 101 or 104	3-4	
Senior			Social Science Choice	3	
Fall	<b>Credits Spring</b>	Credits		17-18	15
EDUC 406	3 KIN 417	8	Senior		
KIN 355	3 KIN 418	8	Fall	Credits Spring	Credits
KIN 366 or 365	3		ENGL 302, 314, or SP CM	3 KIN 400 Level Courses*	9
KIN 395	3		312		
KIN 475	3		FS HN 367	1 Electives	6
Elective	1		KIN 358	3	
	16	16	KIN 359	1	
Kinesiology and He	alth, B.S Pre-Health Profess	ions -	KIN 373	1	
Chiropractic	aidi, b.o. The meanin horest	,,,,,,,	Elective	1	
Freshman			Electives (300+ Level	3	
Fall	Credits Spring	Credits	Courses)		
BIOL 211	3 BIOL 212	3	Humanities Choice	3	
BIOL 211L	1 BIOL 212L	1		16	15
CHEM 177	4 CHEM 178	3	* KIN 400 Level Course Cho	oices (9 cr): KIN 458, 462, 466, 467, 47	'2. 473.
CHEM 177L	1 CHEM 178L	1	480, H S 464.		,,
ENGL 150	3 H S 110	3			

3-4

1

1 MATH 140, 143, 145, or 165

1 Elective

# Kinesiology and Health, B.S. - Pre-Health Professions - Dentistry

F	res	h	m	2	n

Fall	<b>Credits Spring</b>	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
CHEM 177	4 CHEM 178	3
CHEM 177L	1 CHEM 178L	1
ENGL 150	3 H S 110	3
KIN 252	1 MATH 143, 145, or 165	3-4
KIN 253	1	
LIB 160	1	

15

### Sophomore

Fall	<b>Credits Spring</b>	Credits
BIOL 255	3 BIOL 256	3
BIOL 255L	1 BIOL 256L	1
CHEM 331	3 CHEM 332	3
CHEM 331L	1 CHEM 332L	1
ENGL 250	3 SOC 134	3
KIN 242	0.5 STAT 101 or 104	3-4
KIN 258	2	
PSYCH 101 or 230	3	
	16.5	14-15

### Junior

Fall	<b>Credits Spring</b>	Credits
BBMB 404	3 H S 350	3
KIN 366 or 365	3 KIN 355	3
KIN 372	3 PHYS 132	4
PHYS 131	4 PHYS 132L	1
PHYS 131L	1 Electives	3
SP CM 212	3 Humanities Choice	3
	17	17

### Senior

Fall	<b>Credits Spring</b>	Credits
ENGL 302, 314, or SP CM 312	3 BIOL 313, 314, 328, 335, 350, or BBMB 405	3-4
KIN 358	3 Electives (300+ Level	3
KIN 359	Courses) 1 KIN 400 Level Courses*	9
KIN 373	1	
Electives (300+ Level	3	
Courses)		

	17	15-16
Social Science Choice	3	
Humanities Choice	3	

\* KIN 400 Level Course Choices (9 cr): KIN 458, 462, 466, 467, 472, 473, 480, H S 464.

# Kinesiology and Health, B.S. - Pre-Health Professions - Human Medicine

### Freshman

14-15

Fall	<b>Credits Spring</b>	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
CHEM 177	4 CHEM 178	3
CHEM 177L	1 CHEM 178L	1
ENGL 150	3 H S 110	3
KIN 252	1 MATH 165	4
KIN 253	1	
LIB 160	1	
	15	15

### Sophomore

Fall	<b>Credits Spring</b>	Credits
BIOL 255	3 BIOL 256	3
BIOL 255L	1 BIOL 256L	1
CHEM 331	3 CHEM 332	3
CHEM 331L	1 CHEM 332L	1
ENGL 250	3 SOC 134	3
KIN 242	0.5 STAT 101 or 104	3-4
KIN 258	2	
PSYCH 101 or 230	3	
	16.5	14-15

### Junior

Fall	<b>Credits Spring</b>	Credits
BBMB 404	3 BIOL 313, 314, 328, 335, 350	), 3-4
	or BBMB 405	
KIN 366 or 365	3 H S 350	3
KIN 372	3 KIN 355	3
PHYS 131	4 PHYS 132	4
PHYS 131L	1 PHYS 132L	1
SP CM 212	3 Humanities Choice	3-4
	17	17-10

Senior		
Fall	<b>Credits Spring</b>	Credits
ENGL 302, 314, or SP CM 312	3 KIN 400 Level Courses*	9
KIN 358	3 Electives	2
KIN 359	1 Humanities Choice	3
KIN 373	1	
Electives (300+ Level Courses)	6	
Social Sciences Choice	3	
	17	14

<sup>\*</sup> KIN 400 Level Course Choices (9 cr): KIN 458, 462, 466, 467, 472, 473, 480, H S 464.

# Kinesiology and Health, B.S. - Pre-Health Professions - Occupational Therapy

### Freshman

Fall	<b>Credits Spring</b>	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
ENGL 150	3 KIN 258	2
H S 110	3 MATH 140, 143, 145, or 165	3-4
KIN 252	1 SOC 134	3
KIN 253	1 Humanties Choice	3
LIB 160	1	
PSYCH 101	3	
	16	15-16

### Sophomore

KIN 372

Fall	Credits Spring	Credits
BIOL 255	3 BIOL 256	3
BIOL 255L	1 BIOL 256L	1
CHEM 163 or 177	4 PHYS 115 or 131 <b>and</b> 131L	4-5
CHEM 163L or 177L	1 Electives	3
ENGL 250	3 Humanities Choice	3
KIN 242	0.5	
PSYCH 230	3	
Elective	1	
	16.5	14-15
Junior		

Fall	<b>Credits Spring</b>	Credits
KIN 366 or 365	3 FS HN 367	1

3 H S 350

SP CM 212	3 KIN 355	3
STAT 101 or 104	3-4 PHIL 331	3
Electives	3 Electives (300+ Level Courses)	6
	15-16	16
Senior		
Fall	Credits Spring	Credits
ENGL 302, 314, or SP CM 312	3 KIN 400 Level Courses*	9

	17	16
Electives	3	
Courses)		
Electives (300+ Level	3	
PSYCH 460	3	
	Courses)	
KIN 373	1 Electives (300+ Level	3
KIN 359	1 Elective	1
	Choice	
KIN 358	3 PSYCH, SOC, or Humanities	3
312		
ENGL 302, 314, or SP CM	3 KIN 400 Level Courses*	9
ı alı	orcantooping	Orcuito

<sup>\*</sup> KIN 400 Level Course Choices (9 cr): KIN 458, 462, 466, 467, 472, 473, 480, H S 464.

# Kinesiology and Health, B.S. - Pre-Health Professions - Optometry (Pharmacy)

### Freshman

Fall	Credits Spring	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
CHEM 177	4 CHEM 178	3
CHEM 177L	1 CHEM 178L	1
ENGL 150	3 H S 110	3
KIN 252	1 MATH 165	4
KIN 253	1	
LIB 160	1	
	15	15

### Sophomore

3

Fall	Credits Spring	Credits
BIOL 255	3 BIOL 256	3
BIOL 255L	1 BIOL 256L	1
CHEM 331	3 CHEM 332	3
CHEM 331L	1 CHEM 332L	1
ENGL 250	3 SOC 134	3
KIN 242	0.5 Humanities Choice	3

15

KIN 258	2		Sophomore		
PSYCH 101 or 230	3		Fall	Credits Spring	Credits
	16.5	14	BIOL 255	3 BIOL 256	3
Junior			BIOL 255L	1 BIOL 256L	1
Fall	Credits Spring	Credits	CHEM 177	4 CHEM 178	3
BBMB 404 or 420	3 H S 350	3	CHEM 177L	1 CHEM 178L	1
KIN 366 or 365	3 KIN 355	3	ENGL 250	3 FS HN 367	1
KIN 372	3 PHYS 132	4	KIN 242	0.5 Electives	3
PHYS 131	4 PHYS 132L	1	Humanities Choice	3 PSYCH Choice	3
PHYS 131L	1 STAT 101 or 104	3-4		15.5	15
SP CM 212	3 Electives (300+ Level	3	Junior		
	Courses)		Fall	<b>Credits Spring</b>	Credits
	17	17-18	KIN 366 or 365	3 H S 350	3
Senior			KIN 372	3 KIN 355	3
Fall	<b>Credits Spring</b>	Credits	PHYS 131	4 PHYS 132	4
ENGL 302, 314, or SP CM	3 KIN 400 Level Courses*	9	PHYS 131L	1 PHYS 132L	1
312			SP CM 212	3 PSYCH 460	3
KIN 358	3 MICRO 201 or 302	2-3	STAT 101 or 104	3-4 Elective	1
KIN 359	1 MICRO 201L or 302L	1		17-18	15
KIN 373	1 Electives (300+ Level	3	Senior		
	Courses)		Fall	Credits Spring	Credits
Electives (300+ Level	3		ENGL 302, 314, or SP CM	3 KIN 400 Level Courses*	9
Courses)			312		
Humanities Choice	3		KIN 358	3 Electives (300+ Level	6
Social Science Choice	3			Courses)	
	17	15-16	KIN 359	1	
* KIN 100 Lavel Course Ch	oices (9 cr): KIN 458, 462, 466, 467, 4	172 /172	KIN 373	1	
480, H S 464.	oices (3 ci). Niii 430, 402, 400, 407, 4	rı 2, 41 J,	Electives (300+ Level	9	
.55,110 10 1.			Courses)		

# Kinesiology and Health, B.S. - Pre-Health Professions - Physical Therapy

### Freshman

Fall	Credits Spring	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
ENGL 150	3 KIN 258	2
H S 110	3 MATH 143, 145, or 165	3-4
KIN 252	1 PSYCH 101	3
KIN 253	1 Humanties Choice	3
LIB 160	1	
SOC 134	3	
	16	15-16

<sup>\*</sup> KIN 400 Level Course Choices (9 cr): KIN 458, 462, 466, 467, 472, 473, 480, H S 464.

# Kinesiology and Health, B.S. - Pre-Health Professions - Physician Assistant

### Freshman

Fall	Credits Spring	Credits
BIOL 211	3 BIOL 212	3
BIOL 211L	1 BIOL 212L	1
CHEM 177	4 CHEM 178	3
CHEM 177L	1 CHEM 178L	1
ENGL 150	3 H S 110	3

	15	17-18
LIB 160	1	
KIN 253	1 PSYCH 101	3
KIN 252	1 MATH 140, 143, 145, or 1	65 3-4

### Sophomore

Fall	<b>Credits Spring</b>	Credits
BIOL 255	3 BIOL 256	3
BIOL 255L	1 BIOL 256L	1
CHEM 231 or 331	3 SOC 134	3
CHEM 231L or 331L	1 SP CM 212	3
ENGL 250	3 STAT 101 or 104	3-4
KIN 242	0.5 Humanities Choice	3
KIN 258	2	
PSYCH 230	3	
	16.5	16-17

### Junior

Fall	<b>Credits Spring</b>	Credits
BBMB 316 or 404	3 BIOL 313	3
KIN 366 or 365	3 BIOL 313L	1
KIN 372	3 FS HN 367	1
PSYCH 460	3 H S 350	3
Humanities Choice	3 PHYS 115 or 131 <b>and</b> 131L	4-5
	Electives	3
	15	15-16

#### Senior

Fall	Credits Spring	Credits
ENGL 302, 314, or SP CM	3 KIN 400 Level Courses*	9
312		
KIN 355	3 Electives (300+ Level	3
	Courses)	
KIN 358	3 Electives	3
KIN 359	1	
KIN 373	1	
MICRO 302	3	
MICRO 302L	1	
Elective	1	
	16	15

<sup>\*</sup> KIN 400 Level Course Choices (9 cr): KIN 458, 462, 466, 467, 472, 473, 480, H S 464.

## **Minors**

### **Dance**

The minor requires a minimum of 15 credits and may be earned by completing the following:

6 cr. from the following:

DANCE 270	Dance Appreciation	3
DANCE 320	Sound and Movement	3
DANCE 360	History and Philosophy of Dance	3
4 cr. from the follo	owing:	
DANCE 220	Modern Dance Composition	2
DANCE 384	Teaching Children's Dance	2
DANCE 385	Methods of Teaching Dance	2
DANCE 386	Teaching Dance Technique and Composition	2
5 cr. from the follo	owing:	
DANCE 222	Modern Dance II	1
DANCE 223	Modern Dance III	1
DANCE 224	Concert and Theatre Dance	1
DANCE 232	Ballet II	1
DANCE 233	Ballet III	1
DANCE 242	Jazz II	1
DANCE 250	Yoga Movement	1
DANCE 370	Advanced Studies in Dance	1
DANCE 490	Independent Study	1

## **Exercise Science**

**KIN 266** 

**KIN 345** 

KIN 462

KIN 467

**Facilities** 

Medical Aspects of Exercise

Exercise and Health: Behavior Change

The minor requires a minimum of 18 credits and may be earned by completing the following:

KIN 258	Principles of Physical Fitness and Conditioning	2
KIN 358	Exercise Physiology	3
KIN 359	Exercise Physiology Lab	1
KIN 366	Exercise Psychology	3
KIN 458	Principles of Fitness Assessment and Exercise	4
	Prescription	
5 cr. from the following		
A TR 220	Basic Athletic Training	
KIN 259	Leadership Techniques for Fitness Programs	

**Advanced Strength Training and Conditioning** 

Management of Health-Fitness Programs and

### **Health Promotion**

The minor requires a minimum of 18 credits and may be earned by completing the following:

H S 110	Personal and Consumer Health	3
H S 350	Human Diseases	3
H S 380	Worksite Health Promotion	3
3-6-cr. from the fo	llowing	
H S 305	Instructor's First Aid and Cardiopulmonary Resuscitation	
H S 310	Community and Public Health	
3-6 cr. from the following		
H S 430	Community Health Program Development	
H S 464	Physical Activity Epidemiology	
KIN 467	Exercise and Health: Behavior Change	

### **Kinesiology**

The minor requires a minimum of 16 credits and may be earned by completing the following: (For non-majors only)

KIN 355	Biomechanics	3
KIN 358	Exercise Physiology	3
KIN 359	Exercise Physiology Lab	1
KIN 360	Sociology of Physical Activity and Health	3
KIN 372	Motor Control and Learning Across the Lifespan	3
KIN 365	Sport Psychology	3
or KIN 366	Exercise Psychology	

### Gerontology

The department participates in the interdepartmental minor in gerontology (see Index).

### **Health Coach Certificate**

Students pursuing a bachelor's degree in kinesiology can seek additional credentials through the Health Coach Certificate. More information on the certificate can be found at: Health Coach Certificate (http://catalog.iastate.edu/previouscatalogs/2023-2024/collegeofhumansciences/healthcoach/#text).

The Kinesiology Department offers two concurrent undergraduate and graduate programs.

### B.S./M.A.T.R. degree in Athletic Training

Certified Athletic Trainers are allied medical health professionals who specialize in the prevention, assessment, treatment and rehabilitation of injuries to athletes and physically active individuals who are engaged in physical and athletic activities. To gain certification, candidates must graduate from a CAATE accredited athletic training education program and successfully pass the Board of Certification (BOC) examination.

In addition to BOC certification, many states also have licensure requirements to practice athletic training. The Athletic Training program at Iowa State University, accredited since 2001 has transitioned to the new M.A.T.R. degree program, which includes various athletic training clinical rotations including high school, physical therapy clinics, surgical observation experiences, and emergency room observation.

More information on the B.S./M.A.T.R. degree in Athletic Training (http://catalog.iastate.edu/previouscatalogs/2023-2024/collegeofhumansciences/athletictraining/#text).

### **B.S./M.S. DEGREE IN DIET AND EXERCISE**

A combined Bachelor of Science and Master of Science (B.S./M.S.) degree in Diet and Exercise is available. The program is jointly administered by the Department of Food Science and Human Nutrition (FS HN), and the Department of Kinesiology. Students interested in this program must enroll as freshmen in the Pre-Diet and Exercise program. In the fall of the junior year, students will apply for admission to the B.S./M.S. program. Students not accepted into the program will continue toward completion of a B.S. degree in Dietetics or Kinesiology & Health. Coursework has been designed to facilitate a 4-year graduation date for those students not accepted into the program and electing to complete a single undergraduate degree. Students accepted into the program will progress toward completion of B.S./M.S. degrees in Diet and Exercise. More information can be found at: https://fshn.hs.iastate.edu/find-yourmajor/diet-and-exercise/

### **Graduate Study**

The Department of Kinesiology graduate program seeks to integrate discovery and learning by preparing graduate students to understand and create basic and applied knowledge in the study of physical activity, exercise and sport. The normal prerequisite to major graduate work is the satisfactory completion of a curriculum essentially equivalent to that required of undergraduate students in kinesiology at this university. However, it is possible for students to qualify for graduate study if undergraduate preparation has been in a related area.

Students in the M.S. and Ph.D. degrees are required to complete original research and write a thesis or dissertation. There is a non-thesis degree option for M.S. students requiring more coursework and an internship experience or other creative component. Specific information about the requirements for these degree options is available from the department office or from the department web site (http://www.kin.hs.iastate.edu/graduate (http://www.kin.hs.iastate.edu/graduate/)).