

Bachelor of Science in Health and Exercise Science

Program Description

The Health and Exercise Science (HES) Program at the Jefferson College of Health Sciences is a four-year, Bachelor of Science degree program. The blend of classroom, laboratory, and clinical components is designed to prepare students for careers in Health and Exercise Science and/or post-baccalaureate education.

A Bachelor of Science degree in Health and Exercise Science from Jefferson College of Health Sciences prepares graduates for careers in college, clinical, corporate, and commercial settings, including personal fitness consulting/training, cardiopulmonary rehabilitation, hospital and/or corporate wellness, community health and obesity prevention, and industrial rehabilitation/worksites fitness. Students enrolled in the program will have the flexibility to develop knowledge, skills, and abilities to pursue post-baccalaureate education in medicine, occupational or physical therapy, exercise science, public health or other graduate and/or professional allied health programs.

Program Philosophy

The educational philosophy of the HES program is based on the concepts of learner-centered teaching, experiential learning and academic excellence. The HES program features a complementary relationship between general education and professional studies, between academic and personal development, between service and individual growth, and between the JCHS campus and the larger community.

The overarching vision of HES is to help people establish and maintain physically active, healthy lifestyles. This includes helping people develop the essential beliefs, attitudes, knowledge, and skills associated with maintaining lifelong physical activity habits that promote *individual responsibility* toward optimal health and fitness. Additionally, and equally important, is helping people to develop *collective efficacy*, communities of learned citizens that value active living, are confident in their ability to live actively, and are committed to our transformation to a physically active society. Physically active citizens behave in ways that recognize and support societal changes and policies aimed at building healthy, supportive environments that are conducive to the practice of safe, effective, and inclusive physical activity and health behaviors that are available to *all* people.

Program Mission

The mission of the Health and Exercise Science program is to provide an academic environment that will enable students to develop knowledge, skills, and abilities (KSAs) in the areas of health and exercise science. Through a focused curriculum, faculty-student interactions, and clinical opportunities, graduates of the Health and Exercise Science program will cultivate the competencies and proficiencies required for entry-level professional practice or continuation to graduate-level education.

Program Outcomes

Graduates of the Health and Exercise Science program will be able to

1. apply biophysical and behavioral theory and research from health and exercise science to critically analyze health, exercise, and fitness processes, behaviors, and outcomes,
2. demonstrate integration of health and exercise science scholarship into clinical practice through
 - assessment, design, and implementation of individual and group exercise programs and fitness activities for persons of all ages who are apparently healthy and those with controlled disease,
 - application of skills in evaluating health behaviors and risk factors, conducting fitness assessments, writing appropriate exercise prescriptions, and motivating individuals to modify negative health habits and maintain positive lifestyle behaviors for health promotion,
3. demonstrate competence, professionalism, cultural sensitivity, and a commitment to life-long learning as a leader of health and fitness programs in college, clinical, corporate and/or commercial settings in which clients participate in health promoting and fitness-related activities,
4. develop knowledge, skills, and abilities requisite for post-baccalaureate education in health and exercise science, other medical/allied health fields, and/or professional certification/career placement, and
5. complete minimally 400 hours of practical experience in supervised clinical exercise program settings.

Minimum Performance Standards

Client safety and provision of quality services is paramount. Students in the Health and Exercise Science Program are expected to demonstrate:

Observation Skills:

- Ability to observe a client's response to programming, changes in client's physical condition, body alignment, exercise technique, gait, posture and functional abilities, interpret instrument panels/displays, assess the environment, and gather information from data sources and professional literature.

Communication Skills:

- Ability to communicate clearly, effectively and efficiently in English, both orally and in writing, with patients and their families, other health care providers, peers, faculty, community or other professional groups.
- Ability to use nonverbal behavior to effectively and appropriately communicate messages.
- Ability to recognize, interpret and respond to the nonverbal behavior of others.
- Ability to read at a competency level necessary to safely and efficiently carry out the essential functions of a task.
- Ability to document clearly, legibly and using appropriate scholarly and professional terminology.

Motor Skills:

- Demonstrate satisfactory movement skills necessary to model and instruct appropriate exercise technique.
- Demonstrate satisfactory physical conditioning and motor ability necessary to assure safety when working with clients.
- Demonstrate motor control necessary to manipulate/operate equipment controls and use assessment tools.

Intellectual Conceptual Skills:

- Ability to collect, interpret and assess data about clients.
- Ability to prioritize multiple tasks, integrate information and make decisions.
- Ability to problem-solve.
- Demonstrate critical thinking skills sufficient for safe and sound clinical judgment and discretion.
- Ability to apply knowledge of health and exercise interventions in a variety of settings and situations.
- Ability to recognize and respond appropriately to emergency and potentially hazardous situations.

Behavior:

- Ability to interact appropriately with individuals of all ages, genders, races, socio-economic, religious, lifestyle and cultural backgrounds.
- Ability to cope effectively with the stresses of academic demands and clinical situations.

- Ability to work collaboratively with HES students, faculty, and clinical staff.
- Demonstrate emotional health and stability required to fully utilize intellectual capabilities, demonstrate good judgment and render services required in diverse health and exercise settings.

The HES Program faculty will assist a student's accomplishment of these technical standards, but the responsibility for meeting KSAs rests with the student.

If a student cannot demonstrate the ability to meet the technical standards, it is the responsibility of the student to request appropriate accommodations. The College will determine whether it agrees that the student can meet the technical standards with reasonable accommodation. This includes a review as to whether the accommodations requested are reasonable, taking into account whether accommodations would jeopardize clinician or client safety, the institution, or the educational process of the student, including all coursework, and clinical experiences deemed essential for graduation.

Academic Policies

In addition to those policies published in the JCHS Catalog and JCHS Student Handbook, students are expected to follow the program policies as published in the Health and Exercise Science Program student handbook. This handbook is available electronically on the program blackboard site and may be requested from the department secretary.

Program Progression

HES courses (with a HES prefix) should be taken in the year sequence listed. Students must successfully complete lower (200) level courses before advancing to the next (300) level. The student must achieve a minimum grade of “C” in all professional courses and BIO 211 and 212, as well as meeting prerequisite or co-requisite requirements in order to advance to the next semester. Please refer to the catalog course descriptions for prerequisite and co-requisite requirements.

Licensing Information

Health and Exercise Science program graduates will be eligible to pursue certifications with the American College of Sports Medicine, National Strength and Conditioning Association and other organizations requiring a Bachelor's degree and clinical experience.

Exercise Science Minor

Students who are majoring in disciplines other than Health and Exercise Science (HES) may choose to minor in Exercise Science. The following are the requirements for an Exercise Science minor.

Required

- Minimum 15 credit hours, of which 9 must be earned at JCHS
- HES 201 Foundations of Health and Exercise Science (1)
- HES 221 Group Exercise Activities (1) and HPE 221 Aerobic Exercise Skills (1)
- HES 222 Muscle Fitness Activities (1) and HPE 222L Resistance Training Skills (1)
- HES 302 Exercise Physiology (4)
- HES 334/334L Kinesiology (3)
- 3 hours HES courses at the 300/400 level (3)

Health Promotion Minor

Students who are majoring in disciplines other than Health and Exercise Science (HES) may choose to minor in Health Promotion. The following are the requirements for a Health Promotion minor.

Required

- Minimum 15 credit hours, of which 9 must be earned at JCHS
- IDS 355 Introduction to Public Health (3)
- HLT 301 Nutrition (3)
- PSY 221 Behavior Change Methods (3)
- HES 365 Psychosocial Aspects of Exercise (3)
- HES 452 Community Health and Physical Activity Promotion (3)

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Program of Study (122 credit hours)

HES classes must be taken sequentially in the order presented.

PREFIX	COURSE TITLE	CREDITS
Semester 1		
BUS 131	Computer Concepts & Applications	3
CHM 111/111L	General Chemistry I	4
ENG 111	Grammar & Composition I	3
GEN 100	Academic Seminar	1
MTH 165	College Algebra (or above)	3
PSY 201	General Psychology	3
Total Credits:		17
Semester 2		
ELE	Elective	3
ENG 112	Grammar & Composition II	3
IDS 112	Basic First Aid & CPR for Healthcare Providers	1
IDS 215	Bioethics	3
PSY 202	Human Growth & Development	3
SOC 213	Social Issues in Healthcare Delivery	3
Total Credits:		16
Semester 3		
BIO 211/211L	Anatomy & Physiology I	4
ELE	Elective	3
ELE (ENG)	Elective (ENG 325 or ENG 220)	3
HES 201	Foundations of Health and Exercise Science	1
HES 221	Group Exercise Activities	1
HPE 221	Aerobic Exercise Skills	1
PSY 221	Behavior Change Methods	3
Total Credits:		16
Semester 4		
BIO 212/212L	Anatomy & Physiology II	4
ELE	Elective	3
HES 272	Injury Prevention and Post Rehabilitative Exercise	2
HES 222	Muscle Fitness Activities	1
HPE 222L	Resistance Training Skills	1
IPE 200	Fundamentals of Teamwork	1
MTH 301	Statistics (or MTH 210)	3
Total Credits:		15
Semester 5		
ELE	Elective	3
HES 302/302L	Exercise Physiology	4
HES 311C	Clinical I	2
HES 365	Psychosocial Aspects of Exercise	3
HLT 301	Nutrition	3
Total Credits:		15

PREFIX	COURSE TITLE	CREDITS
Semester 6		
HES 312C	Clinical II	2
HES 323	Concepts of Strength and Conditioning	3
HES 334/334L	Kinesiology	3
HES 345/345L	Exercise Testing and Prescription	3
HES 375	Research Methods in HES	3
IPE 300	Interprofessional Healthcare Discovery and Collaboration	1
Total Credits:		15
Semester 7		
ELE	Electives	3
HES 411C	Clinical III	2
HES 422	Organization and Administration in HES	3
HES 426C OR HES 427C	Professional Fieldwork in HES 426C or HES 427C: Scholarly Fieldwork in Health and Exercise Science	2
HES 444	Physical Activity and Aging	3
IPE 400L	Interprofessional Healthcare Experience Lab	1
Total Credits:		14
Semester 8		
ELE	Electives	6
HES 412C	Clinical IV	2
HES 452	Community Health and Physical Activity Promotion	3
HES 485	Professional Seminar in HES	3
Total Credits:		14
Total Credits		122
Credits from Non-Major Courses		70
Credits from Interprofessional Education Courses:		3
Credits from Major Courses		49