



2009-2010  
Career and Technical  
Programs

Health, Physical  
Education and  
Athletics Division  
(541) 463-5545

Two-Year Associate  
of Applied Science  
Degree, Exercise  
and Movement  
Science

Two-Year Certificate  
of Completion,  
Fitness Specialist

One-Year Certificate  
of Completion,  
Fitness Technician

# Exercise and Movement Science

**Purpose** To prepare students as fitness professionals for various careers in the fitness industry.

**Learning Outcomes** The graduate will:

- demonstrate interpersonal skills in the areas of leadership, motivation, and communication.
- understand and apply basic exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training.
- administer various fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance.
- design and demonstrate safe and effective exercise programs for individuals, groups, and special populations within current fitness industry standards and best practices.
- utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret basic algebraic formulas to fitness assessment data and exercise programming.

**Employment Trends** Statewide, 95 openings are projected, with ten of those in Lane County. According to the U.S. Department of Labor, "Employment of fitness workers is expected to increase much faster than the average for all occupations through 2014. An increasing number of people spend more time and money on fitness, and more businesses are recognizing the benefits of health and fitness programs and other services such as wellness programs for their employees. Aging baby boomers are concerned with staying healthy, physically fit, and independent. They have become the largest demographic group of health club members. The reduction of physical education programs in schools, combined with parents' growing concern about childhood obesity, has resulted in rapid increases in children's health club membership. Health club membership among young adults also has grown steadily, driven by concern with physical fitness and by rising incomes.

As health clubs strive to provide more personalized service to keep their members motivated, they will continue to offer personal training and a wide variety of group exercise classes."

Individuals with formal training or experience will have the best chances to get these jobs.

**Wages** The statewide average is \$17.17 hourly, for an average annual salary of \$35,720.

**Costs in Addition to Tuition (estimate)** Textbooks and minimal lab fees are required for most program core courses.

**Program Certification** The American College of Sports Medicine (ACSM) endorses Lane Community College's Professional Fitness Training Program as providing training for the knowledge, skills and abilities as specified for ACSM certification. ACSM states: "The American College of Sports Medicine has endorsed the curriculum for Lane Community College's Associate of Applied Science program. This curriculum covers the knowledge, skills, and abilities expected of an ACSM Health/Fitness Instructor®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM. This does not reflect ACSM endorsement of the college or its other academic programs."

**Admission Deadline** Please check with the Health and PE department for specific dates.

**Number of New Students Admitted Annually** 30 students maximum are admitted each academic year.

# Exercise and Movement Science

**Criteria Used for Admission** Applicants must meet the following minimum qualifications:

- complete application for admission to the college (new students only) and separate program application (all students). Only complete applications will be considered. Please see the Health and PE department for an application.
- have a high school or college GPA of 2.5, or a 500 average standard score on the GED certificate. If a student has earned 12 or more college graded credits, the college GPA will be used to determine eligibility.
- complete admission placement tests in Reading, Writing, and Mathematics meeting the minimum scores, or successfully complete qualifying classes as outlined in the program application packet.

Selection to the program is by a point allocation system from a pool of qualified applicants. Information about the point allocation system is available within the application packet (see below). All applicants will be notified of program selection status.

**Admission Information** Program information sheets and application packets are available in the Division of Health, Physical Education and Athletics, Bldg. 5, Rm. 205 and the Counseling and Advising Center, Bldg. 1, Rm. 103.

**Program requirements** In addition to completing all required coursework, accepted students must meet the following criteria for program completion:

- attendance at a mandatory program orientation before fall term and advisee meetings with program advisor each term
- earned letter grade of C or higher AND earned accumulative G.P.A. of 3.0 or higher in all program core courses
- minimum of four total Cooperative Education credit hours as a student intern in the Fitness Education Center and the Therapeutic Exercise and Rehabilitation Program, with at least two credits in both areas (additional credits of Cooperative Education in other areas are also required).
- Knowledge, Skills, and Abilities Competency List
- acceptable evaluations from the instructors of professional core courses
- acceptable Cooperative Education work experience supervisor evaluations
- exit interview with program advisor

**Cooperative Education (Co-op)** Co-op internships provide job-related experiences and are an integral component of the program. Students will complete on-campus internships in both the Fitness Education Center and the Therapeutic Exercise and Rehabilitation Center. Students will then have the opportunity to apply for off-campus intern experiences or additional on-campus opportunities. For information, contact Sue Thompson, Bldg. 5, Rm. 227 (541) 463-5735, [thompsons@lanecc.edu](mailto:thompsons@lanecc.edu); or Shannon Gaul, Bldg. 5, Rm. 103, (541) 463-5556, [gauls@lanecc.edu](mailto:gauls@lanecc.edu).

**Program Advisor** Marisa Hastie, Bldg. 5, Rm. 221, (541) 463-5552, [hastiem@lanecc.edu](mailto:hastiem@lanecc.edu)

## Exercise and Movement Science

### Associate of Applied Science Degree

#### Fitness Specialist

##### Two-Year Certificate of Completion

First Year	Fall
HE 275 Lifetime Health and Fitness <sup>D,P</sup> .....	3
Choice of: .....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech. <sup>*,1</sup> .....	3
PE 194S Professional Activity: Strength Training and Conditioning <sup>*,1</sup> .....	2
PE 196 Applied Anatomy and Kinesiology <sup>*,1</sup> .....	3
Choice of: .....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of: .....	4
WR 115 Introduction to College Writing <sup>*,W</sup>	
WR 121 English Comp: Exposition and Intro to Argument <sup>*,W</sup>	
<b>Total Credits</b>	<b>17</b>

Winter	
PE 194T Professional Activity: Techniques of Leadership Training <sup>*,1</sup> .....	2
PE 295 Injury Prevention and Management <sup>*,1</sup> .....	3
PE 280F Co-op Ed: Fitness <sup>G</sup> .....	1
PE 280 RT Co-op Ed: Rehabilitation Therapies <sup>G</sup> .....	1
Physical Education Strength Training class <sup>2</sup> .....	1
Choice of: .....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 (co requisites) Bio-Bonds Learning Community (3 credits each) <sup>S</sup>	
CH 104 Introductory Chemistry <sup>S</sup>	
CH 110 Chemistry in Everyday Life	
Choice of: .....	4-5
MTH 070 Introductory Algebra (or equivalent) <sup>M</sup>	
MTH 095 Intermediate Algebra <sup>M,R</sup>	
MTH 105 Intro to Contemporary Mathematics <sup>M</sup>	
MTH 111 College Algebra <sup>M</sup>	
<b>Total Credits</b>	<b>16-19</b>

Spring	
Human Relations requirement <sup>R</sup> .....	3
FN 225 Nutrition .....	4
PE 135 Applied Exercise Physiology 1 <sup>*,1</sup> .....	3
Choice of: .....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
Choice of: .....	4
SP 100 Basic Communication <sup>A</sup>	
SP 105 Listening and Critical Thinking <sup>A</sup>	
SP 111 Fundamentals of Public Speaking <sup>A</sup>	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication <sup>A</sup>	
HE 252 First Aid <sup>D</sup> .....	3
<b>Total Credits</b>	<b>18</b>

# Exercise and Movement Science

## Second Year

Ethnic/Gender/Cultural Diversity elective (from AA/OT requirement list in catalog).....	3
General electives .....	3
PE 235 Applied Exercise Physiology 2 <sup>*,1</sup> .....	3
Choice of: .....	1
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Physical Education Activity elective <sup>2</sup> .....	1
Choice of: .....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 199 Special Studies	
HE 209 Human Sexuality	
HE 250 Personal Health	
HE 255 Global Health	

Total Credits 14

## Fall

## Fitness Technician

### One-Year Certificate of Completion

HE 275 Lifetime Health and Fitness <sup>D,P</sup> .....	3	<b>Fall</b>
Choice of: .....	1	
PE 183A Conditioning		
PE 183F Fitness Education: Introduction		
PE 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Tech. <sup>*,1</sup> .....	2	
PE 194S Professional Activity: Strength Training and Conditioning <sup>*,1</sup> .....	2	
PE 196 Applied Anatomy and Kinesiology <sup>*,1</sup> .....	3	
Choice of: .....	1	
PE 280F Co-op Ed: Fitness <sup>G</sup>		
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>		
Choice of: .....	4	
WR 115 Introduction to College Writing <sup>*,W</sup>		
WR 121 English Comp: Exposition and Intro to Argument <sup>*,W</sup>		

Total Credits 16

PE 194L Professional Activity: Fitness Assessment and Exercise Prescription: Lab Techniques <sup>*,1</sup> .....	2	<b>Winter</b>
Physical Education Activity elective <sup>2</sup> .....	1	
Choice of: .....	2	
PE 280F Co-op Ed: Fitness <sup>G</sup>		
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>		
PE 280 Co-op Ed: Physical Education		
PE 280AR Co-op Ed: Aerobics		
PE 280W Co-op Ed: Wellness		
PE 280M Co-op Ed: Fitness Management		
PE 280AT Co-op Ed: Athletic Training		
Directed Electives <sup>3</sup> .....	7	

Total Credits 12

## Spring

PE 294 Foundations of Fitness Management <sup>*,1</sup> .....	3
Directed Electives <sup>3</sup> .....	6
Choice of: .....	2
PE 280F Co-op Ed: Fitness <sup>G</sup>	
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>	
PE 280 Co-op Ed: Physical Education	
PE 280AR Co-op Ed: Aerobics	
PE 280W Co-op Ed: Wellness	
PE 280M Co-op Ed: Fitness Management	
PE 280AT Co-op Ed: Athletic Training	
Choice of: .....	4
WR 121 English Composition: Exposition and Introduction to Argument <sup>*,A</sup>	
WR 122 English Comp: Style and Argument <sup>*,A</sup>	
WR 123 Composition: Research <sup>*,A</sup>	

Total Credits 15

PE 194T Professional Activity: Techniques of Leadership Training <sup>*,1</sup> .....	2	<b>Winter</b>
PE 295 Injury Prevention and Management <sup>*,1</sup> .....	3	
PE 280F Co-op Ed: Fitness <sup>G</sup> .....	1	
PE 280 RT Co-op Ed: Rehabilitation Therapies <sup>G</sup> .....	1	
Physical Education Strength Training class <sup>2</sup> .....	1	
Choice of: .....	4-6	
BI 102D General Biology – Survey of Biology		
BI 102I General Biology – Human Biology		
BI 112 and CH 112 (co requisites) Bio-Bonds Learning Community (3 credits each) <sup>S</sup>		
CH 104 Introductory Chemistry <sup>S</sup>		
CH 110 Chemistry in Everyday Life		
Choice of: .....	4-5	
MTH 070 Introductory Algebra (or equivalent) <sup>M</sup>		
MTH 095 Intermediate Algebra <sup>M,R</sup>		
MTH 105 Intro to Contemporary Mathematics <sup>M</sup>		
MTH 111 College Algebra <sup>M</sup>		

Total Credits 16-19

Human Relations requirement <sup>R</sup> .....	3	<b>Spring</b>
FN 225 Nutrition .....	4	
PE 135 Applied Exercise Physiology 1 <sup>*,1</sup> .....	3	
Choice of: .....	1	
PE 280F Co-op Ed: Fitness <sup>G</sup>		
PE 280RT Co-op Ed: Rehabilitation Therapies <sup>G</sup>		
Choice of: .....	4	
SP 100 Basic Communication <sup>A</sup>		
SP 105 Listening and Critical Thinking <sup>A</sup>		
SP 111 Fundamentals of Public Speaking <sup>A</sup>		
SP 115 Introduction to Intercultural Communications		
SP 218 Interpersonal Communication <sup>A</sup>		
HE 252 First Aid <sup>D</sup> .....	3	

Total Credits 18

### Standard footnotes:

- \* Prerequisite required
- A Meets Arts/Letters requirement
- B Must be passed with grade of "B-" or better to use as a prerequisite
- D Degree or certificate requirement; must be passed with grade of "C-" or better
- G Must be taken for a grade, not P/NP; major requirement

- H Meets Human Relations/Social Science requirement
- M Meets Mathematics requirement
- P Meets PE/Health requirement
- R Required for AAS degree
- S Meets Science/Math/Computer Science requirement
- W Meets Written Communications or English Composition requirement

- 1 Core curriculum requirement; must be passed with a grade of "C" or better
- 2 PE Activity Electives Fitness-related activity courses to be selected from the following list:
  - PE 181B Cardio Core Conditioning
  - PE 181C Combination Aerobics
  - PE 181D Dance Aerobics
  - PE 181K Kickboxing Aerobics
  - PE 181S Step Aerobics
  - PE 181SB Body Sculpt
  - PE 181SS Step and Sculpt
  - PE 181Y Yogilates
  - PE 183A Conditioning
  - PE 183B Exercise and Weight Control
  - PE 183C Exercise Walking
  - PE 183CG Group Cycling
  - PE 183E Fitness Circuits
  - PE 183G Fitness Education: Continuing/Returning
  - PE 183J Jogging
  - PE 183R Stability Ball Fitness
  - PE 183S Strength Training
  - PE 183U Strength Training for Women
  - PE 183W Therapeutic Exercise and Rehabilitation Program
  - PE 184K Karate
  - PE 184P Personal Defense
  - PE 185T Tai Chi Chuan
  - PE 185Y or PE 185Z or PE 185YG Yoga

Students may repeat PE 183G, PE 183W, PE 183S or PE 183U once for credit

- 3 Directed Electives Courses to be selected from the following list:
  - BA 101 Introduction to Business
  - BA 226 Business Law
  - BA 278 Leadership and Team Dynamics
  - BI 101F General Biology - Survey of Biology
  - BI 102D General Biology – Survey of Biology
  - BI 102I General Biology: Human Biology
  - BI 112 Cell Biology for Health Occupations (co-requisite CH 112)
  - BI 231 Human Anatomy and Physiology 1
  - BI 232 Human Anatomy and Physiology 2
  - BI 232 Human Anatomy and Physiology 3
  - CG 140 Career and Life Planning
  - CG 202 Life Transitions
  - CG 203 Human Relations at Work
  - CG 206 Coping Skills for Stress and Depression
  - CG 216 Understanding Eating Issues
  - CH 104 Introductory Chemistry 1
  - CH 105 Introductory Chemistry 2
  - CH 112 Chemistry for Health Occupations (co requisite BI 112)
  - CH 221 General Chemistry 1
  - CH 222 General Chemistry 2
  - CIS 101 Computer Fundamentals
  - CS 120 Concepts of Computing: Information Processing
  - EL 115 Effective Learning
  - EL 115H Effective Learning: Health Science Majors
  - FN 230 Family, Food, and Nutrition
  - FN 199SS Sports Nutrition
  - HE 125 Workplace Health and Safety
  - HE 152 Drugs, Society and Behavior
  - HE 199 Special Studies
  - HE 209 Human Sexuality
  - HE 250 Personal Health
  - HE 255 Global Health
  - HO 100 Medical Terminology
  - HS 107 Gerontology and Aging
  - HS 200 Understanding Addictive Behaviors
  - MTH 111 College Algebra
  - MTH 112 Trigonometry
  - PH 101 Fundamentals of Physics
  - PH 102 Fundamentals of Physics
  - PH 103 Fundamentals of Physics
  - PH 201 General Physics
  - PSY 110 Exploring Psychology
  - PSY 201 General Psychology
  - PSY 202 General Psychology
  - PSY 215 Lifespan Developmental Psychology
  - PSY 218 Multicultural Psychology
  - PSY 239 Introduction to Abnormal Psychology
  - SOC 204 Introduction to Sociology
  - SOC 207 Women and Work
  - SOC 208 Sport and Society
  - SP 105 Listening and Critical Thinking

- SP 111 Fundamentals of Public Speaking
- SP 112 Persuasive Speech
- SP 115 Introduction to Intercultural Communication
- SP 130 Business and Professional Speech
- SP 218 Interpersonal Communication
- SPAN 101 Spanish, First Year
- SPAN 102 Spanish, First Year
- SPAN 103 Spanish, First Year
- WR 122 Composition: Style and Argument
- WR 123 Composition: Research
- WR 227 Technical Writing