

# EXERCISE SCIENCE, B.S.

## Major Code: 1226

The Exercise Science degree (previously named Human Performance and Health Promotion) will prepare students for fitness positions in wellness facilities, as well as in general fitness facilities and gyms. Towards this end, the curriculum will include a strong foundation in math and science, along with basic fitness-related classes in general fitness and wellness, sport psychology, motor learning, strength and conditioning, exercise physiology, exercise appraisal and programming, biomechanics and fitness program administration. Specialized classes will include introduction to exercise field work, emergency response procedures, cardiopulmonary assessment, exercise physiology for special populations, and kinesiology.

The baccalaureate program culminates in two internships designed to provide the student with significant hands-on training and experience in the field of Exercise Science. The first internship involves direct participation in the daily operations of the college-run wellness center. The students will be responsible for all aspects of the operation including administration, management, and exercise programming. The Capstone Internship involves a practical off-campus learning experience immersing students in the day-to-day operations of approved agencies. Sites for internships will include corporate fitness centers, wellness clinics, and community-based health clubs.

The Exercise Science degree will prepare students for preventative and rehabilitative fitness positions in cardiac rehabilitation and wellness facilities, cardiology offices, hospitals and nursing homes, as well as in general fitness facilities and gyms.

Upon successful completion of this program, students will be able to:

- Lead, supervise, and effectively guide and motivate individuals in an exercise program.
- Administer fitness assessments, develop and implement prescriptions based on those assessments
- Conduct experiments and collect data related to exercise science, and then interpret how this data relates to physiological adaptations.
- Describe how disease negatively affects health and quality of life and how exercise can mitigate effects
- Apply principles discussed within the Exercise Science curriculum in a practical, professional environment
- Describe the influence of psychological principles in sport, exercise, and other performance related contexts
- Present and organize information in a manner that is consistent with the principles of scientific writing

## Curriculum Requirements

A minimum of 120 credits is required for degree completion.

Code	Title	Credits
HHPH 100	Intro to Wellness & Fitness	4
HHPH 101	Fieldwork in HHPH (45 hours)	1
HHPH 200	Exercise Physiology I	4
HHPH 201	Exercise Physiology II	4
HHPH 300	Sport & Exercise Psychology	3
HHPH 301	Kinesiology & Applied Anatomy	4
HHPH 304	Community Service in Sport Sci	1

HHPH 305	Fitness Assess and Ex Rx	4
HHPH 400	App Strength Cond Principles	3
HHPH 401	Cardiopulmonary Assess for Ex	3
HHPH 402	Wellness Center Internship	3
HHPH 403	Ex Phys Special Populations	3
HHPH 404	Fitness Leadership and Admin	3
HHPH 405	HHPH Internship	6
NUTR 110	Nutrition I	3
NUTR 250	Sports Nutrition	3
MAST 100	CPR for Healthcare Providers	1
PHYS 107	Introductory Physics I	4
BIOL 120	General Biology I	4
BIOL 150	Human Anatomy + Physiology I	4
BIOL 151	Human Anatomy + Physiology II	4
COMP 101	Composition and Research	3
COMP 310	Advance Tech Communication	3
COMM 111	Introduction to Speech	3
MATH 141	Statistics	3
MATH 151	General Calculus A	3
SOCI 250	Social Gerontology	3
PHIL 201	Introduction To Philosophy	3
PHIL 311	Professional Ethics	3
PSYC 101	Introduction to Psychology	3
PSYC 384	Group Behavior	3
PSYC 386	Social Psychology	3
SUNY General Education as Advised: Arts, US History & Civic Engagement, World History & Global Awareness, or World Languages		3
SUNY General Education Diversity, Equity, Inclusion and Social Justice as Advised		3
SUNY General Education Electives as Advised (General Education or LAS Credits)		5
Electives as Advised		7
<b>Total Credits</b>		<b>120</b>

## Suggested Course Sequence

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
HHPH 100	Intro to Wellness & Fitness	4
BIOL 120	General Biology I	4
NUTR 110	Nutrition I	3
COMP 101	Composition and Research	3
GNED 100	First Year Experience	2
MATH 151	General Calculus A	3
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
HHPH 101	Fieldwork in HHPH	1
COMM 111	Introduction to Speech	3
PHYS 107	Introductory Physics I	4
General Education as Advised		3
Elective as Advised		3
<b>Credits</b>		<b>14</b>
<b>Year 2</b>		
<b>Fall</b>		
BIOL 150	Human Anatomy + Physiology I	4
PSYC 101	Introduction to Psychology	3

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HPHP 200	Exercise Physiology I	4
SUNY General Education Diversity, Equity, Inclusion and Social Justice as Advised		3
Elective as Advised		2
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
MATH 141	Statistics	3
BIOL 151	Human Anatomy + Physiology II	4
HPHP 201	Exercise Physiology II	4
SOCI 250	Social Gerontology	3
PHIL 201	Introduction To Philosophy	3
MAST 100	CPR for Healthcare Providers	1
<b>Credits</b>		<b>18</b>
<b>Year 3</b>		
<b>Fall</b>		
HPHP 301	Kinesiology & Applied Anatomy	4
HPHP 300	Sport & Exercise Psychology	3
PHIL 311	Professional Ethics	3
PSYC 384	Group Behavior	3
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
HPHP 305	Fitness Assess and Ex Rx	4
HPHP 304	Community Service in Sport Sci	1
COMP 310	Advance Tech Communication	3
NUTR 250	Sports Nutrition	3
General Education as Advised		3
<b>Credits</b>		<b>14</b>
<b>Year 4</b>		
<b>Fall</b>		
HPHP 400	App Strength Cond Principles	3
HPHP 401	Cardiopulmonary Assess for Ex	3
HPHP 402	Wellness Center Internship	3
HPHP 403	Ex Phys Special Populations	3
<b>Credits</b>		<b>12</b>
<b>Spring</b>		
HPHP 404	Fitness Leadership and Admin	3
HPHP 405	HPHP Internship	6
PSYC 386	Social Psychology	3
General Education Elective as Advised		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>121</b>