THE ALLEN CENTER FOR NUTRITION

Fall 2009

COURSE PLAN

COURSE NO: NTR 327

COURSE TITLE: Medical Nutrition Therapy I

COURSE DESCRIPTION: A comparative view of nutrition as it relates to the treatment of disease.

Emphasis will be placed on evaluation of assessment data, the nutrition care process, methods of nutrition support, food and drug interactions, herbal remedies, weight management and applications of nutrition interventions for cardiovascular disease, hypertension, and diabetes. Medical Nutrition Therapy I and Medical Nutrition Therapy II is a two-semester course. Medical Nutrition Therapy I must be taken before

Medical Nutrition Therapy II.

CREDITS: 4 credit hours Class start 630 PM

CLOCK HOURS/WEEK: 4 hours total, 3 hours didactic, 2 hours clinical **INSTRUCTOR:** Marcia Kalista-Richards MPH, RD, CNSC, LDN

The Allen Center for Nutrition

Miller Building, room 16

I have not listed a phone number since I am not in the office or on campus except for class time. It is <u>best</u> to call me on my cell phone or at my dialysis work number (numbers will be provided). You can also email me at <u>makalist@cedarcrest.edu</u>. Please note I do not have access to my Cedar Crest email while at my dialysis job therefore my phone contact is the method I will respond quickest. Emergency messages can be left with Lesley Jones at the Allen Center by calling 610-606-4666 and leaving message for me. She can leave me a message on my cell phone when necessary.

Office Hours by appointment – please contact me as needed to set up appointment; before or after class.

PREREQUISITE: Nutrition 300 and 305 Advanced Nutrition I and II **COURSE OBJECTIVES:**

- 1. The students will have a basic knowledge of: (K1.1)
 - A. Alternative nutrition and herbal therapies (K1.1)
 - Define and give examples of alternative/herbal therapies.
 - Critically examine the risk-benefit relationships of alternative/herbal therapies.
 - Explain how to professionally work with clients who use alternative/herbal therapies.
 - B. Evolving methods of assessing health status (SK5.2)
 - Discuss newer methods of assessing health status.
- 2. The students will have a working knowledge of:
 - A. Pathophysiology related to nutrition care (K1.1, SK5.2)
 - Explain the pathophysiology related to obesity, cardiovascular disease, diabetes, and malnutrition.
 - B. Fluid and electrolyte requirements (SK5.2)
 - Identify fluid and electrolyte requirements for patients with cardiovascular disease, diabetes, disorders of the upper gastrointestinal tract, or on parenteral/enteral nutrition.
 - C. Pharmacology: Nutrient-nutrient and drug-nutrient interaction (SK5.2)
 - Use and interpret resources appropriately to identify nutrient-nutrient and drug-nutrient interactions.

- D. Assessment and treatment of nutritional health risks (K1.1)
 - Assess and plan treatment for patients with cardiovascular disease, diabetes, and malnutrition.
- E. Medical nutrition therapy, including alternative feeding modalities, chronic diseases, dental health, mental health, and eating disorders (K1.1,SK5.2, SK5.3)
 - Apply appropriate parenteral/enteral principles in case studies.
 - Apply appropriate treatment principles for persons with cardiovascular disease, diabetes, and malnutrition in case studies.
- F. Strategies to assess need for adaptive feeding techniques and equipment (SK5.3)
 - Identify appropriate special feeding devices for patients with feeding disabilities.
 - Explain strategies for feeding patients with different feeding disabilities (such as inability to suck, inability to chew, inability to swallow, inability to grasp, poor handmouth coordination, impaired vision, etc).
- G. Influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior (K2.1)
 - Evaluate the influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior using case studies.
- H. Current reimbursement issues
- 3. The students will demonstrate the ability to:
 - A. Present an educational session for a group (KR2.1a)
 - B. Use current information technologies (KR2.1a)
 - C. Interpret medical terminology (KR3.1a)
 - D. Interpret laboratory parameters in multiple disease states relating to nutrition (KR2.1a,KR3.1a)
 - E. Interpret current nutrition research (K1.1)
 - F. Interpret basic statistics (K1.1)
 - G. Calculate and interpret nutrient composition of foods (K1.1)
 - H. Translate nutrition needs into menus for individuals and groups (KR3.2a, KR3.1a)
 - I. Calculate and/or define diets for common/complex conditions (KR3.1a)
 - J. Screen individuals for nutrition risk (KR3.1a)
 - K. Collect pertinent information for comprehensive nutrition assessments (KR3.1)
 - L. Determine nutrient requirements across the lifespan (KR3.1a)
 - M. Measure, calculate, and interpret body composition data (KR3.1a)
 - N. Calculate enteral and parenteral nutrition formulations (KR3.1a)

REQUIRED TEXTS:

- 1. Food-Medication Interactions. Pronsky, Zaneta. Newest edition
- 2. Krause's Food, Nutrition and Diet Therapy by Mahan, Escott-Stump. Saunders, 12th ed., 2008.
- 3. Pocket Guide for International Dietetics & Nutrtiion terminology (IDNT) Reference Manual:

 Standardized Language for the Nutrition Care Process. American Dietetic Association. 2009 2nd edition (Pocket guide can be purchased)
- <u>4. ADA Pocket Guide to Nutrition Assessment.</u> P. Charney, A. Malone. American Dietetic Association. 2008 edition.

Recommended resource books (Not required)

- <u>5. ADA Pocket Guide to Enteral Nutrition</u>. P. Charney, A. Malone. American Dietetic Association. 2006.
- <u>6. ADA Pocket Guide to Parenteral Nutrition</u>. P. Charney, A. Malone. American Dietetic Association. 2007. *OR*
- ASPEN Parenteral Nutrition Handbook. CanadaT, Crill C, Guenter P. The American Society of Parenteral and Enteral Nutrition. 2009. ISBN-10#1-889622-11-7
 Phone number is 1-800-727-4567 (Note this book is more up to date than the ADA pocket

guide but is more expensive – ask for student rate.

- 8. Speakman Elizabeth & Weldy Norma Jean. Body Fluids & Electrolytes A Programmed Presentation- eighth edition. 2002. (there is not an updated version of this book)
- 9. Nutrition & Diagnosis-Related Care 6th edition by Sylvia Escott Stump. Lippincott Williams & Wilkins (About \$80). Check for more recent edition.
- 10. Shirley Soltesz Steiner. Quick Medical Terminology: A Self Teaching Guide 4th edition. John Wiley & Sons.,INC. publisher; (about \$20).

EVALUATION:

Assessment of the student's progress is an ongoing process and involves the student as well as the instructor. The stated course objectives serve as the basis for evaluation. **All assignments are due on the date scheduled. NO EXCEPTIONS**. Points will be deducted for each day missed. (2 points per date turned in past due date).

Midterm #1	150 points	
Comprehensive Final Exam	150 points	
Assignments (8)	400 (50 points each	X 8 = 400)
700 pts		

327 Clinical Experience is a separate grade

You are expected to participate in classroom events and discussion and you are expected to be prepared for these interactive activities via reading of chapter, review of slides before class, completion of assignments, etc. Failure to do this can result in lowering of your score.

If you are late more than two times, or absent more than twice without a doctor's note, your final numerical grade (on a scale of 1 to 100) will be lowered by 3 points for each absence or tardiness. **POINTS GRADE**

POINTS	<u>GRADE</u>
651 +	A
630-650	A -
609-629	B+
581-608	В
560-580	B-
539-559	C+
511-538	C
490- 510	C-
469-489	D+
420-468	D
Below 420	F

TEACHING METHODS:

- 1. Lecture/Teacher-centered discussion
- 2. Student-centered discussion
- 3. Simulations Case studies
- 5. Demonstration
- 6. Practice/Skill Rehearsal
- 7. Clinical Observation
- 8. Student Presentations
- 9. Reading in textbooks, reference books, periodicals, newspapers, journals, Internet
- 10. Assignments involving researching, organizing information, and writing

WORK EXPECTED OF THE STUDENTS:

- 1. Students are expected to have read the assignment prior to class and to actively participate in class discussions.
- 2. Students are responsible for all terms defined in the textbook.
- 3. Written assignments must be word processed and completed on 8-1/2" x 11" paper. Spelling, punctuation and grammar will constitute part of the grade for the assignment. One-inch margin and appropriate spacing. Indent for paragraphs.
- 4. Class attendance is expected. If you must miss a class, a phone call to the department is expected.
- 5. Assignments are due on the date indicated. NO EXCEPTIONS.
- 6. Make up tests require an MD excuse for illness or must be previously arranged with the instructor.
- 7. You will be expected to complete case studies and work as assigned.
- 8. You will complete 28 clinical observation hours during the semester.
- 9. "Your obligations for this course include attendance at the final exam, on the day and time scheduled by the Registrar's Office. You should not make travel arrangements until the final exam schedule is published; if you must make plans early, you should schedule your travel after the last final exam day."

CLASSROOM PROTOCOL

Appropriate classroom behavior is implicit in the Cedar Crest honor Code. Such behavior is defined and guided by complete protection for the rights of all students and faculty to a courteous, respectful classroom environment. That environment is free from distractions such as <u>late arrivals</u>, early departures, inappropriate conversations and any other behaviors that might disrupt instruction and/or compromise students' access to their Cedar Crest College education. **TURN YOUR CELL**

PHONES OFF and do not bring lap top computers!

Honor Code: The Cedar Crest Honor Code will prevail at all times. Please verify on each test and assignment that the work done is your own with your SIGNATURE. You are not to consult with ANY OTHER STUDENTS when you are given take-home tests, projects, and assignments. PLAGIARISM or any other form of academic dishonesty will result in no points on the paper/exam on which you plagiarized or cheated. In addition, such an act may result in failing the entire course. Please refer to your customs book for a complete explanation of the Cedar Crest Honor Code.

Assignments and Nutrition Cases: Objectives

- 1. Identify fluid and electrolyte requirements
- 2. Use and interpret resources to identify nutrient-nutrient and drug-nutrient interactions
- 3. Assess and plan treatment of nutritional heal risks
- 4. Apply medical nutrition therapy principles
- 5. Identify the influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior
- 6. Interpret medical terminology
- 7. Interpret laboratory parameters relating to nutrition
- 8. Calculate and interpret nutrient composition of foods
- 9. Translate nutrition needs into menus for individuals and groups
- 10. Calculate and/or define diets for common conditions
- 11. Screen individuals for nutrition risk
- 12. Collect pertinent information for comprehensive nutrition assessments
- 13. Determine nutrient requirements across the lifespan

Procedure: Using your textbooks and other reference materials, you are to complete the assignments and case studies

Evaluation: Assignments and written case studies are graded by the instructor based on accuracy.

Due Dates Per instructor

Medical Nutrition Management I Nutrition 327 Fall 2008 Proposed Schedule (SUBJECT TO CHANGE)

DATE	TOPIC	Chapter Reading
Aug 24	Nutrition and Laboratory Assessment	Mahan 14, 15 ADA Pocket Guide to Nutrition Assessment Handouts/Articles See appendixes Pg1204-1241
August 31	Nutrition and Laboratory Assessment	As above
Sept 7	No class due to Labor Day – Happy Holiday	
Sept. 14	Physical Assessment One hour clinical – classroom = 2 hrs clinical time (Assessment calculations, case studies)	View videos available Ch 14 pgs398-406 Articles/Handouts
Sept. 21	Nutrition & Diabetes	Mahan Ch 30 Appendix 34
Sept 28	Nutrition and Diabetes	Mahan Ch 30 Appendix 43,34
Oct 5	Pharmacology	Mahan Ch 16 Appendix 31- pg 1242-
	One hour clinical – classroom = 2 hrs clinical time Case studies, CHO calculations	1247
Oct 12	NO Class Fall break	
Oct 19	The Nutrition Care Process	Mahan Ch 17 Articles Nutrition Diagnosis and Intervention Articles/Handouts
Oct 26	MID TERM EXAM	Nutr Assess, Phys Asses, NCP, Diabetes All information covered

Nov 2	Specialized Nutrition Support - Enteral	ADA Pocket Guide Enteral Nutrition Articles/Handouts Mahan Ch 20
Nov 9	Specialized Nutrition Support - Parenteral	ADA Pocket Guide Parenteral Nutrition Articles/Handout Mahan Ch 20
Nov 17	Enteral & Parenteral Cardiovascular & Hypertension One hour clinical classroom = 2 hrs clinical time	As above Mahan Ch 32-32 Appendix 37 -42
Nov 23	NO CLASS – Happy Holiday Cardiovascular and Hypertension	Ch 32-33
Nov 30	Weight Reduction One hour clinical classroom = 2 hrs clinical time	Ch 21
Dec 7	Comprehensive Final	
	Schedule is subject to change.	

Additional information will be provided in class setting. Many worksheets and materials can be found under doc sharing of computer.

Resources and books may also available for use in the department. Please talk to instructor regarding resource needs and information or books you do not have available.