



# Exercise Physiology and Related Sciences

## Program Description

The Exercise Physiology and Related Sciences Program (ExPRS) is a specialized program and follows a similar curricular format as the district's other career academies. ExPRS provides students with an understanding of how the body functions, reacts and responds to movement during physical exercise. The Exercise Physiology and Related Sciences Program has been designed to prepare students for the many opportunities in the growing fields of health and exercise, specifically in jobs related to **physical therapy, occupational therapy, exercise science, athletic training, sports medicine, cardiac rehabilitation and nutrition**. Students who enroll in this career academy will obtain a solid foundation in the medical sciences while completing a curriculum that is rigorous, offering students the opportunity to earn up to 19 college credits through the University of Medicine and Dentistry. The college credits are as follows:

University of Medicine and Dentistry	
Course	Credits
Fundamentals of Health and Wellness	3
Dynamics of Health Care in Society	3
Anatomy and Physiology I	4
Anatomy and Physiology II	4
Scientific Principles of Nutrition	3
Emergency and Clinical Care	2

**Students must receive a C or better and pass the UMDNJ exam for each course to receive credits.**

The ExPRS program is supported by an advisory board consisting of industry experts and professionals from academia. Students are encouraged to utilize the board as a resource for career and educational opportunities. Internships, field trips and guest speakers will provide students opportunities for career exploration. Upperclassmen have the option of participating in job shadowing experiences at healthcare facilities, wellness centers, therapy facilities, rehabilitation centers, fitness centers, and sports medicine offices. Upon completion of the ExPRS Program, students will receive certification as a personal trainer through the American College of Sports Medicine. Students who successfully complete the four year ExPRS program will have a solid academic and practical foundation for pursuing further studies in areas related to exercise and medicine.

For additional information about ExPRS Program, please contact Mr. Jeffrey Lerner - Principal, [jlerner@ucvts.tec.nj.us](mailto:jlerner@ucvts.tec.nj.us) or at (908) 889-8288 x311.





## EXERCISE PHYSIOLOGY AND RELATED SCIENCES

(All Academic Courses are Honors, Advanced Placement©, or College Level for Dual Credit)

	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>HISTORY</b>	World History	US History I	US History II	AP European History* or AP Government
<b>ENGLISH</b>	English I- World Literature	English II - Early American Literature	English III- Modern American Literature	English IV- British Literature or AP English
<b>WORLD LANGUAGE</b>	Spanish I- III	Spanish II-IV	Spanish III-IV*	Spanish IV* or AP Spanish*
<b>PHYSICAL EDUCATION</b>	Fitness & Health I	Fitness & Health II	Fitness Health III <b>Emergency and Clinical Care (Rutgers)</b>	Fitness & Health IV <b>Fundamentals of Health and Wellness (Rutgers)</b>
<b>MATHEMATICS</b>	Combined Algebra or Geometry/ Trigonometry	Geometry/ Trigonometry or Math Analysis	Math Analysis or AP Calculus I A/B	AP Calculus I A/B or AP Calculus II B/C
<b>SCIENCE</b>	Biology  Foundations of Science	Chemistry	Physics  <b>Anatomy/ Physiology (Rutgers)</b>  AP Chemistry* or AP Biology*	AP Chemistry* or AP Biology* or AP Physics or <b>Anatomy / Physiology II*(Rutgers)</b>
<b>TECHNICAL CONCENTRATION</b>	Foundations of Exercise Science	Intro. to Exercise Physiology  <b>Dynamics of Health Care (Rutgers)</b>  Introduction to Nutrition	Introduction to Physical Therapy  <b>Scientific Principals Nutrition (Rutgers)</b>	<b>Medical Terminology (Rutgers)</b>  Exercise Prescriptions for the Special Populations
<b>INTERDISCIPLINARY Studies</b>		Financial Literacy  Visual and Performing Arts Requirement		

\* Electives (all other course work is required)