College of Micronesia-FSM P. 0. Box 159 Kolonia Pohnpei FM 96941

Course Outline

Course TitleDepartment and NumberHealth ScienceDivision of Natural Sciences and Mathematics SC 101

Course Description:This is a course on introduction to basic human anatomy and its functions, disease and disease carriers, nutrition, Physical fitness, drug, sex education, environmental and community health.

Course Prepared by:Jazmin Gonzales **State/Campus:** Pohnpei/National **Date prepared: 12/12/2003**

	Hours per Week		No. of Week		Total Hours		Semester Credits
Lecture	3	х	16	х	48/16	=	3
Laboratory							
Workshop							
Study							
					Total Semester Credits:	-	3

Purpose of Course

Degree Requirement:	
Degree Elective:	<u>X</u>
Certificate:	
Remedial:	
Other:	

Prerequisite Course: ESL 089 Reading V.

Date approved by Committee:_____ Date approved by President:_____ I. Health careers program learning outcomes

Students will be able to:

[These outcomes have not yet been formally discussed nor has the measurability of these outcomes been determined. These should be considered placeholders for program level outcomes to be developed at a later date.]

• **describe** the structure, function, and basic pathologies of the human body.

• **communicate** health, nutrition, and premedical information in both written and oral formats.

• **describe** health care and allied professions.

• **demonstrate** a foundation in basic biology, chemistry, microbiology, anatomy, nutrition, health, and physiology.

• **work** effectively in groups to solve human life sciences and health problems.

• **quantify and analyze** human life sciences and health problems *using analytical, statistical, and computer methods.*

• **acquire and synthesize** human life science, health, and nutrition information *in a critical, scientific, and technologically advanced manner*.

II. General Objectives (Course learning outcomes)

Students will be able to:

A. Describe what it means to be healthy.

B. Explain the wellness continuum and its impact on Personal health.

C. Identify the various structures of the human anatomical systems.

D. Explain the effect of the electrical signals and chemical messengers to human physiology and behavior.

E. Explain the body functions and the relation of each system to one another.

F. Identify and explain how various infectious diseases are prevented and treated.

G. Identify and describe causes and and prevention of non-communicable diseases.

H. List the seven components of food, and identify common foods that contain each component.

I. Define the concept of total fitness and the essential characteristic and consideration of a physical fitness program.

J. Enumerate the causes and prevention of communicable diseases.

K. Explain the importance of human behavior in the occurrence of noncommunicable disease. L. Discuss the effect of drugs to the human body, human behavior and its consequence to family and society.

M. Explain the sexual maturation of adolescents.

N. Describe the process of conception as well as the influence of heredity and environment to the developing human organism.

O. Explain the importance of safety and accident prevention measures.

P. Explain the importance and effect of family planning to the nuclear family, community, government and world population.

Q. Explain why knowledge about drugs is important to health.

R. Explain how the environment can affect health.

S. Explain why conservation and preservation of the environment is important to man.

III. Specific objectives (Specific student learning outcomes)

Students will be able to:

o. Relate the importance of adaptation in relation to health and disease.

1. Explain homeostasis and the role it plays in maintaining health.

2. Explain the wellness continuum and its impact on personal health.

3. Describe the personal qualities that are associated with the six dimensions of wellness.

4. Describe the functions of the autonomic nervous system

5. Describe the how the mind and body communicate, chemically and electrically, to enhance well physical and mental well-being.

6. Describe the functions of the autonomic nervous system.

7. Describe the relationship between hormones and certain body functions.

8. Describe the organization of the body from cell to the whole organism.

9. Describe how the body functions harmoniously as a unit.

10. Discuss the generalized functions of the skin as an organ system.

11. Describe the layers and functions of the skin and its appendages.

12. Briefly describe or comment on some skin conditions.

13. List and discuss the generalized functions of the skeletal system.

14. Discuss bone growth, resorption and the response of hone to stress.

15. Identify each of the major structure of a bone.

16. Compare the classification of joints according to structure and range of movements.

17. Discuss the structure of the three types of articulation.

18. Discuss and compare the four types of arthritis.

19. Briefly describe the different kinds of muscles and its functions.

20.List and describe major muscular disorders.

21. Describe the measures of physical fitness and the components of muscular strength by isotonic, isometric exercises, flexibility and cardiovascular fitness.

22. Define posture and discuss its importance to the body as whole.

23. Describe a few of muscular disorders.

24. Name and describe the organs of the digestive system.

25. Discuss the generalized functions of the digestive system.

26. List, illustrate and describe, in sequence, the components of the alimentary canal.

27. Name and describe some disorders of the digestive tract.

28. Define and compare mechanical and chemical digestion.

29. Explain and compare fats, proteins and carbohydrates.

30. Explain the role of minerals and vitamins in nutrition and give example of each.

31. Describe the purpose of the respiratory system.

32. Name the structure of the respiratory system.

33. List and define several kinds of respiratory infection.

34. List the major organs of the urinary system and give the generalized function of each.

35. Describe the physical characteristic of normal urine.

36. Discuss the consequence of untreated urinary disorder.

37. Describe the basic anatomy and physiology of the cardiovascular system.

38. List the blood composition and function.

39. Differentiate among the three main types of blood vessels with regard to structure and functions.

40. Describe the progression of the coronary heart disease.

41. Discuss ways to reduce the risk of coronary heart disease.

42. Explain the various kinds of diseases that affect the circulatory system.

43. Compare and contrast traditional roles for male and female.

44. Describe the male and female reproductive.

45. Discuss reasons for and against becoming pregnant.

46. Identify and briefly describe four important health habits during pregnancy.

47. Describe fertilization process and the early development of the fertilized egg.

48. Discuss several methods of medical intervention in childbirth.

49. Identify the reasons for infertility and options for infertile couple.

50. Identify the advantages and disadvantages of at least ten fertility control method.

51. Explain why some some sexually active people do not use fertility control method.

52. Describe the impact of sexually transmitted infection (STI) on society.

53. Identify the causative agent, symptoms and treatment of at least five STI.

54. Describe the characteristics of the major pathogens, bacteria, viruses, fungi, protozoa, rickettsiae, and metazoa.

55. Explain the elements and method of transmission that pose the chain of infection.

56. Identify, various defense mechanism -environmental, constitutional, structural, cellular, structural, and chemical.

57. Explain what is known about the occurrence, symptoms, treatment, and prevention of many common diseases.

58. Identify the types of cancerous tumors and the prevalence of cancer.

59. Describe the factors that contribute to cancer.

60.Describe cancer countermeasures of prevention, early detection and diagnosis, and treatment.

61. Explain the difference between a drug and medicine.

62. Differentiate between drug use and drug abuse and the major risked involved.

63. Describe the different effects of the major classes of psychoactive drugs.

64. Describe the hazards of cigarette smoking and smokeless tobacco.

65. Discuss the short term and long term health related and social consequences of tobacco use.

66. Discuss the prevalence of drinking, types of drinking, reasons for drinking and attitudes toward among college student.

67. Identify the principal environmental pollutants and their hazard to health.

68. Discuss the impact of pollution of food production and health.

IV. Course content

. Introduction to Health

A. Basic Anatomy and Physiology

1. Integumentary System

2. Digestive System

3. Circulatory System

4. Skeletal System

5. Respiratory system

6. Lymphatic System

7. Articulation System

8. Urinary System

9. Reproductive System

10. Muscular System

B. Diseases

1. Communicable Diseases

2. cardio-vascular Diseases

3. Cancer and other Non-communicable Diseases

C. Personal Health Concerns

1. Eating Behavior - The Good and the Bad of It

2. Fitness - Better Appearance and Ability to Function Optimally

D. Sex Education

1. Human Sexuality

2. Family Planning

3. Conception

4. Contraception

5. Problems of Population Explosion

E. Drugs

1. Mood Modification and Psychoactive Drugs

2. Using Tobacco

3. Alcoholic Drinks

4. Drug-Taking Behavior

F. Preventing unintentional injuries and Accidents

G. Health Problems of the Community

H. Community Health Environmental Concern

V. Textbook



VI. Reference materials

 Chiras, Daniel, Human Biology, Jones and Bartlett Publishers, Massachusetts,2002 • Charles, Carroll., Miller Dean., HEALTH, The Science of Human Adaptation: Wm. C. Brown., Dubuque, 1994 $_{\odot}$ $\,$ Dewitt, William., Human Biology, Scott, Foresman and Company. 1989

 Hamann, Barbara., Diseases: Identification, Prevention, and Control Mosby-Yearbook, Inc., 1994 • Benson, Harold., Gunstream, Stanley., Arthur, Talaro, Kathleen., Anatomy and Physiology, Wm. C. Brown Publishers, Dubuque, 1999

 $_{\odot}$ $\,$ Chiras, Daniel, Human Body Systems. Jones and Bartlett Publishers. 2003 $\,$

VII. Required materials

• Basic human anatomy charts

• Charts on nutrition

• Audiovisual materials

• Models of body parts

VIII. Institutional costs

• Textbooks

• Audiovisual materials

• Equipment

• Models

• Medical charts

 \circ Health charts

IX. Methods of instruction

• Lecture

• Visual Aids

• Films

• Classroom Discussion

• Demonstrations

• Guest Speakers

X. Evaluation

• Unit tests, mid-term and final exam. Points averaged and grades reported using college catalog guidelines.

XI. Grading scale: as per College catalog.

XII. Attendance: as per College catalog.

XIII. **Academic honesty policy**: dishonesty or cheating on any test or examination will result in a grade of "F" for the course.