



## Program Planning Guide

### Health and Fitness Science, Associate in Applied Science Degree (A45630)

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

**See the College Catalog and the Health Science Programs Admissions packet for details regarding:** Limited Enrollment Curriculum; Entrance Standards; Required Admissions Criteria and Requirements for Acceptance.

**Program Length:** 5 semesters

**Career Pathway Options:** Associate in Applied Science in Health & Fitness Science; Diploma in Health & Fitness Science; Health & Fitness Science Certificate: HEA 112 (2), HFS 110 (4), HFS 111 (4), PED 117 (1), HFS 210 (3), HFS 116 (3)

**Program Site(s):** Lee Main Campus, Day Program

Suggested Course Schedule:		Hours				Notes:
		Class	Lab	Clinical	Credit	
<b>1st Semester (Fall )</b>						
ACA 122	College Transfer Success	0	2	0	1	Online
See HSAP*	Humanities/Fine Arts Elective	3	0	0	3	Online or seated
ENG 111	Writing and Inquiry	3	0	0	3	
HEA 112	First Aid & CPR	1	2	0	2	certificate
HFS 111	Fitness & Exercise Testing I	3	2	0	4	certificate
HFS 110	Exercise Science	4	0	0	4	certificate
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<b>2nd Semester (Spring)</b>							
HFS 116	Prevention & Care Exer Injuries	2	2	0	3	certificate	
HFS 120	Group Exercise Instruction	2	2	0	3		
HFS 210	Personal Training	2	2	0	3	certificate	
PED 117	Weight Training I	0	3	0	1	certificate	
PSY 150	General Psychology	3	0	0	3		
Communication Elective, take one:						3	Online or seated
ENG 112	Writing/Research in the Disc	3	0	0			
ENG 114	Prof Research & Reporting	3	0	0			
COM 110	Intro to Communication	3	0	0			
COM 120	Intro to Interpersonal Com	3	0	0			
COM 231	Public Speaking	3	0	0			
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<b>3rd Semester (Summer)</b>							
BIO 155	Nutrition	3	0	0	3		
HFS 218	Lifestyle Changes & Wellness	3	2	0	4		
PED 110	Fit & Well for Life	1	2	0	2		
Take one course from:						1	
PED 122	Yoga	0	2	0			
PED 113	Aerobics I	0	3	0			
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**Students may exit with Diploma**

<b>4th Semester (Fall)</b>						
BIO 168	Anatomy & Physiology I	3	3	0	4	
HFS 118	Fitness Facility Mgmt	4	0	0	4	
PED 118	Weight Training II	0	3	0	1	
WBL 111	Work-based Learning I	0	0	10	1	
Mathematics, take one:					4	
MAT 152	Statistical Methods I	3	2	0		
MAT 171	Precalculus Algebra	3	2	0		
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<b>5th Semester (Spring)</b>						
BIO 169	Anatomy and Physiology II	3	3	0	4	
HFS 211	Fitness & Exercise Testing II	3	2	0	4	
HFS 212	Exercise Programming	2	2	0	3	
HFS 214	Health & Fitness Law	3	0	0	3	
WBL 121	Work-based Learning II	0	0	10	1	
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**Total Semester Hours Credit Required for Graduation: 72**

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## Course Descriptions

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### **ACA 122 College Transfer Success 0-2-0-1**

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **BIO 155 Nutrition 3-0-0-3**

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups.

### **BIO 168 Anatomy & Physiology I 3-3-0-4**

*Local Prerequisite: BIO 090, BIO 094, BIO 110, BIO 111 or by permission of the instructor*

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **BIO 169 Anatomy & Physiology II 3-3-0-4**

*Prerequisites: BIO 168*

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **COM 120 Intro Interpersonal Com 3-0-0-3**

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

### **COM 231 Public Speaking 3-0-0-3**

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

### **ENG 111 Writing and Inquiry 3-0-0-3**

*Prerequisites: DRE 098*

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

### **ENG 115 Oral Communication 3-0-0-3**

This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

### **HEA 112 CPR & First Aid 1-2-0-2**

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

### **MAT 152 Statistical Methods I 3-2-0-4**

*Prerequisites: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and DRE-098*

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

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<b>MAT 171</b>	<b>Precalculus Algebra</b>	<b>3-2-0-4</b>	<b>HFS 110</b>	<b>Exercise Science</b>	<b>4-0-0-4</b>
<p><i>Prerequisites: Take One Set:</i> <i>Set 1: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, DMA-060, DMA-070, and DMA-080</i> <i>Set 2: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and DMA-065</i> <i>Set 3: MAT-121</i></p> <p>This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).</p>			<p>This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.</p>		
<b>PED 110</b>	<b>Fit and Well for Life</b>	<b>1-2-0-2</b>	<b>HFS 111</b>	<b>Fitness &amp; Exer Testing I</b>	<b>3-2-0-4</b>
<p>This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</p>			<p>This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.</p>		
<b>PED 113</b>	<b>Aerobics I</b>	<b>0-3-0-1</b>	<b>HFS 116</b>	<b>Pvnt &amp; Care Exer Injuries</b>	<b>2-2-0-3</b>
<p>This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</p>			<p>This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries.</p>		
<b>PED 117</b>	<b>Weight Training I</b>	<b>0-3-0-1</b>	<b>HFS 118</b>	<b>Fitness Facility Mgmt</b>	<b>4-0-0-4</b>
<p>This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.</p>			<p>This course provides information about the management and operation of health and fitness facilities and programs. Topics include human resources, sales and marketing, member retention, financial management, facility design and maintenance, and risk management. Upon completion, students should be able to demonstrate the knowledge and skills necessary to effectively manage a fitness facility.</p>		
<b>PED 118</b>	<b>Weight Training II</b>	<b>0-3-0-1</b>	<b>HFS 120</b>	<b>Group Exer Instruction</b>	<b>2-2-0-3</b>
<p><i>Prerequisites: PED 117</i></p> <p>This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.</p>			<p><i>Prerequisites: HFS 110</i></p> <p>This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity.</p>		
<b>PED 122</b>	<b>Yoga</b>	<b>0-2-0-1</b>	<b>HFS 210</b>	<b>Personal Training</b>	<b>2-2-0-3</b>
<p>This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga.</p>			<p><i>Prerequisites: HFS 110 and HFS 111</i></p> <p>This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.</p>		
			<b>HFS 211</b>	<b>Fitness &amp; Exer Testing II</b>	<b>3-2-0-4</b>
			<p><i>Prerequisites: HFS 110 and HFS 111</i></p> <p>This is an advanced course in graded exercise testing. Topics include various exercise testing protocols for physical fitness and cardiorespiratory fitness with methods for prescribing exercise programs based on exercise test results. Upon completion, students should be able to conduct specific exercise tolerance tests using a variety of equipment and protocols.</p>		

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### **Course Descriptions**

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**HFS 212      Exercise Programming      2-2-0-3**

*Prerequisites: HFS 110*

This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.

**HFS 214      Health and Fitness Law      3-0-0-3**

This course is designed to build a greater awareness and understanding of laws and legal issues encountered in the health and fitness industry. Topics include federal/state regulations, historical/current practices, risk management, torts, employment, discrimination, contracts, waivers, health/fitness screening, client confidentiality, facility safety, equipment liability, and emergency procedures. Upon completion, students should be able to demonstrate an understanding of the legal system to prevent or minimize liability in a fitness setting.

**HFS 218      Lifestyle Changes & Wellness      3-2-0-4**

This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting.

**PSY 150      General Psychology      3-0-0-3**

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

**WBL 111      Work-Based Learning I      0-0-10-1**

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 121      Work-Based Learning II      0-0-10-1**

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.