

College of Micronesia-FSM
PO Box 159
Pohnpei, FM 96941

COURSE OUTLINE

Fundamentals of Wellness and Physical Fitness
 Course Title

ESS200 Exercise Sport Science
 Department & Number

Course Description:

This course is designed to give students the skills and knowledge necessary to live a physically, mentally, and spiritually healthy life. Emphasis will be placed on the importance of physical activity, and experiencing the process of change. Students will learn how to assess various components of their wellness, as well as behavior modification techniques. Course topics include improving fitness and nutrition, weight control, reducing the risks of cardiovascular disease/cancer/diabetes, stress management, prevention of sexually transmitted diseases, prevention of substance abuse, and overall management of personal health and lifestyle habits to achieve the highest potential for well-being.

Course Prepared by: Rachel Hollingsworth

State Pohnpei/National Campus

	Hours per week		No. of week		Total Hours		Semester Credits
Lecture	<u> 3 </u>	x	<u> 16 </u>	x	<u> 48 </u>	=	<u> 3 </u>
Laboratory	<u> </u>	x	<u> </u>	=	<u> </u>	=	<u> </u>
Workshop	<u> </u>	x	<u> </u>	=	<u> </u>	=	<u> </u>

Purpose of Course:

Degree Requirement
 Degree Elective x
 Certificate
 Other x

Prerequisite Courses: MS098, EN110.

 Signature, Chairperson, Curriculum Committee

 Date Approved by Committee

 Signature, President, COM-FSM

 Date Approved by President

I. Course Objectives

A. General/Program Outcomes

1. Explain physical fitness and wellness, as well as their importance to overall health, disease prevention, and athletic performance.
2. Demonstrate the physical skills necessary to perform a variety of physical activities.
3. Design and demonstrate exercise regimes appropriate to improve health, physical fitness, and athletic performance.
4. Compare and contrast the education and skills needed to gain employment in wellness, physical education (K-12), kinesiology and coaching.
5. Describe and demonstrate beginning coaching skills.
6. Value regular physical activity and its contribution to a healthful lifestyle.

B. Student Learning Outcomes

Upon successful completion of this course, the student will be able to:

1. [Core] Identify and describe the basic components of wellness. (1)
2. [Core] Describe the benefits and the significance of participating in a lifetime fitness and wellness program. (1,6)
3. [Core] Describe common careers enjoyed by people who have a bachelor's degree in Wellness. (4)
4. [Core] Assess his/her current wellness in the areas of physical fitness, nutrition, weight control, stress management, drug use, and disease risk (including sexually transmitted diseases, cardiovascular disease, type II diabetes, and cancer) and use those results to set realistic wellness goals based on accepted models of behavior change. (1,4)
5. [Core] Explain the components of the transtheoretical model of behavior change, and assess his/her stage of change for a variety of possible health behavior changes. (4)
6. [Core] Experience the challenges of self-transformation by selecting and improving an aspect of physical fitness during the semester, based on accepted models of behavior change. (1,4)
7. [Core] List and define the five factors of physical fitness. (1)
8. [Core] Given fitness assessment results, design a plan to improve each of the five factors of physical fitness, based on accepted models of behavior change. (3,4)
9. [Core] Identify the symptoms of common exercise-related injuries, preventative measures, and basic treatment. (3)
10. [Core] List behaviors appropriate for each of the stages of change that would help people attempting to:
 - Decrease their disease risk (cardiovascular disease, cancer, type II diabetes, sexually transmitted diseases),
 - Keep their weight and percent body fat levels in a healthy range,
 - Stop using detrimental drugs. (1,4)
11. [Core] Describe the important role regular medical check-ups play in lifetime fitness and wellness. (1)
12. [Core] Define cardiovascular disease, cancer, and type II diabetes, and explain recent lifestyle changes in the FSM associated with the increased incidence of these diseases. (1,6)
13. [Core] Explain the importance of healthy behaviors in the prevention of cardiovascular disease, cancer and type II diabetes. (1,6)

14. [Core] Describe the detrimental health effects of tobacco, alcohol, marijuana and betelnut, and the benefits of cessation. (6)
15. [Core] Describe the symptoms of common sexually transmitted diseases (including HIV), and their health consequences. (6)
16. [Core] Define obesity and explain the health risks correlated with it. (1,6)
17. [Core] List and define the six nutrients, and describe at least one role each nutrient plays in the effective functioning of the body and mind. (1,6)
18. [Core] Conduct a comprehensive nutrient analysis, recognizing areas of deficiency and describe strategies to improve overall nutrition, based on accepted models of behavior change. (1,4,6)
19. [Core] Explain the physiology of weight loss and the effects of diet on basal metabolic rate; design a physiologically sound weight reduction and weight maintenance program, based on accepted models of behavior change. (1,4)
20. [Core] Define spiritual well-being and describe its relationship to a healthy lifestyle. (1,6)
21. [Core] Describe the relationship between healthy personal relationships, disease risk, and mortality. (1,6)
22. [Core] Describe behavior changes to improve a person's spiritual well-being, based on accepted models of behavior change. (4,6)
23. [Core] Define stress and explain its role in the maintenance of health and optimal performance through various stress reduction and stress management techniques. (4,6)
24. [Core] Describe the relaxation response and the concept of *mindfulness* and describe their importance to stress management and spiritual well-being. (1,6)

II. Course Content

- I. Introduction to Wellness
 - A. Components of Wellness
 - i. Health vs. Wellness
 - ii. Body-mind connection
 - B. Self-assessment of Wellness
 - C. Lifestyle Management
 - D. Making Wellness a career
- II. Behavior change
 - A. Transtheoretical model
 - B. Self-assessment of stage of change
 - C. Methods to move from one stage of change to another
 - D. Setting Wellness goals
 - E. Health Screening, preparedness for physical activity
- III. Physical Fitness
 - A. Five Factors of Physical Fitness
 - i. Cardiovascular
 - ii. Muscular Strength
 - iii. Muscular Endurance
 - iv. Flexibility
 - v. Body Composition
 - B. Assessment of Fitness
 - i. Heart rate/blood pressure, VO2 max prediction
 - ii. 10-rep max tests
 - iii. Push-up and sit-up tests
 - iv. Sit and reach test
 - v. Percent body fat
 - C. Injury prevention
 - i. Symptoms of common injuries
 - ii. Cross-training
 - iii. Prevention and treatment
- IV. Physical Fitness
 - A. Developing each of the components of fitness
 - B. FITT principle
 - C. Overload and specificity theory
 - D. Stage of change strategies for changing exercise habits
 - E. Designing balanced fitness routines
- V. Nutrition
 - A. The roles of the six nutrients
 - B. Food sources of each nutrient
 - C. Harvard School of Public Health Food Pyramid
 - D. Making healthy food choices
- VI. Nutrition
 - A. Assessment & analysis of current nutrition
 - B. Stage of change strategies for changing eating habits
 - C. Designing balanced diets
- VII. Weight management
 - A. Assessing weight and wellness
 - i. Body mass index
 - ii. Waist-to-hip ratio
 - iii. % body fat
 - B. Underweight, Overweight, Overfat
 - C. Choosing a healthy weight

- VIII. Weight management
 - A. Energy balance
 - i. Basal metabolic rate
 - ii. Genetic control of energy expenditure
 - iii. Physical activity
 - iv. Thermic effect of food
 - v. Adaptive Thermogenesis
 - B. Designing programs for weight loss and control
- IX. Stress management
 - A. Eustress vs. distress
 - B. Relaxation response
 - C. Stress reduction techniques
 - D. Stage of change strategies for changing thinking/behavior patterns
 - E. Designing stress management programs
- X. Chronic Diseases
 - A. Early detection
 - B. Cardiovascular diseases
 - C. Cancer
 - D. Diabetes
 - E. Osteoporosis & others
 - F. Stage of change strategies for changing behaviors that increase disease risk
- XI. Chronic Diseases
 - A. Physical activity and prevention & treatment
 - B. Nutrition and prevention & treatment
 - C. Assessment of current risk for chronic disease
 - D. Lifestyle changes for disease risk reduction
- XII. Drug Abuse
 - A. Physical/mental effects of tobacco, alcohol, marijuana & betelnut
 - B. Dependency/Addiction
 - C. Assessment of current risk of addiction
 - D. Drug use and disease risk
- XIII. Drug Abuse
 - A. Various medical programs for drug use cessation
 - B. Stage of change strategies for cessation of drug use
 - C. Designing personal drug rehabilitation programs
- XIV. Sexually Transmitted Diseases
 - A. Common curable and non-curable STDs
 - B. Physical/mental effects of STDs
 - C. Detection and treatment
 - D. Barrier protection
 - E. Assessment of current risk of contracting an STD
 - F. Protection vs. prevention of STDs
- XV. Personal Relationships and Spiritual Wellness
 - A. Definitions
 - B. Spiritual practices
 - i. Mantras
 - ii. Meditation
 - iii. Connection to nature
 - iv. Prayer
 - C. Relationships and health risks
 - i. Spouse
 - ii. Family
 - iii. Friendship/membership

- iv. Pets
- D. Spirituality and health risks
- E. Assessment of current spiritual wellness
- XVI. Self-Assessment of Wellness
 - A. Review of progress towards wellness goals
 - B. Setting goals for the future
 - C. Preparing for a career in Wellness
 - D. Review previous concepts

III. Textbooks

Hoeger, WWK and Hoeger, SA. *Fitness and Wellness*. Wadsworth: 2004. ISBN: 053463544X

IV. Required Course Materials

Bottled water and appropriate attire (loose-fitting, comfortable clothing that allows a full range of motion around all of the joints of the body) on fitness assessment days.

V. **Reference Materials**

American College of Sports Medicine. "ACSM Position Stand on The Recommended Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory and Muscular Fitness, and Flexibility in Adults." *Medicine and Science in Sports and Exercise* 30(6): 975–991, 1998.

American College of Sports Medicine. *ACSM's Guidelines for Exercise Testing and Prescription, 6th Edition*. Philadelphia, PA: Lippincott, Williams and Wilkins 2000.

American College of Sports Medicine. "American College of Sports Medicine Position Stand on Progression Models in Resistance Training for Healthy Adults", *Medicine and Science in Sports and Exercise* 34(2): 364–380, 2002.

American College of Sports Medicine. "Exercise and Type 2 Diabetes: Position Stand." *Med Sci Sports & Ex* 32(7):1345-1360, 2000.

Beck, A. and Katcher, A. *Between Pets and People: The Importance of Animal Companionship*. Toronto: General Publishing Co. 1983.

Cardinal, B. J., Cardinal M. K., and Burger, M. "Lifetime Fitness for Health Course Assessment: Implications for Curriculum Improvement," *Journal of Physical Education, Recreation and Dance*, 76(8): 48-52, 2005.

Carpinelli, Otto & Winett. "A critical analysis of the ACSM position stand on resistance training: Insufficient evidence to support recommended training protocols," *Journal of Exercise Physiology online*, 7(3):1-60, 2004.

Dobbin, Jay. "Drugs in Micronesia." *Micronesian Counselor* 18: Apr. 1996.
<http://www.micsem.org/pubs/counselor/frames/drugmicrofr.htm?http&&www.micsem.org/pubs/counselor/drugmicro.htm>

Hezel, Francis X. "Health in Micronesia Over the Years." *Micronesian Counselor* 53: Nov. 2004.
<http://www.micsem.org/pubs/counselor/pdf/mc53.pdf>

Hezel, Francis X., Edwin Q.P. Petteys, and Deborah L. Chang. "Sustainable Human Development in the FSM: Health" *MicSem Articles: Economics*. Online 9/8/2005
<http://www.micsem.org/pubs/articles/economic/shd/frames/chapter07fr.htm?http&&www.micsem.org/pubs/articles/economic/shd/chapter07.htm>

Katzmarzyk and Craig. "Musculoskeletal fitness and risk of mortality." *Medicine and Science in Sports and Exercise* 34(5): 740-4, 2002.

Leon, et al. "Leisure time physical activity and the 16-year risks of mortality from coronary heart disease and all-causes in the Multiple Risk Factor Intervention Trial (MRFIT)." *Int J Sports Med*. 1997 Jul;18 Suppl 3:S208-15. Baechle and Earle, eds. *National Strength & Conditioning Association: Essentials of Strength Training and Conditioning-2nd Edition*. Champaign, IL: Human Kinetics 2000.

O'Donnell, Michael P. "A Simple Framework to Describe What Works Best: Improving Awareness, Enhancing Motivation, Building Skills, and Providing Opportunity." *American Journal of Health Promotion, The Art of Health Promotion* 20: 1-6, 2005.

Ornish, Dean. *Love and Survival: 8 Pathways to Intimacy and Health*. New York: HarperCollins Publishing 1998.

Schnohr, et al. "Changes in Leisure-time Physical Activity and Risk of Death: An Observational Study of 7,000 Men and Women," *Am J Epidemiol* 2003; 158:639-644.
<http://aje.oupjournals.org/cgi/content/abstract/158/7/639>

Sharkey, Brian J. *Fitness & Health: 5th Edition*. Champaign, IL: Human Kinetics 2001.

American Association for Health Education <http://www.aahperd.org/aahe>

American College of Sports Medicine <http://www.acsm.org/index.asp>

Cancer Prevention Research Center <http://www.uri.edu/research/cprc/trans theoretical.htm>

ExRx (Exercise Prescription) on the Net <http://www.exrx.net/>

National Center of Complementary and Alternative Medicine <http://nccam.nih.gov/>

Oakland University Employment and Internship Links in Wellness, Health Promotion and Injury Prevention (WHP) <http://www2.oakland.edu/shs/whp/employment.cfm>

University of California at Chico Health and Wellness Jobs
<http://www.csuchico.edu/plc/healthjobs.html>

VI. Instructional Cost

5 – 10 Automated blood pressure cuffs (@\$90/each). 10-20 Polar Heart rate monitors (@\$75/each). 10 Gulick (cloth-style) measuring tapes (@\$23/each). Tanita/% bodyfat measurement/body water scale, cost \$72.99 (<http://www.amazon.com/gp/product/B0001VRKVU/104-3362379-9620719?v=glance&n=284507&n=507846&s=kitchen&v=glance>). Access to a weight room, a quiet/empty room (where yoga, Tai Chi, Martial Arts is taught, or where a drama class meets). Classroom with white board, chairs, desks, ventilation (cost variable). Access to LCD projector and overhead (transparency) projector.

VII. Methods of Instruction

Lecture, individual reading and assignments, projects, group work, and hands-on participation. Assessment could be in the form of individual and group assignments, student portfolios, homework and quizzes given throughout the semester.

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

VIII. Evaluation

No credit by evaluation.

IX. Attendance Policy

The College attendance policy shall be applied.

X. Academic Honesty Policy

The College academic honesty policy shall be applied.

XI. Appendices

A. Health History Form

- i. All students must complete the Physical Activity Readiness Questionnaire - PAR-Q, from the Canadian Society for Exercise Physiology prior to participating in any physical fitness assessments
- ii. PAR-Q is available online and may be reproduced if used in its entirety
www.csep.ca/pdfs/par-q.pdf
- iii. Students may be required to receive medical clearance to participate in portions of this course based on the results of the PAR-Q

B. Class enrollment limit

- i. **No more than 25 students**
- ii. Exceptions may be made by Division Chair of Exercise Sports Science

C. Safety procedures

- i. CPR certification strongly recommended for instructors of this course