

**College of Micronesia-FSM**  
**Course Outline**

**Course Title:** Review of Health Science

**Department No.** CHS 220a

**Course Description:** This course gives an overview of the health care system and the role of the community health worker. The determinants of human health and illness and the measures that can be taken to preserve health are explored. The course prepares the student to participate in community health assessment and to use the results to help organize health improvement activities.

**Course Prepared By:** Dr Mark Durand

**Campus:** Yap

	Hours Per Week	x	No. of Week	=	Total Hours	=	Semester Credits
<b>Lecture</b>	4		16	=	64	=	4
<b>Laboratory</b>	1		16	=	16	=	1
<b>Workshop</b>				=		=	

**Total Semester Credits =** 5

Purpose of Course:	Degree Requirement	_____
	Degree Elective	_____
	Certificate	<u>X</u>
	Other	_____

Prerequisite: None

\_\_\_\_\_  
Signature Chairperson, Curriculum Committee

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Date

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Signature, President, COM-FSM

\_\_\_\_\_  
Date

**General Course Objectives:** Students will become familiar with the concept of community health status, basic health terminology, and the determinants of health. They will develop a clear understanding of their future role and value to the health service and their communities. They will be made aware of the various approaches for improving health status, especially through preventive interventions at the household and community levels. In the lab portion of the course they will gain knowledge, skills and attitudes needed to participate in a community health assessment. This course is designed both for community health workers who will be working within the villages of the district centers as well as those who are based in dispensaries in areas where there is no doctor.

**Specific Learning Objectives:**

- ◆ Explain the 10 principles for health workers in the Code of Conduct of the International Red Cross as they apply both to disaster relief and community health (see Community Health. Wood, CH. AMREF, 2<sup>nd</sup> ed. Nairobi Kenya, 1997.)
- ◆ Define confidentiality and explain why it is important for all health workers to preserve.
- ◆ Demonstrate 3 techniques for establishing rapport with a patient.

(Ch 1 of text)

- ◆ Define “community health”
- ◆ Define “primary health care”
- ◆ Define “community-based health care”
- ◆ Explain the purpose of community health assessment (also known as “community diagnosis”)
- ◆ Identify factors that affect the health status of a community
- ◆ Explain the advantage of early intervention for the control of disease
- ◆ Explain the difference between the need and demand for health services
- ◆ List 4 factors that determine the type of health services that people seek.
- ◆ Define the following: primary prevention, secondary prevention, tertiary prevention.
- ◆ List 6 types of primary prevention that can be applied to people.
- ◆ List 6 types of primary prevention that can be applied to the environment.
- ◆ List the preventive services that are provided by the following programs:
  - Family planning program
  - Immunization program
  - School health program
  - Maternal and child health program
  - HIV/STI program
  - Non-communicable diseases program
  - Mental health and substance abuse program
  - Tuberculosis/hansen’s disease program
  - Sanitation program
  - Childrens’ dental program
  - Outpatient clinic
  - State hospital ward

- ◆ Define “population coverage” for a preventive service.
- ◆ Compute % population coverage from raw data
- ◆ Define “high risk group” for a disease condition.

(Ch 2)

- ◆ Give examples of how biological, physical and social/cultural environments can affect health and the success of health programs
- ◆ Give examples of how beliefs and behavior of individuals, families and villages can affect health.

(CH 3)

- ◆ Use the latest census and immunization registries to find the following information about a dispensary/health center catchment area population size: age 0-4 years, 5-14 years, 15-44 years, 45-65 years, over 65 years and total.
- ◆ Explain how this information can help to define the target populations for programs like immunization, family planning, and maternal and child health.

(Ch 4)

- ◆ Define disease “incidence” and “prevalence”.
- ◆ Calculate incidence of a disease from raw data
- ◆ Calculate prevalence of a disease from raw data
- ◆ Define “disease distribution” for a disease in a population
- ◆ Compare disease rates for different groups of people and decide which group is worse off.
- ◆ List three factors that determine how important a disease is to the health of a community

(Ch 5)

- ◆ Identify 10 principles of primary care and explain what each one means
- ◆ Identify 10 principles for the implementation of primary care programs and explain what each one means.

(Ch 7)

- ◆ Describe various ways to perform community health assessment including environmental inspection, focus groups, surveys.
- ◆ Explain how information from a survey can tell who, when and where with regard to health conditions
- ◆ Explain the difference between cross-sectional and longitudinal surveys as they relate to disease incidence and prevalence
- ◆ Define survey “response rate” and explain why it is important.
- ◆ List at least 3 reasons for doing a survey
- ◆ Explain the difference between the use of surveys for case finding vs. determination of disease prevalence
- ◆ Define “standard methods” for a survey and explain why they are important
- ◆ List 4 common sources of error for survey questionnaires.
- ◆ Gather all of the materials and complete all of the steps needed to prepare for an afternoon’s survey.

- ◆ Number individual houses and individual forms correctly; process completed forms correctly so that none are misplaced.
- ◆ Interview household survey subjects and correctly record observations and responses
- ◆ Calculate and compare rates from survey questions
- ◆ Construct a spot map using data from a completed survey
- ◆ Prepare a case register using data from a completed survey.
- ◆ Explain how health assessment results can be used to improve health in a community.
- ◆ Explain how health assessment results can best be shared with community members and why it is important to do so.

(Ch 8)

- ◆ Describe the ways in which water supplies affect health.
- ◆ Describe how human waste disposal affects health.
- ◆ Describe how household and village water drainage affects health.
- ◆ Describe how solid waste disposal practices in villages affects health.
- ◆ Describe how housing quality, in particular crowding, ventilation, and disease vectors around the home affect health.
- ◆ Describe how hand washing, laundering and bathing can affect health.
- ◆ Describe how hygiene in markets and animal raising practices can affect health.
- ◆ Describe how food preparation and storage affect health.
- ◆ Describe how home gardens affect health.

(Ch 9)

- ◆ Define disease “immunity” and explain how vaccines work to prevent disease
- ◆ Explain why vaccines must be given according to a schedule and why some should be given at the time of birth while others should be given later and why some require multiple doses while others only a single dose.
- ◆ Describe the effects of the following vaccine-preventable diseases: TB, Hepatitis B, Polio, Measles, Mumps, Rubella, Diphtheria , Pertussis, Tetanus and Hemophilis B.
- ◆ List barriers to childhood immunization and how to overcome each one.
- ◆ Successfully persuade a family of a child who is overdue for immunization to have the child vaccinated
- ◆ Define the vaccine “cold chain” and explain why it is important

(Ch 10)

- ◆ Explain the effect of “birth spacing” on a mother’s and baby’s health and how much time between births is best for mothers and infants.
- ◆ List examples of natural, mechanical, chemical and surgical contraceptive methods and describe how each one works.

(Ch 12)

- ◆ Describe the purpose of health education
- ◆ List 5 risk behaviors that have a large effect on health.
- ◆ Explain the difference between “health education” and “health promotion”
- ◆ Describe 4 ways to make health education messages more effective.

(Ch 14)

- ◆ Explain why mothers and small children are especially vulnerable to illness

(Survey skills)

- ◆ Approach community groups and households for gathering information and providing health services with proper traditional protocol.
- ◆ By inspection, correctly identify the following types of household health problems: improper disposal of trash, mosquito breeding sites, signs of rats, improper location of pigpens, standing water or poor drainage.
- ◆ Identify the various types of toilets and explain the advantages and disadvantages of each.
- ◆ Take an accurate blood pressure from children, adults, obese clients
- ◆ Explain what is blood pressure, limits of normal vs abnormal readings, dangers associated with abnormal BP
- ◆ Correctly practice universal precautions when taking finger-stick blood samples for lab testing.
- ◆ Correctly calibrate blood glucose meter.
- ◆ Take accurate finger-stick glucose readings.
- ◆ Understand what is blood glucose, limits of normal vs abnormal readings, dangers associated with abnormal glucose.
- ◆ Calibrate and balance weight scales correctly.
- ◆ Weigh people of all sizes correctly.
- ◆ Measure height of people of all sizes correctly.
- ◆ Plot weight and height readings on growth charts/ body mass charts.
- ◆ Interpret charts to determine whether clients are under-nourished, normal, overweight or obese.
- ◆ List 3 dangers associated with under-nutrition and 3 dangers associated with overweight.
- ◆ Examine skin for signs of Hansen's disease, and recognize lesions that require referral for further evaluation.
- ◆ Recognize the signs and symptoms of tuberculosis that require referral for further investigation.
- ◆ Interview survey clients and correctly record their responses.
- ◆ Number houses and individual forms correctly; process completed forms correctly so that none are misplaced.
- ◆ Calculate and compare rates from survey questions.
- ◆ Construct a spot map using data from a completed survey.
- ◆ Prepare a case register using data from a completed survey.
- ◆ Explain how health assessment results can be used to improve health in a community.
- ◆ Explain how health assessment results can best be shared with community members and why it is important to do so.

**Course Contents:**

- Overview of the health care system, including orientations to local facilities and programs
- Role of the community health worker within the health care system
- Ethics and approach to the community
- Orientation to the course of study for becoming a community health worker
- Community health status concepts, and determinants of community health and illness (as covered in the text)
- Community health assessment including practical skills, knowledge and attitudes needed to assist with health assessment for a defined population.

**Textbooks:**

*Community Health* (2<sup>nd</sup> ed.) Wood, CH. African Medical and Research Foundation, Nairobi, Kenya, 1997. ISBN: 9966-874-14-3

**Required Course Materials:**

Chalk board, BP cuffs, stethoscopes, growth charts for children, obesity charts for adults, weight scales, height scales, blood glucose meters, lancets, latex gloves, test strips, Hansen's disease color plates of skin photos.

**Methods of Instruction**

Lectures. Hands-on demonstrations and role-play for interviewing people, collecting and recording survey data, checking blood pressure and blood glucose, checking growth and doing skin inspections (for Hansen's disease). Field work under supervision for conducting health survey. Guest sessions by designated representatives from councils of traditional leaders with regard to proper ways to approach households and community groups. Guest sessions by public health program managers for orientation to health programs and by lab personnel for fingerstick glucose testing and universal precautions.

**Evaluation:**

Examinations.

Successful performance of skills components based on skills checklists. (see Tabella, Part 1)  
 Assessment of student counseling skills by testing comprehension of lay people who have been counseled about a topic by student.

**Attendance:** As per college policy