

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

Transfer course A.A. degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: HE 100 Health Education and Fitness Dynamics

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 64

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Individual well-being will be developed through the study of the emotional, spiritual, intellectual, social, and physical qualities of health. Physical activity in lab setting will be used to support and reinforce the applicable areas.

SPECIFIC COURSE OBJECTIVES:

Successful students will:

1. apply principles of proper body mechanics pertaining to health education and fitness dynamics.
2. analyze personal fitness needs through a testing program to evaluate individual physical fitness status.
3. identify concepts of fitness, skill performance, body mechanics, posture, obesity, stress, diet, nutrition and the value of exercise.
4. identify programs for aiding him/her in becoming physically fit and more efficient in daily life.
5. evaluate his/her attitude toward health, physical activity, physical dependency, substance abuse, stress induced behavior building self-esteem and relationships.
6. explain concepts for identifying communicable, cardiovascular, cancer and sexually transmitted diseases.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

1. **AEROBICS**

- a. Technology and fitness
- b. The body and energy
- c. Aerobic vs anaerobic
- d. Physiological effects of aerobics
- e. Definition of health
- f. Primary and secondary fitness parameters
- g. Health 100 course objectives
- h. Formulas used to determine heart efficiency
- i. Application of aerobic concepts
- j. Implications of aerobic concepts on adult fitness programs
- k. Blood pressure readings

2. **CARDIOVASCULAR SYSTEM**

- a. Cardiovascular system components and anatomy
- b. Blood circulation
- c. Types of blood vessels
- d. Heart rate and safe training zone
- e. Physiological implications of cardiovascular disease
- f. Cardiac cycle
- g. Plaque and its formation
- h. Cardiovascular disease and related medical terms
- i. "Hi-Tech" implications of health

3. **RESPIRATORY SYSTEM**

- a. Respiratory processes
- b. Anatomy of the lung
- c. Lung volumes and capacities:
 - (1) residual air
 - (2) tidal air
 - (3) vital capacity
 - (4) respiratory volume
- d. O₂ and CO₂ diffusion and transport
- e. Metabolism
- f. Effects of exercise
- g. Maximum oxygen uptake

4. **EXERCISE PROGRAMS**

- a. Training
- b. Effects of lifestyles
- c. Cautions
- d. Frequency, intensity, and duration
- e. Schedules or programs
- f. Types of training programs
- g. Fitness program planning

5. **STRENGTH**
 - a. The 12 major muscle groups of the body
 - b. Twelve(12) exercises which develop 23 muscles
 - c. Endurance vs strength
 - d. Muscles:
 - (1) skeletal
 - (2) heart
 - (3) smooth
 - e. Self-training programs
 - f. Isometric, isotonic and isokenetic training programs
 - g. The "Sliding Filament Theory"

6. **NUTRITIONAL GUIDELINES**
 - a. Obesity
 - b. Balanced diets
 - c. Identification of low fat foods
 - d. Diets which cause weight gain
 - e. Fat reduction without dieting
 - f. The effects of exercise on metabolic balance
 - g. Prenatal care
 - h. Childhood and eating habits
 - i. Food pyramid

7. **ESSENTIAL NUTRIENTS**
 - a. Digestion, absorption, and metabolism
 - b. Sources of required nutrients
 - c. Enzymes and the digestive system
 - d. The effects of foods on optimal health
 - e. Carbohydrates, fats, and proteins
 - f. Energy production

8. **VITAMINS AND MINERALS**
 - a. Facts vs fallacy
 - b. Content of vitamins and minerals in foods
 - c. Supplementing the diet
 - d. Macro and micro nutrients

9. **BODY POLLUTION**
 - a. Physiological chemical reactions
 - b. The effect of our poorly regulated food/chemical industry
 - c. Chemicals in foods:
 - (1) Testing done on animals
 - (2) Unique individual metabolism systems
 - (3) State-of-the-art in testing
 - d. Food additives:
 - (1) BHA and BHT
 - (2) Nitrates
 - (3) Coloring agents
 - (4) Flavor enhancers

10. **CANCER**

- a. Definition
- b. Carcinogens
- c. Seven early danger signs
- d. Diagnosis
- e. Treatment
- f. Types
- g. Impact:
 - (1) emotional
 - (2) social
 - (3) economic

11. **COMMUNICABLE DISEASE**

- a. History
- b. Definitions
- c. Microbes
- d. Stages
- e. Body's defenses
- f. STD's
- g. AIDS

12. **FLEXIBILITY**

- a. Relationship to health
- b. Stretching
- c. Proper body alignment
- d. Posture deviations and correction
- e. Causes of back pain
- f. Exercises to relieve back discomfort
- g. Structures of the back
- h. Preventive back care

13. **MENTAL HEALTH**

- a. Neurotransmitters
- b. Endorphines
- c. Mental and physical changes which occur without drugs
- d. Balanced life style
- e. Stress
- f. General Adaptation Syndrome
- g. Stress response pathway
- h. Four ways to cope with stress
- i. Illness as a result of stress
- j. Acquisition of habits
- k. Four steps to changing habits
- l. Motivators which reinforce change
- m. Self-esteem
- n. Self-fulfilling prophecy
- o. Law of attraction
- p. Affirmations

14. **MARRIAGE AND FAMILY**

- a. "Love"
- b. Relationship of love to marriage
- c. Factors for a successful marriage
- d. Marital problems
- e. Marriage vs friendship
- f. "Classic" definitions of love
- g. Family life
- h. World population problems
- i. Family planning
- j. Contraception
- k. Abortion and alternatives

15. **SUBSTANCE ABUSE AND CHEMICAL DEPENDENCY**

- a. Social consequences
- b. Associated financial cost to society
- c. prevention models
- d. Intervention models
- e. Gateway drugs
- f. Addictive personality:
 - (1) Biochemical genetic traits
 - (2) Progressive, chronic, and terminal signs
 - (3) Symptoms tolerance
 - (4) Euphoric responses
 - (5) Disease pathology
 - (6) Psychological defenses
- g. History, description, chemical contents, and effects of substances to include the following major groups:
 - (1) Narcotics
 - (2) Depressants
 - (3) Stimulants
 - (4) Hallucinogens
 - (5) Cannabis, designer drugs, and steroids
 - (6) Alcohol
 - (7) Tobacco
- h. Social responses to chemical dependency.
 - (1) Survey of social agencies
 - (2) 12 step programs (AA/NA)
 - (3) Federal, State, and local laws
 - (4) College policies and assistance plan
 - (5) Self-help plans
 - (6) Support groups
 - (7) Intervention
 - (8) Hospital plans and insurance protection
 - (9) County programs (CMH, Detox)

REQUIRED READING:

Donatelle, Rebecca J. and Lorraine G. Davis. Health The Basics. 4th edition. Boston: Allyn & Bacon, 2001.

SUGGESTED READING:

Instructor generated handouts.

REQUIRED WRITING:

1. a completed journal of lecture notes and students' reactions to each lecture.
2. A documented individualized profile.
3. A written project of not less than five typewritten pages.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Outside assignments will include reading the textbook, reviewing lecture materials, studying for test and completing assignments as deemed necessary by the instructor.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply. (See guidelines for preparation for definitions.)

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

Participation	20%
Exams	60%
Written project and class assignments	20%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit:
1.

If yes, identify specific provision of Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON:

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