COURSE OUTLINE

HPE 110 Concepts of Health & Fitness

Course Number                     Course Title                                Credits
1          2              0                   0

Class or Lecture Hours             Laboratory Work Hours                 Clinical or Studio Hours     Practicum, Co-op, Internship
15 or 10 week Course or Laboratory Work Hours  Studio Hours  Co-op, Internship
Course Length (# of weeks)

75

Performance on an Examination/Demonstration
(Placement Score (if applicable); minimum CLEP score)

Traditional

Delivery Methods
(Traditional, Online, Hybrid)

Catalog Description:
Through lectures and laboratories, essential knowledge and skills in health and all dimensions of wellness will be explored. Through self-assessments, students will develop a wellness profile and program designed to achieve and/or maintain optimal livelong health and wellness. Physical activity is required.

Prerequisites: ENG 033 or equivalent

Corequisites: None

Last Revised: December 26, 2016

Course Coordinator
Robert Pugh; Office PE 115; pughb@mccc.edu; 609-570-3743

Required Texts and Other Materials:
Concepts of Fitness and Wellness
By: Corbin, Welk, Corbin & Welk
Publisher: McGraw-Hill
11th Edition

Information resources:
The primary resource for this course is the textbook listed above. Students will also use a free computer or mobile app to track their diet and exercise habits so they can have a healthier lifestyle. Students are also encouraged to utilize the MCCC fitness center.

Other learning resources:
The West Windsor Learning Center, located in LB 214 on the West Windsor Campus, offers free tutoring for students. If you have a disability that may have some impact on your work in this class and for which you may require accommodations, please call Disability Services at 609-570-3525 or visit the office in Room LB 217.
Course Goals

Upon Successful Completion of the course, the student will be able to:

1. develop assessment and self-management skills necessary to improve the quality of life through health, wellness and fitness
2. identify and implement the various health and skill related components of physical fitness and their associated health benefits, including but not limited to cardiovascular fitness
3. recognize and appreciate the basic anatomy and physiology of one’s biological systems, its interconnectedness and how to correct possible imbalances
4. identify and describe the national guidelines for health, wellness and fitness
5. analyze concerning personal lifestyle behaviors (i.e. safe-sex, smoking, nutrition, etc.)
6. identify health risks associated with misinformation concerning health and fitness

General Education Knowledge Goals

Goal 1. Communication. Students will communicate effectively in both speech and writing.
Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.
Goal 4. Technology or Information Literacy. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
Goal 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
Goal 6. Humanities. Students will analyze works in the fields of art, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language.
Goal 7. History. Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.
Goal 8. Diversity. Students will understand the importance of a global perspective and culturally diverse peoples.

MCCC Core Competencies

Goal A. Written and Oral Communication in English. Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.
Goal B. Critical Thinking and Problem-solving. Students will use critical thinking and problem solving skills in analyzing information.
Goal C. Ethical Decision-Making. Students will recognize, analyze and assess ethical issues and situations.
Goal D. Information Literacy. Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.
Goal E. Computer Literacy. Students will use computers to access, analyze or present information, solve problems, and communicate with others.
Goal F. Collaboration and Cooperation. Students will develop the interpersonal skills required for effective performance in-group situations.
Goal G. Intra-Cultural and Inter-Cultural Responsibility. Students will demonstrate an awareness of the responsibilities of intelligent citizenship in a diverse and pluralistic society, and will demonstrate cultural, global, and environmental awareness.
Units of Study

Unit 1: Objectives:
- Define physical fitness, wellness, exercise, and health.
- Define each of the components of physical fitness.
- Define each of the dimensions of wellness.
- Explain the purpose and significance of the Healthy People goals for the nation.
- Distinguish between a long life and a long healthy life.
- Explain the importance of healthy lifestyles to good health and wellness.
- Explain the importance of regular exercise to good fitness.
- Assess personal wellness. (Lab)
- Assess personal fitness with simple estimations. (Lab)
- Describe the stages of change that people experience in modifying their lifestyle behaviors.
- Describe personal factors that can influence behavior change.
- Explain why self-management skills are needed for lasting behavior change.
- Provide examples of some important self-management skills for behavior change.
- Assess one's level of exercise adherence. (Lab)
- Evaluate current level of self-management skills for behavior change. (Lab)
- Explain the meaning of "activity readiness".
- Describe the benefits of a warm-up and cool-down.
- Explain the important characteristics of fitness clothing for different conditions.
- Explain precautions for exercising in the heat and procedures for cooling the body.
- Describe the types and severity of heat related illnesses.
- List the precautions for exercising in the cold.
- Explain how other environmental factors can affect one's ability to exercise safely.
- Define and explain the meaning of the specificity principle.
- Define and explain the meaning of the progression principles.
- Define and explain the concept of threshold of training.
- Define and explain the concept of fitness target zones.
- Explain the FIT formula.
- Describe the levels of the activity pyramid.
- Explain the significance of the different activities in the activity pyramid.
- Evaluate current activity habits according to the activity pyramid. (Lab)
- Course Goals: 01, 02, 04
- Core Competencies: A, B, F
- Gen Ed Goals: 1, 2, 5

Unit 2 - Objectives:
- Describe the ways in which activity and fitness contribute to health and wellness.
- Identify and define important hypokinetic diseases, i.e. cardiovascular disease, cancer, back problems, long-term weight control, diabetes and osteoporosis.
- Identify and define terms related to cardiovascular diseases and corresponding risk factors.
- Explain the relationship of activity and fitness to cardiovascular health.
- Describe the theories for the beneficial effects of activity on the heart.
- Describe the theories for the beneficial effects of activity on preventing atherosclerosis.
- Explain the relationship of activity and fitness to other hypokinetic conditions.
- Explain the effects of activity and fitness on non-hypokinetic conditions.
- Describe the basic anatomy and physiology of the heart and vascular system.
- Describe the contributions of the heart, lungs and bloods to good cardiovascular fitness.
- Explain how exercise improves the fitness of the heart and vascular system.
- Describe the relationship between CV fitness and heart disease.
- Discuss the threshold of training and target zones, and FIT formula for cardiovascular fitness.
- Explain how training target zone changes as fitness improves.
- Count pulse accurately and determining target heart rates. (Lab)
- Self-assess cardiovascular fitness. (Lab)
- Rate perceptions of exertion accurately. (Lab)
• Identify high blood pressure and how it affects health
• Understand and experience perceived exertion
• Explain the effect of regular exercise on the arteries and veins.
• **Course Goals:** 01, 02, 03, 04, 06
• **Core Competencies:** A, B, F
• **Gen Ed Goals:** 1, 2, 4

**Unit 3 - Objectives:**
• List and describe the role of the different nutrients in the diet.
• Distinguish between simple and complex carbohydrates, saturated and unsaturated fat and between complete (animal) and incomplete (vegetable) proteins.
• Calculate the percent of calories from each dietary nutrient.
• Discuss the recommended amount of vitamins and minerals in one's diet.
• Discuss the importance of soluble and insoluble fiber in the diet.
• Describe the concept of the food pyramid as a model for diet.
• Discuss the dietary needs of active people and athletes compared to sedentary people.
• Describe common types of nutrition quackery.
• Describe some to the common eating disorders.
• Evaluate the quality of different sample diets by calculating percent of calories from nutrients. (Lab)
• Assess the quality of one's own diet. (Lab)
• Describe the prevalence of overweight conditions in the U.S.
• Explain the difference between overweight and overfatness and standards for both.
• Describe the importance of regional fat deposition and how it is measured.
• Explain the use and calculation of body mass index.
• List and describe various methods of assessing body fatness.
• Discuss the relationship between overfatness/underfatness and good health.
• List and explain the common reasons for overfatness and describe appropriate plans for fat reduction.
• Explain the facts about diet, exercise, and body composition.
• Discuss pressures to be thin and risks of eating disorders.
• Evaluate body composition with skinfolds. (Lab)
• Evaluate body composition with anthropometric measures. (Lab)
• Evaluate daily energy expenditure. (Lab)
• State the risks of poor flexibility and the benefits of good flexibility.
• List causes of poor flexibility and explain the principle of overload used to improve flexibility.
• Explain differences between different stretching techniques.
• Give an example of the principle of specificity applied to flexibility exercises.
• Describe the threshold of training and target zone (FIT) for flexibility.
• Describe some safety precautions to prevent injury when performing stretching exercises.
• Describe stretches that would improve flexibility for different joints of the body.
• Evaluate their personal level of flexibility. (Lab)
• Plan and log stretching exercises to improve personal flexibility. (Lab)
• Describe the benefits of good muscular fitness.
• Distinguish between muscular strength and muscular endurance, how to train for and the need for both.
• Describe the difference among strength and power.
• Describe the risks associated with using anabolic steroids and/or growth hormones as a way to obtain strength.
• Explain how the principle of overload and specificity area applied in resistance training.
• Distinguish among isotonic, isokinetic, and isometric contractions.
• Distinguish between eccentric and concentric contractions.
• Describe the threshold of training and the target zone for resistance training.
• Explain the advantages and disadvantages of free weights and weight machines.
• Describe exercises to train different body parts.
• List the dangers of anabolic steroids and other supplements used to improve strength or physique.
• Evaluate personal levels of strength and endurance. (Lab)
• Plan a personal resistance training program to suit personal interests and needs. (Lab)
Unit 4: Objectives:

- Describe the impact of back problems on American society.
- Define and distinguish among body mechanics, static posture, and dynamic posture.
- Describe the function of the spinal column and list the benefits of good posture.
- Describe the elements of good standing posture and causes of poor posture.
- Describe some common postural problems and probable causes of backaches and neck aches.
- List guidelines for preventing backache and neck ache.
- Describe the correct methods of moving a heavy object from the floor.
- Determine your risk for backache or neck ache. (Lab)
- Recognize postural deviations and assess another person's posture. (Lab)
- Plan an exercise/stretching program to address personal needs regarding back care. (Lab)
- Explain the relationship between skill-related fitness, health-related fitness and performance.
- Distinguish between high-level aerobic and anaerobic capabilities.
- Describe the specific needs of athletes training for muscular strength
- Describe the concept of "periodization" and how it applies to performance training.
- Define power and describe how to train to increase power.
- Describe which skill-related fitness components are required for different sports.
- List a few common hyperkinetic conditions.
- Define the term "ergogenic aid" and provide an example.
- Evaluate personal levels of skill-related fitness. (Lab)
- List the methods of transmission, symptoms and treatment of each of following sexually transmitted infections: chlamydia, gonorrhea, herpes, syphilis, human papilloma virus, AIDS, hepatitis B and pediculosis pubis.
- Understand the responsibilities involved with sexual activity

Unit 5 - Objectives:

- Define stress and explain how the autonomic nervous system responds to it.
- Explain how stress impacts health and promotes illness.
- List common sources of environmental, physiological, emotional, and social stressors.
- Distinguish between hypostress, distress, and eustress, and apply these terms to the target zone concept.
- Describe the common characteristics of stressful events.
- Explain how "appraisal" of stress can make a difference in the perception of a stressor.
- Evaluate personal stress level using the Life Experience survey. (Lab)
- Evaluate personal level of Hardiness that can protect against stress. (Lab)
- List common coping strategies for stress management.
- Explain some of the reasons why exercise is found to reduce stress.
- Discuss the importance of social support for stress management.
- Differentiate between leisure and recreation and list some of the most popular forms.
- Differentiate between committed and free time and list steps for managing time more effectively.
- List and explain the steps for managing stress more effectively.
- Evaluate levels of muscular tension related to stress and describe ways to reduce it. (Lab)
- Evaluate personal coping strategies used to manage stress. (Lab)
- Evaluate personal levels of social support in relation to stress management. (Lab)
- Monitor time usage in order to improve time management skills for stress management. (Lab)
- Distinguish between fraud and quackery.
- Describe the characteristics that make a person susceptible to fraud and quackery.
- Describe some potentially fraudulent weight loss gimmicks such as spot reducing, cellulite treatments, surgical sculpting for fitness, and others.
Describe some potentially fraudulent fitness products such as passive exercise machines.
Describe some potentially fraudulent health products and procedures.
Explain what massage does and does not do to the body, including its effect on fitness.
Explain why tanning salons, saunas, and whirlpools may not be effective and can be harmful.
Explain the difference between an expert and a quack and tell how to recognize quackery.
List common sources of misinformation and how it contributes to quackery.
Apply consumer skills to evaluate health-related products. (Lab)
Describe the factors that influence our lifestyles.
List the major healthy lifestyles that are crucial to health and wellness.
List and explain the five steps for planning for healthy living.
Plan a personal lifestyle change program. (Lab)
Course Goals: 01, 02, 03, 04, 05, 06
Core Competencies: A, B, C, F
Gen Ed Goals: 1, 2, 4, 5, 8

Evaluation of Student Learning:
Achievement of the course objectives will be evaluated through the use of the following tools:
- Participation in weekly lab research and/or activities. (CG1, 2, 3, 4, 5, 6)
- Informal writing in weekly lab reports. (CG1, 3, 4, 5, 6)
- Student-centered learning projects. (CG1, 2, 3, 5, 6)
- Fitness and Wellness Portfolio. (CG1, 2, 3, 4, 5, 6)
- Summative assessments (CG1, 2, 3, 4, 5, 6)

Project Values/Grade Breakdown

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<tr>
<th>The final grade is based on the following values:</th>
<th>Points</th>
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<tbody>
<tr>
<td>Participation, Labs and Final Project</td>
<td>100</td>
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<tr>
<td>Unit Tests</td>
<td>100</td>
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<tr>
<td>Total</td>
<td>200</td>
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Students with Disabilities
Any student in this class who has special needs because of a disability is entitled to receive accommodations. Eligible students at Mercer County Community College are assured services under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

If you believe you are eligible for services, please contact the Director of Academic Support Services.

Academic Integrity
As per the student handbook, “A student will be guilty of violating academic integrity if he/she (a) knowingly represents the work of others as his/her own, (b) uses or obtains unauthorized assistance in the execution of academic work, or (c) gives fraudulent assistance to another student.” Students should read the Academic Integrity policy in the MCCC Rights and Responsibilities Student Handbook. Academic Dishonesty will result in failure of this course.