

**College of Micronesia-FSM**

**Course Outline**

**Course Title:** Human Nutrition

**Department No.** CHS 234a

**Course Description:**

The Micronesian diet has changed radically in recent years. Diseases of both nutritional excess and deficiency have a huge impact on the health of the population. In this course, the relationship between diet and health is explored, focusing on the role of the health worker for improving health through nutrition. This course is designed both for community health workers (CHWs) who will be working within the villages of the district centers as well as for health assistants (HAs) who are based in dispensaries in areas where there is no doctor.

**Course Prepared By:** Dr Durand

**Campus:** Yap

	Hours Per Week	No. of Week	Total Hours	Semester Credits
<b>Lecture</b>	<u>  3  </u>	x <u> 16 </u>	= <u> 48 </u>	= <u>  3  </u>
<b>Laboratory</b>	<u>          </u>	x <u>          </u>	= <u>          </u>	= <u>          </u>
<b>Workshop</b>	<u>          </u>	x <u>          </u>	= <u>          </u>	= <u>          </u>

**Total Semester Credits =**   3  

Purpose of Course: Degree Requirement \_\_\_\_\_  
Degree Elective \_\_\_\_\_  
Certificate   X   \_\_\_\_\_  
Other \_\_\_\_\_

Prerequisite: 220a

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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature, President, COM-FSM

\_\_\_\_\_  
Date



### **General Course Objectives:**

Students will develop knowledge and skills needed to measure and monitor the growth of children, promote breast feeding, give nutritional advice for young children, mothers, and adults, identify, manage and prevent nutritional deficiencies and overweight, provide nutritional care during common infections and convey nutritional messages to the community. They will learn to identify signs and risk factors for common non-communicable diseases (NCDs; including heart disease, stroke, cancer, diabetes, hypertension and emphysema) and advise people on their prevention, management and proper use of (but not prescription of) medications.

### **Specific Learning Outcomes:**

- ◆ 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 confidentiality.
- ◆ Demonstrate 3 techniques for establishing rapport with a client.
- Identify signs and symptoms that may indicate the presence of a nutritional disorder.
- Collect information that will help to show what are the nutritional and nutrition-related problems of the community.
- Decide which social groups, families and individuals are at special risk of nutritional problems (i.e. define “target populations” within the community who need special care).
- Identify individuals with nutrition problems and, with the help of a supervisor, plan the actions needed to deal with these problems.
- Identify people and organizations in the community (i.e. “resource persons”) that can help with the nutrition problems and prepare a list of what they can do, how they can help and how to build understanding with them.
- Decide which people are seriously ill and should be referred.
- Explain the relationship between growth, development and nutrition.
- Weigh a child accurately to within 3 oz of correct weight.
- Record the weight of a child on a growth chart.
- Interpret a child’s growth pattern from the weight changes recorded on the chart.
- Explain to a mother the features of the growth chart and how it will help her decide if the child is doing well or not.
- Find out all about breast feeding practices in the community.
- Find out from individual mothers how they feed their children and what they think about breast-feeding.
- Encourage mothers to breast feed their infants and use sympathy and persuasion to convince them of the advantages of breast feeding.
- Reassure and help mothers to overcome problems of breast-feeding: flat or sore nipples, swollen or painful breasts, and fear of too little or poor quality milk.
- Explain to a mother the risks and costs of bottle feeding.
- Find out how mothers feed their young children and what their beliefs are about various foods.
- Find out what foods in the area are suitable for the feeding of children.

- Find out how the availability and prices of foods vary with different seasons.
- Prepare and mix local foods so they can be suitable for giving to young children.
- Prepare an appropriate diet for young children and know when, how often, and how much they should eat.
- Give feeding advice convincingly to parents.
- Collect information on the local beliefs and practices about different foods and feeding during pregnancy and lactation.
- Explain to pregnant women and mothers the importance of a proper diet during pregnancy and lactation.
- Advise mothers on suitable diets during pregnancy and lactation.
- Identify mothers in the community who are most at risk of malnutrition during pregnancy and lactation, based on their age, social, and family status.
- Detect anemia by examining the inner side of lips and eyelids, and take appropriate action.
- Recognize obesity, and the main types of protein energy malnutrition, in order to be able to take appropriate action.
- Explain the main causes of obesity, and protein-energy malnutrition to mothers.
- Identify children at risk of obesity, and protein energy malnutrition and advise their parents how to prevent these conditions.
- Give specific advice to parents to improve the diet of children who are suffering from obesity and malnutrition.
- Identify children with vitamin A deficiency, those at risk of developing this deficiency and advise measures to treat and prevent vitamin A deficiency.
- Identify children with anemia, those at risk of developing anemia and take action to treat and prevent anemia.
- Explain the causes and dangers of diarrhea to mothers.
- Detect children who have lost much water and salt through their stools (dehydration) and advise mothers what to do.
- Explain to a mother how the common infections in children make them malnourished, and again how infection is worse and more frequent in malnourished children.
- Advise mothers about feeding during common infections of children.
- Explain to lay people what foods protect teeth and which foods harm teeth by causing decay.
- Explain the relationship between food intake, physical activity and obesity.
- Use educational materials in order to promote understanding and motivation for people to use the MODFAT diet.
- Take accurate readings of weight and height, and plot these on a BMI (body mass index) chart.
- Use the chart to classify patients as normal, underweight, overweight or obese and relate the significance of these findings.
- Explain to a lay person what foods protect against cancers and which increase the risk of cancers, including alcohol.
- Explain to a lay person what foods protect against diabetes (and improve the disease once it is present) and which increase the risk of diabetes (and make it worse once present), including alcohol.
- Explain to a lay person what foods protect against gout and which increase the risk of gout, including alcohol.

- Explain to a lay person what foods protect against hypertension and which ones make it worse, including alcohol.
- Explain to a lay person what foods protect against heart attack and stroke, and which increase the risk of stroke and heart attack, including alcohol.
- Identify two signs of impaired swallowing in patients who have had a stroke or other brain damage.
- Explain measures that can be taken to reduce the chance of aspiration of food or drink into the lungs in a patient who has had a stroke or other brain damage.
- Understand the need to share simple messages to the community to help the people to adopt better health and nutrition practices.
- Identify people in the community, either individuals or groups, who need special help to improve their nutrition.
- Select simple messages according to the problem and deliver them in a simple and convincing way.
- Identify the location and function of organs affected by anemia, vitamin A deficiency, gout, protein deficiency, vitamin C deficiency, deficiency of B vitamins, diabetes, excessive fat intake, and alcohol intake.
- Describe how each agent (or its deficiency) causes dysfunction of affected organ systems.
- Describe how dysfunction may result in symptoms, illness and death from each agent.
- Describe the typical time course of each condition, including the usual age of onset.
- Demonstrate mastery in the use of flip charts to systematically deliver key messages about disease.
- Use educational materials in order to promote understanding and motivation for people to change behavior.

**Course Contents:**

- Assessment of nutritional status
- Identification and management of nutrition related diseases
- Breastfeeding, weaning and nutrition of young children and mothers
- The use of health education to improve nutrition
- Nutrition and dental disease

**Textbooks:**

Guidelines for Training Community Health Workers in Nutrition (2<sup>nd</sup> ed.) World Health Organization, Geneva, 1986 [ISBN: 92-4-154210-1]

**Required Course Materials:**

Standard classroom materials including chalk boards, computer with projector, infant weight scales, adult weight and height scales, pediatric “Road to Health” growth charts, adult body mass index charts.

**Reference Materials:**

Diabetes is Everybody’s Business- Introductory Diabetes Training Program for Community Health Workers. Participant’s Manual Secretariat of the Pacific Community, March, 2004

SPC Diabetes Flipchart

Modfat Diet Materials

Weight and Height scales, BMI charts

**Methods of Instruction:**

Lecture, group discussion, role play

**Evaluation:**

Examinations.

Successful performance of skills components based on skills checklists. (see Tabella, Part 1)

Graded demonstrations by students' use of flipcharts, scales and weight charts. Assessment of student counseling skills by testing comprehension of lay people who have been counseled about a topic by student.

**Attendance Policy:** Per standard COM-FSM policy as stated in the current catalog. Students will be advised of this on the first day of class.

**Academic Honesty Policy:** Per standard COM-FSM policy as stated in the current catalog.