

## Science of Fitness

HLTH 033 056

Credits: 0.5 units / 5 hours

### Course Description

This course is designed to help students understand the science of fitness and how this knowledge can be applied to their life now and in the future. In this course students will assess their current level of fitness and then make a plan to increase their physical fitness, maintain a healthy weight, and practice effective stress management. Students will learn the benefits of routine physical activity, how to prepare for physical activity, how to measure and assess cardiorespiratory endurance, muscular strength and endurance, and flexibility, and incorporate them in an exercise program. They will learn the major components of nutrition and a healthy diet, identify strategies for effective weight management, identify common symptoms and sources of stress, along with stress coping strategies, and how to make informed decisions to achieve lifetime fitness.

**NOTE:** This course is may also be used for science credit.

**Graded Assessments:** 4 Unit Evaluations; 2 Projects; 2 Proctored Progress Tests

### Course Objectives

When you have completed the materials in this course, you should be able to:

1. Describe the benefits of routine physical activity.
2. Describe the Stages of Change model used in adopting a healthy lifestyle.
3. Determine how much physical activity is needed each week and how to prepare for physical activity.
4. Measure and assess cardiorespiratory endurance, and then design an appropriate cardiorespiratory exercise program.
5. Define and assess flexibility, and implement stretching into an exercise program.
6. Measure and assess muscular strength and endurance, and then design an effective strength training program.
7. Describe the major components of nutrition and how to follow a healthy diet.
8. Describe methods to assess body composition, and identify strategies for effective weight management.
9. Identify common symptoms and sources of stress as well as useful strategies for coping with stress.
10. Describe a lifetime fitness program and the informed decisions necessary for achieving fitness for life.

## Course Outline

### Unit 1: Physical Activity and a Healthy Lifestyle

Lesson 1: Physical Activity Benefits  
Lesson 2: Changing to a Healthier Lifestyle  
Lesson 3: Preparing for Exercise  
Unit 1 Evaluation  
Project 1

### Unit 2: Components of a Physical Fitness Program

Lesson 4: Cardiorespiratory Endurance  
Lesson 5: Flexibility  
Lesson 6: Muscular Strength and Endurance  
Unit 2 Evaluation  
Progress Test 1

### Unit 3: Nutrition, Healthy Weight, and Sleep

Lesson 7: The Science of Nutrition  
Lesson 8: Healthy Weight Management  
Lesson 9: Sleep  
Unit 3 Evaluation  
Project 2

### Unit 4: Stress Management and Your Lifetime Fitness Program

Lesson 10: Stress Management  
Lesson 11: Injury Care and Prevention  
Lesson 12: Decisions for Lifetime Fitness  
Unit 4 Evaluation  
Progress Test 2

## Required Textbook and Materials

(available through Follett virtual bookstore at <http://highschool.nebraska.bkstr.com>)

**Textbook:** *Fit to be Well*, 2023. Jones & Bartlett Learning. (ISBN: 9781284228397)

*Science of Fitness* Syllabus HLTH033056 is the print version of the online course content. This print course content is optional for this course.