

Exercise Science & Sports Medicine

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Available at: Diamond, Laurel, Live, Scarlet

COURSES

Health Science and Technology

This first course in the career field provides students an overview of the opportunities available in the healthcare industry. Students will learn fundamental skills in effective and safe patient care that can be applied across a person's lifespan. They will also be introduced to exercise science and sports medicine, the field of biomedical research and the importance of managing health information.

Exercise and Athletic Training*

In this course, students will apply procedures and techniques used in athletic training and in the care and rehabilitation of athletic injuries and therapeutic exercise. Topics include injury prevention, conditioning, and wound care techniques of the musculoskeletal system. Students will learn techniques in the analysis of mechanical factors related to human movement. In addition, current trends, technology, legal considerations, and the role of exercise science in relationship to other health fields will be emphasized.

Athletic Injuries and Prevention

Students will identify signs and symptoms of injury and apply emergency procedures and techniques used in the immediate care of athletic-related trauma. Students will learn clinical and field evaluative processes, injury prevention techniques, conditioning techniques, treatment, taping, bracing, and rehabilitation of musculoskeletal injuries and conditions. Students will design and implement conditioning programs including nutritional considerations and ergogenic aids. Emphasis is placed on the synthesis of information gathered through injury history, observation, and manual muscle testing.

Fitness Evaluation and Assessment*

Students will complete comprehensive fitness evaluations and develop individualized training programs. Students will administer lab and field tests of cardiovascular endurance, body composition, joint flexibility and muscular strength, power, and endurance. Emphasis is placed on assessing body composition, neuromuscular flexibility, agility, balance, coordination, and proprioception. Additionally, students will identify components of physical fitness and communicate how physical activity impacts health and wellness.

Nutrition and Wellness

Students will increase their knowledge of comprehensive health and wellness. Students will be able to identify the components of fitness and communicate the relationship between physical fitness, physical performance, injury prevention, and nutritional intake. Students will evaluate an individual's state of nutrition based upon the impact of personal choices and social, scientific, psychological and environmental influences. Further, students will calculate an individual's kilocalorie burn rate and recommend an ideal diet and physical fitness plan.

* These courses are eligible for college credit under the Career-Technical Assurance Guide (CTAG.)
For more information about what CTAG is: ohiohighered.org/transfer/ct2/earning-college-credit
To learn what credit is currently available at Ohio colleges and universities: transfercredit.ohio.gov/pg_9?9915099094718

CREDENTIALS YOU CAN EARN

- AMCA – Physical Therapy Aide
- OSHA 10 – Healthcare
- American Council on Exercise – Personal Trainer
- Basic Life Support CPR/AED, ECSI First Aid

INSTRUCTORS

- Diamond Oaks: Anthony Ross – rossa@greatoaks.com
- Laurel Oaks: Preston Thomas – thomasp@greatoaks.com
- Live Oaks: Scott Proscia – proscias@greatoaks.com
- Scarlet Oaks: Roger Osborne – osborner@greatoaks.com

Courses subject to change