EXERCISE SCIENCE (EXS)

EXS101 / Introduction to Exercise Science

3 Credits / 3.0 Periods for Lecture

Introductory course that will provide the student with a general overview of the key theories and concepts, professions, and research areas associated with the field of Exercise Science. Educational pathways and career options will also be examined. Prerequisites: None. **Division:** Health Science and Public Service

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EXS112 / Professional Applications of Fitness Principles 3 Credits / 3.0 Periods for Lecture

Basic principles of fitness for the prospective fitness professional and characteristics of quality communication and fitness leadership. Topics include behavior modification, enhancing motivation components of fitness, fitness assessment, risk stratification, exercise programming and modifications. Prerequisites: None.

Division: Health Science and Public Service

EXS125 / Introduction to Exercise Physiology

3 Credits / 3.0 Periods for Lecture

Principles of exercise science applied to fitness instruction. Major factors related to the function of the human body will be examined/ introduced with an emphasis on exercise physiology and functional anatomy. A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor. **Division:** Health Science and Public Service

EXS130 / Strength Fitness-Physiological Principles and Training Techniques

3 Credits / 3.0 Periods for Lecture

Principles and techniques of strength training including strength physiology, performance factors, training recommendations, exercise techniques, and program design and management. Prerequisites: None. **Division:** Health Science and Public Service

EXS132 / Cardiovascular Fitness: Physiological Principles and Training Techniques

3 Credits / 3.0 Periods for Lecture & Lab

Covers principles and techniques of aerobic training and the application of these to the development of aerobic training programs. Includes instructional techniques and safety, and stresses injury prevention. Prerequisites: None.

Division: Health Science and Public Service

EXS145 / Guidelines for Exercise Testing and Prescription 3 Credits / 4.5 Periods for Lecture & Lab

Follows the current ACSM guidelines for health appraisal, risk assessment, safety of exercise, exercise testing, and exercise prescription. Prerequisites: None.

Division: Health Science and Public Service

EXS146 / Introduction to Exercise Testing

1 Credit / 2.0 Periods for Lecture & Lab

Introductory course in exercise testing, to include health appraisal, risk stratification, and the selection and administration of common evidencebased assessments for apparently healthy populations. A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor. Prior completion of or concurrent enrollment in EXS125 is recommended.

Division: Health Science and Public Service

EXS210 / Assessment and Program Design: Muscular Fitness 2 Credits / 3.0 Periods for Lecture & Lab

Principles of muscular fitness training including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of C or better in EXS125. **Division:** Health Science and Public Service

EXS211 / Assessment and Program Design: Flexibility and Balance 2 Credits / 3.0 Periods for Lecture & Lab

Principles of flexibility and balance including evaluation of movement patterns, selection and interpretation of assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of C or better in EXS125. **Division:** Health Science and Public Service

EXS212 / Assessment and Program Design: Cardiorespiratory Fitness 2 Credits / 3.0 Periods for Lecture & Lab

Principles of cardiorespiratory fitness training including evaluation of client needs and health, selection and interpretation of safe and effective assessment techniques and evidence-based program design for healthy and special populations. Prerequisites: A grade of C or better in EXS125. **Division:** Health Science and Public Service

EXS213 / Assessment and Program Design: Weight Management and Motivation

2 Credits / 3.0 Periods for Lecture & Lab

Principles of weight management including evidence-based program design and interpretation of assessments for various populations as well as explanation of theories of motivation and behavior modification. Prerequisites: A grade of C or better in EXS125. **Division:** Health Science and Public Service

EXS214 / Instructional Competency: Flexibility and Mind-Body Exercises 2 Credits / 3.0 Periods for Lecture & Lab

Fundamental methods of instructing and leading fitness activities including flexibility activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better in (EXS125 and HES100) or permission of Instructor. **Division:** Health Sciences

EXS215 / Resistance Training and Recovery Techniques 3 Credits / 4.0 Periods for Lecture & Lab

Fundamental methods for safe and effective instruction of resistance, functional, and athletic conditioning exercises. Application of foundational principles of physiology and kinesiology. Overview of warmup, cooldown, and recovery techniques. A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor.

Division: Health Science and Public Service

EXS216 / Instructional Competency: Muscular Strength and Conditioning 2 Credits / 3.0 Periods for Lecture & Lab

Fundamental methods of instructing and leading fitness activities including strength and conditioning activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better in (EXS125 and HES100) or permission of Instructor. **Division:** Health Sciences

EXS217 / Cardiorespiratory and Flexibility Training 3 Credits / 4.0 Periods for Lecture & Lab

Fundamental methods for safe and effective instruction of cardiorespiratory and flexibility training exercises. Application of foundational principles of physiology and kinesiology. A grade of C or better required in all Prerequisites. Prerequisites or Corequisites: EXS101 or permission of Instructor.

Division: Health Science and Public Service

EXS218 / Instructional Competency: Cardiorespiratory Exercises and Activities

2 Credits / 3.0 Periods for Lecture & Lab

Fundamental methods of instructing and leading fitness activities including cardiorespiratory exercises and activities. Core competencies identified by professional certification agencies. Prerequisites: A grade of C or better in (EXS125 and HES100) or permission of Instructor. **Division:** Health Sciences

EXS239 / Practical Applications of Personal Training Skills and **Techniques Internship**

3 Credits / 5.4 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239 may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS239AA / Practical Applications of Personal Training Skills and **Techniques Internship**

1 Credit / 1.8 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239AA may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS239AB / Practical Applications of Personal Training Skills and **Techniques Internship**

2 Credits / 3.6 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: CPR certification must be current through the duration of the internship. EXS239AB may be repeated for a maximum of six (6) credits. Division: Health Science and Public Service

EXS246 / Advanced Exercise Testing

2 Credits / 3.0 Periods for Lecture & Lab

Advanced course in exercise testing, to include health appraisal, risk stratification, and the selection and administration of evidencebased assessments for apparently healthy and athletic populations. Pharmacology, special populations, and environmental conditions are also examined. Prerequisites: A grade of C or better in EXS146 or permission of Instructor.

Division: Health Science and Public Service

EXS255 / Program Design: Muscular Fitness and Performance 3 Credits / 4.0 Periods for Lecture & Lab

Advanced principles of muscular fitness, sports performance, and recovery techniques including needs analysis, interpretation of assessment outcomes, and evidence-based program design for healthy and athletic populations. Considerations for special populations and environments also examined. Prerequisites: A grade of C or better in (EXS125 and EXS146) or permission of Instructor. Division: Health Science and Public Service

EXS257 / Program Design: Cardiorespiratory Fitness 3 Credits / 4.0 Periods for Lecture & Lab

Advanced principles of cardiorespiratory fitness and weight management including needs analysis, interpretation of assessment outcomes, and evidence-based program design for healthy and athletic populations. Considerations for special populations and environments are also examined. Prerequisites: A grade of C or better in (EXS125 and EXS146) or permission of Instructor.

Division: Health Science and Public Service

EXS270 / Exercise Science Internship 3 Credits / 3.0 Periods for Laboratory

A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the Program Director. Course Notes: CPR and AED certifications must be current through the duration of the internship. EXS270 may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS270AA / Exercise Science Internship 1 Credit / 1.0 Periods for Laboratory

A capstone experience in a fitness or health related facility. Eighty (80) hours of designated work per credit. Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the Program Director. Course Notes: CPR certification must be current through the duration of the internship. EXS270AA may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS270AB / Exercise Science Internship

2 Credits / 2.0 Periods for Laboratory

A capstone experience in a fitness or health related facility. 160 hours of designated work per credit. Prerequisites: Completion of nine (9) credits of EXS courses with a grade of C or better, current CPR and AED card, and permission of Department/Division Chair and/or the Program Director. Course Notes: CPR and AED certifications must be current through the duration of the internship. EXS270AB may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS275 / Sport Science Internship

3 Credits / 3.0 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: EXS275 may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS275AA / Sport Science Internship 1 Credit / 1.0 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: EXS275AA may be repeated for a maximum of six (6) credits.

Division: Health Science and Public Service

EXS275AB / Sport Science Internship 2 Credits / 2.0 Periods for Lecture & Lab

A capstone experience in a fitness or health related facility supervised by a National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialists (CSCS) professional. Eighty (80) hours of designated work per credit. Prerequisites: Completion of a grade of C or better in nine (9) credits of EXS courses, approved by the Department Chair and/or Director, current CPR and AED card, and permission of Department or Division. Course Notes: EXS275AB may be repeated for a maximum of six (6) credits. **Division**: Health Science and Public Service

EXS280 / Special Topics in Exercise Science 2 Credits / 2.0 Periods for Lecture

Conceptual and research basis of current topics in exercise science. Prerequisites: A grade of C or better in EXS101, or EXS112, or EXS125, or permission of Instructor. Course Notes: EXS280 may be repeated for credit.

Division: Health Science and Public Service

EXS280AB / Special Topics in Exercise Science

1 Credit / 1.0 Periods for Lecture

Conceptual and research basis of current topics in exercise science. Prerequisites: A grade of C or better in EXS101, or EXS112, or EXS125, or permission of Instructor. Course Notes: EXS280AB may be repeated for credit.

Division: Health Science and Public Service

EXS290 / Introduction to Evidence-Based Practice

3 Credits / 3.0 Periods for Lecture

Introduction to best practices in the acquisition, analysis, synthesis, and potential application of research in the discipline of exercise science. Specific emphasis on the application of research-based evidence for applied problem solving in exercise science. Prerequisites: A grade of C or better in ENG101 or ENG107 or permission of Instructor. EXS101 recommended.

Division: Health Science and Public Service