

**Common Course Outline**  
**AEXS 120**  
**Introduction to Applied Exercise Science**  
**3 Credits**

**The Community College of Baltimore County**

**Description**

**AEXS 120 – 3 credits – Introduction to Applied Exercise Science** introduces the student to the demands and rewards of a career in health, fitness, or exercise science. Course work exposes the student to specific areas of study, technology, certifications, professional associations, and career opportunities. Class experiences include the skillful use of technology and equipment and practical applications of concepts.

**3 Credits**

**Pre-requisites:** None

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. develop and implement a plan for personal fitness;
2. determine credible sources and analyze information from selected professional journals;
3. investigate career options and certifying agencies for career path development;
4. create a lesson plan designed for cardiorespiratory endurance fitness;
5. demonstrate appropriate communication and teaching skills while engaged in class activities;
6. discuss the career insights gained while shadowing an exercise science professional in the workplace;
7. describe the role of nutrition in fitness and sport performance;
8. explain the role of exercise physiology in the field of applied exercise science;
9. describe the fundamentals of biomechanics and motor control/motor learning;
10. explain the relationship between sports psychology and exercise/sports performance;
11. compare and contrast various applied exercise science career paths;
12. identify the areas of study in exercise epidemiology;
13. promote health and fitness in the community by participating in or leading health and/or fitness related community activities during the semester; and
14. display appropriate confidence and poise when leading activities or presenting lessons.

**Major Topics**

- I. Principles of wellness education
- II. Personal fitness plans
- III. Components of fitness

- IV. Measurement in exercise science
- V. Exercise physiology
- VI. Exercise epidemiology
- VII. Exercise and sport nutrition
- VIII. Biomechanics
- IX. Motor control and motor learning
- X. Exercise and sport psychology
- XI. Investigating career options
- XII. Certifying agencies
- XIII. Teaching presentation

### **Course Requirements**

Grading procedures will be determined by the individual faculty member but will include the following:

### **Grading/exams**

- Attendance and participation
- Personal fitness improvement plan
- A minimum of four practical application projects, to include presentation at a health fair and the shadowing project
- Teaching presentation including a lesson plan
- A written comprehensive final exam

Written Assignments: Students are required to utilize appropriate academic resources.

### **Other Course Information**

This class requires physical activity and also includes an off-campus job shadowing project which will require three (3) out of class hours.