



2013 – 2014
Career Technical Programs

Health, Physical Education and
Athletics Division
541.463.5545

lanecc.edu

Exercise and Movement Science

Two-Year Associate of Applied Science Degree, Exercise and Movement Science
Two-Year Certificate of Completion, Fitness Specialist Level 2
One-Year Certificate of Completion, Fitness Specialist Level 1
Career Pathways Certificate, Group Exercise Instructor

Purpose The Purpose of the 2-year AAS and Fitness Specialist Level 2 Certificate is to prepare students for various careers in the fitness industry, including personal training, group exercise instruction, coaching, athletic training, pre-physical therapy, wellness coaching, and recreation management.

Learning Outcomes The graduate will:

- demonstrate excellent interpersonal skills in the areas of leadership, motivation, management, and communication.
- understand and apply basic science information from the fields of biology, chemistry, and physics as they relate to the exercise science field.
- understand and apply advanced exercise principles related to applied kinesiology, physiology, injury prevention, conditioning, resistance training, and functional training in order to create responsive, adaptive, and personalized exercise programs for a diverse clientele.
- understand, synthesize, and apply nationally recognized standards for fitness and health and be able to communicate the benefits and precautions associated with exercise.
- understand, analyze and apply behavior modification strategies to enhance exercise and health behavior change with clients.
- analyze and administer various fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance, power, speed, and balance in both a laboratory setting and a gym or health club setting.
- evaluate, design and demonstrate safe and effective exercise programs for groups or individuals who are apparently healthy or modify exercise programs to enhance participation and meet the needs of those with medically controlled diseases under the care and supervision of a physician.
- analyze, synthesize, evaluate, and utilize appropriate library and information resources to apply current fitness industry research and support lifelong professional education.
- apply and interpret advanced algebraic formulas to fitness assessment data and exercise programming and critically analyze results and training implications.
- respond to the needs of a diverse clientele and demonstrate inclusive practices.
- understand and evaluate current trends in the fitness industry and be able to provide responsive and timely programming and services to serve the health and fitness needs of individuals in their workplace, community, and the nation.
- demonstrate excellent leadership abilities, interpersonal communication skills, organizational and presentation skills and other necessary professional qualities demanded of health and fitness professionals in the workforce.
- understand and demonstrate professional scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct.
- identify and communicate the unique benefits of group exercise in the health and fitness industry.

Job Openings Projected through 2020

Lane County openings - 9 annually
Statewide openings - 16 annually

Wages

Lane County average hourly - \$16.00; average annual - \$33,277
Oregon average hourly - \$18.01; average annual - \$37,451

Costs (Estimate based on 2012 tuition and fees. Consult Lane's website for updated tuition.)

Resident Tuition and Student Fees.....	\$9,275
Other Course/Program Costs.....	\$135

Books and supplies.....	\$1,050
Total Estimate \$10,460	

Exercise and Movement Science course fees and other course fees may change during the year - see the online credit class schedule for fees assigned to courses. Costs related to obtaining National Certification post-graduation range from \$200-\$500 per certification.

Program Certification The American College of Sports Medicine 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 Specialist®. This curriculum has been reviewed for the educational content and has been endorsed by ACSM.

Admission Contact the Health and PE department for Program information sheets and application packets, or see: lanecc.edu/healthpe/exercise-and-movement-science-program

Program requirements In addition to completing all required coursework and meeting college graduation requirements, students must meet the following criteria for program completion:

- attendance at a mandatory program orientation before fall term of the student's first year in the program
- earn letter grade of "C" or higher and earned accumulative G.P.A. of 3.0 or higher in all program core courses
- complete all required Cooperative Education credits (10 credit requirement). Details will be provided on required sites
- abide by and uphold all program and college expectations and responsibilities
- receive acceptable evaluations from all program instructors
- receive acceptable evaluations from all Cooperative Education work experience supervisors and Cooperative Education coordinators
- attend an exit interview with program coordinator

Course Requirements

1. All EXMS courses must be passed with a letter grade of "C" or better.
2. All PE 280 courses must be completed with a letter grade, not P/ NP, and must be passed with a grade of "C" or better to satisfy program requirements.

Cooperative Education (Co-op) Cooperative Education internships provide job-related experiences and are an integral component of the program. Students will begin by completing required on-campus internships in the Fitness Education Center (2 credits required) during their first two terms in the program. Upon successful completion ("C" letter grade or higher) of all core classes during Fall and Winter term of the first year and Co-op credits in the Fitness Education Center, students are then eligible to start completing required Co-op credits in other areas (see Program Coordinator for approved list and requirements). Students may also begin to apply for a variety of on-campus and off-campus internships in various fitness disciplines to fulfill the 6 remaining elective Co-op credits. More details and direction will be given to students regarding required and optional internship sites. Students are encouraged to choose a variety of sites. Maximum credit limits apply in each area. For more information contact: Sue Thompson, Bldg. 5, Rm. 227 541.463.5735, thompson@lanecc.edu; or Kathleen Seeley, Bldg. 5, Rm. 236 541.463.5573, seeleyk@lanecc.edu.

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Program Coordinator Marisa Hastie, Bldg. 5, Rm. 221, 541.463.5552,
hastiem@lanecc.edu

Fitness Specialist Level 2

Associate of Applied Science Degree

Two-Year Certificate of Completion

Gainful Employment Disclosure

Standard Occupational Classification: 39-9031.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Fitness Trainers and Aerobics Instructors
onetonline.org/link/summary/39-9031.00

Or check on these O*Net Related Occupations:
Recreation Workers onetonline.org/link/summary/39-9032.00

How many students complete the 2-year Fitness Specialist Level 2 Certificate?

No students completed this certificate in academic year 2011-12.

How many jobs are forecast in this occupation between 2010-20?

Lane County: 16 positions

Statewide: 143 positions

What wages are forecast for this occupation?

Lane County average hourly - \$16.00; average annual - \$33,277

Oregon average hourly - \$18.01; average annual - \$37,451

How much will the program cost?

(Estimates based on 2012-13 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees \$9,275

Books, supplies, program costs \$2,280

On-Campus room and board Not offered

Total Estimate \$11,555

What's included?

Program Costs: lanecc.edu/esfs/credit-fees-and-expenses

First Year

EXMS 194F Professional Activity: Fitness Assessment and

Exercise Prescription: Field Tech. 3

EXMS 194S Professional Activity: Strength Training and

Conditioning 2

EXMS 196 Applied Anatomy and Kinesiology 3

Choice of:..... 4

FN 225 Nutrition

FN 240 Intro to Nutrition and Metabolism

Choice of:..... 1

PE 183A Conditioning

PE 183F Fitness Education: Introduction

PE 280F Co-op Ed: Fitness 1

Choice of:..... 4

WR 115 Introduction to College Writing

WR 121 Introduction to Academic Writing

Total Credits 18

Fall

Winter

EXMS 194T Professional Activity: Techniques of Group

Exercise Leadership 2

EXMS 295 Injury Prevention and Management 3

PE 280F Co-op Ed: Fitness 1

Choice of:..... 1

PE 183S Strength Training

PE 183U Strength Training for Women

Choice of:..... 6

BI 102D General Biology – Survey of Biology

BI 102I General Biology – Human Biology

BI 112 and CH 112 Bio-Bonds Learning Community

(co-requisites; CH 112 will count as Directed Elective)

Choice of:..... 4-5

MTH 070 Introductory Algebra (or MTH 060 + 065 equivalent)

MTH 095 Intermediate Algebra

MTH 105 Introduction to Contemporary Mathematics

MTH 111 College Algebra

Total Credits 17-18

EXMS 135 Applied Exercise Physiology 1..... 3

HE 252 First Aid..... 3

Human Relations requirement 3

Choice of:..... 3

HE 125 Workplace Health and Safety

HE 152 Drugs, Society and Behavior

HE 251 Wilderness First Aid

HE 209 Human Sexuality

HE 222 Consumer Health

HE 240 Holistic Health

HE 250 Personal Health

HE 255 Global Health and Sustainability

HE 275 Lifetime Health and Fitness

EXMS 214 Physiology Exercise and Healthy Aging

Choice of:..... 2

PE 280F Co-op Ed: Fitness

PE 280RT Co-op Ed: Corrective Fitness

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

SP 100 Basic Communication

SP 105 Listening and Critical Thinking

SP 111 Fundamentals of Public Speaking

SP 115 Introduction to Intercultural Communications

SP 218 Interpersonal Communication

Total Credits 18

Second Year

EXMS 235 Applied Exercise Physiology 2..... 3

Directed Electives (see list below)..... 3

Choice of:..... 2

PE 280F Co-op Ed: Fitness

PE 280RT Co-op Ed: Corrective Fitness

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 (see list below) 1

Choice of:..... 4

WR 121 Introduction to Academic Writing

WR 122 Composition: Argument, Style and Research

WR 123 Composition: Research

WR 227 Technical Writing

Choice of:..... 3

HE 125 Workplace Health and Safety

HE 152 Drugs, Society and Behavior

HE 251 Wilderness First Aid

HE 209 Human Sexuality

HE 222 Consumer Health

HE 240 Holistic Health

HE 250 Personal Health

HE 255 Global Health and Sustainability

HE 275 Lifetime Health and Fitness

EXMS 214 Physiology of Exercise and Healthy Aging

Total Credits 16

Winter

EXMS 194L Professional Activity: Fitness Assessment

and Exercise Prescription: Lab Techniques 3

Physical Education Activity elective (see list below) 1

Choice of:..... 2

PE 280F Co-op Ed: Fitness

PE 280RT Co-op Ed: Corrective Fitness

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 (see list below)..... 6

Total Credits 12

Spring

EXMS 294 Foundations of Fitness Management..... 3

Directed Electives (see list below)..... 3

General Electives 3

Physical Education Activity Elective (see list below)..... 1

Choice of:..... 2

PE 280F Co-op Ed: Fitness

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PE 280RT Co-op Ed: Corrective Fitness	
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	
Cultural Literacy elective	
(from AA/OT requirement list in catalog)	3
Total Credits	15

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 Progressive Integrative Exercise
- PE 184K Karate
- PE 184P Personal Defense
- PE 185T Tai Chi Chuan
- PE 185Y or PE 185Z or PE 185YG Yoga

Students may repeat any of the above PE classes once for credit.

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 233 Human Anatomy and Physiology 3
- CG 140 Career and Life Planning
- 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
- CS 120 Concepts of Computing: Information Processing
- EL 115 Effective Learning
- EL 115H Effective Learning: Health Science Majors
- EXMS 214 Physiology of Exercise and Healthy Aging
- EXMS 227 Introduction to Exercise Science
- EXMS 275 Exercise and Sport Biomechanics
- FN 110 Personal Nutrition
- FN 190 Sports Nutrition
- FN 230 Family, Food, and Nutrition
- FN 240 Intro to Nutrition and Metabolism
- HE 125 Workplace Health and Safety
- HE 152 Drugs, Society and Behavior
- HE 209 Human Sexuality
- HE 222 Consumer Health
- HE 240 Holistic Health
- HE 250 Personal Health
- HE 251 Wilderness First Aid
- HE 255 Global Health and Sustainability
- HO 100 Medical Terminology

- HO 150 Human Body Systems 1
- HO 152 Human Body Systems 2
- 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: Argument, Style and Research
- WR 123 Composition: Research
- WR 227 Technical Writing

Fitness Specialist Level 1

One-Year Certificate of Completion

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.
- understand and apply nationally recognized standards for fitness and overall health and describe the benefits and precautions associated with exercise.
- understand and apply basic behavior modification strategies to enhance exercise and health behavior change with clients.
- administer various basic fitness assessments including the measurement of cardiovascular endurance, body composition, flexibility, muscular strength and endurance in gym or health club settings.
- design and demonstrate safe and effective exercise programs for apparently healthy individuals and groups 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.
- respond to the needs of a diverse clientele and demonstrate inclusive practices.
- understand their scope of practice and role within the health and fitness field and the allied health care system and practice appropriate and ethical professional conduct.

Gainful Employment Disclosure

Standard Occupational Classification: 39-9031.00

Go to the Department of Labor's O*Net website for a profile of this occupation:

Fitness Trainers and Aerobics Instructors
onetonline.org/link/summary/39-9031.00

Or check on these O*Net Related Occupations:

Recreation Workers onetonline.org/link/summary/39-9032.00

How many students complete the 1-year Fitness Specialist Level 1 Certificate?

Two students completed this certificate in academic year 2011-12.

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What was the on-time graduation rate for these students?

Lane Community College is committed to protecting student privacy and does not publish this rate for ten or fewer graduates.

How many jobs are forecast in this occupation between 2010-20?

Lane County: 15 positions
Statewide: 159 positions

What wages are forecast for this occupation?

Lane County average hourly - \$12.82; average annual - \$26,668
Oregon average hourly - \$12.36; average annual - \$25,711

How much will the program cost?

(Estimates based on 2012-13 data for full-time students. Students attending part-time will incur additional term fees. Consult Lane's website for updated tuition and fees.)

Resident tuition and fees	\$5,008
Books, supplies, program costs	\$990
On-Campus room and board.....	Not offered
Total Estimate	\$5,998

What's included?

Program Costs: lanec.edu/esfs/credit-fees-and-expenses

What is the median loan debt incurred by students who completed the program in 2012?

Federal Loans..... Not disclosed
Institutional financing..... Not disclosed
(For privacy reasons under FERPA, loan information is not disclosed for programs with fewer than ten graduates.)

Course Requirements

- All EXMS courses must be passed with a letter grade of "C" or better.
- All PE 280 courses must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements.

	Fall
EXMS 194F Professional Activity: Fitness Assessment and Exercise Prescription: Field Techniques	3
EXMS 194S Professional Activity: Strength Training and Conditioning	2
EXMS 196 Applied Anatomy and Kinesiology	3
Choice of:.....	4
FN 225 Nutrition	
FN 240 Intro to Nutrition and Metabolism	
Choice of:.....	1
PE 183A Conditioning	
PE 183F Fitness Education: Introduction	
PE 280F Co-op Ed: Fitness	1
Choice of:.....	4
WR 115 Introduction to College Writing	
WR 121 Introduction to Academic Writing	
Total Credits	18

	Winter
EXMS 194T Professional Activity: Techniques of Group Exercise Leadership	2
EXMS 295 Injury Prevention and Management	3
PE 280F Co-op Ed: Fitness.....	2
Choice of:.....	1
PE 183S Strength Training	
PE 183U Strength Training for Women	
Choice of:.....	4-6
BI 102D General Biology – Survey of Biology	
BI 102I General Biology – Human Biology	
BI 112 and CH 112 Bio-Bonds Learning Community (co-requisites; CH 112 will count as Directed Elective)	
Choice of:.....	4-5
MTH 070 Introductory Algebra (or MTH 60 and 65 equivalent)	
MTH 095 Intermediate Algebra	
MTH 105 Intro to Contemporary Mathematics	
MTH 111 College Algebra	
Total Credits	16-19

	Spring
EXMS135 Applied Exercise Physiology 1.....	3
HE 252 First Aid	3
HE 275 Lifetime Health and Fitness	3
Human Relations requirement	3

Choice of:.....	3
HE 125 Workplace Health and Safety	
HE 152 Drugs, Society and Behavior	
HE 251 Wilderness First Aid	
HE 209 Human Sexuality	
HE 222 Consumer Health	
HE 240 Holistic Health	
HE 250 Personal Health	
HE 255 Global Health	
HE 275 Lifetime Health and Fitness	
EXMS 214 Physiology of Exercise and Healthy Aging	
Choice of:.....	2
PE 280F Co-op Ed: Fitness	
PE 280RT Co-op Ed: Corrective Fitness	
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
SP 100 Basic Communication	
SP 105 Listening and Critical Thinking	
SP 111 Fundamentals of Public Speaking	
SP 115 Introduction to Intercultural Communications	
SP 218 Interpersonal Communication	
Total Credits	21

Group Exercise Instructor Certificate

Career Pathway Certificate of Completion

Purpose (Group Exercise Instructor Career Pathway Certificate) Prepare students to become instructors in group fitness activities, such as aerobics, step, cycling, circuit, yoga, muscle conditioning, interval and other group exercise modalities. The curriculum and Co-operative education experiences serve as a "launching pad" into the career of instructing group exercise. National certification and further training in specific styles of group exercise is often required.

Learning Outcomes Upon completion of this certificate, students will:

- design, evaluate, and instruct safe and effective group exercise classes utilizing a variety of exercise modalities.
- appropriately modify and adapt group classes to meet the needs of a variety of participants.
- demonstrate excellent interpersonal skills in the areas of leadership, exercise motivation, and communication (written, verbal, and non-verbal).
- apply nationally recognized standards for group exercise instruction.
- communicate to participants the benefits, risks, and precautions involved with participation in group exercise.
- understand the role of proper nutrition and training techniques as they relate to physical fitness and weight management.
- identify and implement risk management strategies and safety precautions to ensure a safe and productive exercise experience for all participants.
- identify and communicate the unique benefits of group exercise in the health and fitness industry.

Course Requirements

- All EXMS courses must be passed with a letter grade of "C" or better.
- PE 280AR must be completed with a letter grade, not P/NP, and must be passed with a grade of "C" or better to satisfy program requirements. HE 252 must be completed with a grade of "Pass" or "C-" or better.

	Fall
EXMS 194S Professional Activity: Strength Training and Conditioning	2
HE 252 First Aid.....	3
PE 280AR Co-op Ed: Aerobics	1
Total Credits	6
	Winter
EXMS 194T Professional Activity: Techniques of Group Exercise Leadership	2
PE 280AR Co-op Ed: Aerobics.....	2
FN 190 Sports Nutrition	2
Total Credits	6