I. Catalog Description and Credit Hours of Course:

Individualized approach to fitness/wellness concepts and their application. Emphasis on experiencing a directed exercise program. Two hours lecture, one hour lab.(3)

II. Prerequisite(s):
None.

III. Objectives of the Course:

Upon completion of the course the student will be able to:
A. Describe the health-related fitness components and the impact of regular exercise on these components.
B. Explain the role of nutrition and exercise in the maintenance of a healthy body composition.
C. Explain terminology used in conjunction with common exercise procedures and equipment.
D. Discuss means of assessment of health-related fitness components and concepts of wellness.
E. Demonstrate proper technique in the performance of musculoskeletal exercise and means of monitoring exercise intensity.
F. Discuss the concepts of wellness as they relate to healthy and diseased states.
G. Identify appropriate changes in individualized exercise habits combined with other appropriate lifestyle modifications for health enhancement.
H. Demonstrate the ability to lead a group exercise session.

IV. Expectations of the Student: The student will:
A. Complete all examinations.
B. Complete all assignments.
C. Participate in all in-class and designated out-of-class activities.
D. Demonstrate the ability to lead a group exercise activity.

V. Course Outline/Learning Experiences:

A. Overview of wellness
   1. Dimensions of wellness
   2. Disease risk and wellness
   3. Health behavior and wellness
   4. An overview of Healthy People 2010
   5. Laboratory activities
a. completion of wellness assessment instruments
b. health screening instruments
c. identification of personal lifestyle modifications to enhance wellness

B. Physical Fitness
1. Components of health-related physical fitness
2. Principles of training
3. Exercise program design
4. Laboratory activities
   a. resting measures
      i. heart rate – palpation sites
      ii. resting blood pressure measurement

C. Cardiorespiratory Endurance
1. Benefits of cardiorespiratory endurance exercise
2. Assessing cardiorespiratory fitness
3. Cardiorespiratory endurance exercise program
   a. frequency
   b. intensity
   c. duration
   d. mode
4. Laboratory activities
   a. use of Karvonen formula for determining target heart rates
   b. 12-minute run test
   c. Multi-stage shuttle run
   d. participation in aerobic exercise program
      i. individual activities
      ii. group exercise classes

D. Muscular Strength and Endurance
1. Benefits of resistance training exercise
2. Assessing muscular strength and endurance
3. Resistance training program design
   a. goals
   b. exercises - technique
   c. training volume - systems
   d. progression
   e. safety and spotting
4. Laboratory activities
   a. 1 RM testing for strength
   b. Application of equations for estimating 1 RM
   c. Testing for muscular endurance
      i. 70% 1RM method
      ii. Canadian Curl-up
      iii. 1-min timed sit-ups
      iv. Push-up test
   d. participation in resistance training program including circuit training
E. Flexibility
   1. Benefits of flexibility training
   2. Factors effecting flexibility
   3. Flexibility program development
      a. technique
      b. passive and active stretches
      c. duration and frequency
   4. Flexibility and low back pain
   5. Laboratory activities
      a. Sit-and Reach tests
      b. other flexibility tests
      c. participation in flexibility exercise program

F. Body Composition
   1. Importance of maintenance of a healthy body composition
   2. Assessing body composition
   3. Changing body composition
   4. Laboratory activities
      a. measurement of body mass index
      b. girth measurements
      c. percent fat estimation
         i. skinfolds
         ii. other methods

G. Group Exercise Leadership
   1. Leadership
      a. vision
      b. communication
   2. Music
   3. Warm-up and Cool-down
   4. Modifying activities for participants
   5. Teaching technique
      a. flexibility and strengthening exercise demonstration
      b. partner exercises
   6. Safety concerns
   7. Laboratory activities
      a. demonstration of group exercise leadership

H. Nutrition
   1. Components of a healthy diet
   2. Nutrition planning
      a. food labels
      b. dietary supplements
      c. personal application of the principles of nutrition
   3. Overweight and obese – Health Implications
   4. Factors contributing to excess body fat
      a. caloric balance
      b. set point theory
   5. Weight management
      a. weight loss programs
      b. diet aids and prescription drugs
c. other options – surgery, psychological help

6. Pre-competition/pre-activity meals
   a. fluid consumption
   b. foods to include/avoid

7. Laboratory activities
   a. dietary analysis
   b. calculating energy balance

I. Stress 2

1. Stress Response
2. Stress and Wellness
3. Identification of sources and management of stress
4. Laboratory activities
   a. Identifying stress level and key stressors

J. An Overview of Lifestyle, Fitness, and Chronic Disease 3

1. Cardiovascular Diseases
2. Diabetes
3. Cancer
4. Pulmonary Diseases
5. Osteoporosis
6. Osteoarthritis

Laboratory Hours
Total Hours 60

VI. Textbook:

VII. Basis for Student Evaluation:

This is a three credit hour class with two credits being allocated to lecture classes and one credit to the practical sessions. The final grade will be a composite of grades received in both sections with the following percentages allocated:

<table>
<thead>
<tr>
<th>Practical</th>
<th>35%</th>
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<tbody>
<tr>
<td>Theoretical</td>
<td>65%</td>
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A. Practical: (evaluated from laboratory manual report)

1. Completion of:
   a. All exercise programs as evidenced by physical participation in class and exercise log documentation.
   b. All in-laboratory health fitness assessments
   c. Outside laboratory assignments

2. Group Exercise Demonstration
   a. Students will lead the class through a group exercise activity.

B. Theoretical:

1. Quizzes
2. Examinations