### COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.

Nutrition and Disease (709:498; 3 credits)

Spring, 2018

Tues: 12:35-1:55 PM (Sections 1&2, CDL rm 110); Wed 10:55-12:10 (Section 1; CDL rm 102) and

12:35-1:55 (section 2; CDL rm 102)

CDL: on Cook Campus

Department of Nutritional Sciences

#### **CONTACT INFORMATION:**

**Instructor:** S. Shapses, PhD, RDN

Office Location: Foran Hall, rm 195A, Cook Campus Office Phone: 848-932-9403; <a href="mailto:shapses@rutgers.edu">shapses@rutgers.edu</a>

Office Hours: Tuesdays (2-4) and Thursdays 12:30-2 or by appointment using the link.

Assistant/Grader: TBA. Course Prerequisites: Advanced Nutrition (709:401; 709:402; at least

one semester).

## **COURSE WEBSITE, RESOURCES AND MATERIALS:**

- Resources and materials will be made available on the class Sakai website.
- Text: Krause's Food and the Nutrition Care Process, 14th Edition, Eds., Mahan LK, Raymond JL. Elsevier, 2017. ADA Exchange booklet for diabetes project—purchase in class
- **Optional:** course packet (order during first class); Nelms, M, Roth, S. Medical Nutrition Therapy: A Case Study Approach. 5th Edition. Cengage Learning, 2017. ISBN: 978-1-305-62866-3 **Stedman's Medical Dictionary. Food-Medication Interactions.** www.foodmedinteractions.com

#### **COURSE DESCRIPTION:**

The pathophysiology of diseases states and how it relates to nutritional concerns in patients at risk of nutritional complications. This includes an introduction to diet therapy and patient advice for each disease state.

Course Prerequisites: Advanced Nutrition (709:401; 709:402; at least one semester).

## **LEARNING OBJECTIVES:**

After taking this course, students will:

- 1. To understand how to take up-to-date scientific knowledge of diseases and apply it to solve nutritional problems.
- 2. To learn how to approach nutritional treatment of disease and in-patient education. Other objectives in this course include:
  - 3. To formulate, organize and plan a diabetic diet and calculate a TPN formula
  - 4. To understand and utilize different approaches to writing in the medical chart
  - 5. To calculate nutrition assessment using SOAP, ADIME (PES) and understand the contributions of biochemical assessment, anthropometric measurements and emerging information from personalized nutrition and genetics.
  - 6. Case study of diabetes and calculate a diabetic diet.
  - 7. To translate complicated medical nutrition treatment into practical patient care.

Demonstrate effective knowledge in the pathophysiology of disease states, professional oral and written communication and documentation. Describe the interaction of nutrition and diet with specific diseases.

2017 Core Knowledge for the RD (KRD) Standards for Didactic Programs in Dietetics

The Department of Nutritional Sciences undergraduate Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The following ACEND Core Knowledge aptitudes are included within the curriculum of this course:

- KRDN 1.2: Use current information technologies to locate and apply evidence-based guidelines and protocols (i.e., Herbal/Drug Interaction Project with both written and oral presentation).
- KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation (i.e., Herbal/Drug Interaction Project with both written and oral presentation).
- KRDN 2.2 Describe the governance of nutrition and dietetics practice, such as the Scope of Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics; and describe inter-professional relationships in various practice settings (i.e., classroom discussions and case study assignments)
- KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services (i.e., inclass discussions, exams).
- KRDN 3.1: Use the Nutrition Care Process to make decisions, identify nutrition-related problems and determine and evaluate nutrition interventions (i.e., case study assignments and exams).
- KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change for and enhance wellness for diverse individuals and groups (i.e., case study assignments and exams).
- KRDN 3.5: Describe basic concepts of nutritional genomics (i.e., lecture(s) assessed by exams).

## ASSIGNMENTS/RESPONSIBILITIES & ASSESSMENT:

Exam I 25% Exam II 25% Final 25%

Herbal/Drug-Food interaction (oral/written) 5%; Flipped Class 5%; Case Studies (Assessment) 5%; Db diet project 5%; 5% class participation

Attendance: If there is a reason you can't be in class on days when there are guests or projects are due, this should be reported at the website that automatically sends me an email. As needed, you can submit projects by the end of the same day that it is due (late submissions-10% off).

This course includes exams, a critical review of a paper, and active learning projects, such as nutritional assessments, calculating a parenteral nutrition formula and a diabetic diet. There are post-tests included in some sections to help you learn the class material. There will be guest lectures by various experts in the field. This class is geared to help you make an easier transition from the classroom to the clinical setting.

Tuesday - class I (Sections 1 & 2: 12:35-1:55)	Wednesday (10:55-12:15-Sec 1 or 12:35-1:55-Sec 2)
Room CDL 110	CDL 102
January 16	January 17
Introduction/Nutritional Assessment	Intro to Clinical Trials / Case study (SOAP/ADIME)
January 23 submit Nutr Assessment Case Study	January 24
Gastrointestinal Diseases	Gastrointestinal Diseases - mini-case study
January 30	January 31
Gastrointestinal Diseases	Obesity
February 6	February 7
Legal /Ethical Issues (Dr. Cross)	Brain and Nutrient interactions - flipped
February 13	February 14
Methods of Nutrition Support (Ent. Nutrition)	Nutritional Support (Parenteral Nutrition; TPN calculations, and the inter-professional approach)
February 20	February 21
Exam I	Hypertension
February 27	February 28
Cardiovascular Disease (R Zurfluh, MS, RDN)	Respiratory Disease
March 6 National Nutrition Month	March 7
Endocrine disorders and Diabetes	Diabetes - Write a diabetic diet
March 13	March 14
Spring break	Spring break
March 20	March 21
Liver Disease (submit Db project) Intro Drug/Herb/Nutrient Interactions	Osteoporosis (visit body comp/bone lab)
March 27 - Inborn Errors (Dr. Watford)	March 28 - Exam II
April 3 –	April 4 –
Immune Sys./HIV (J Bridenbaugh, MS, RDN)	Cancer (submit ½ page drug/herb project)
April 10	April 11
Drug/Herb/Nutrient Interactions Projects	Sepsis Injury Burns
April 17	April 18 –
Drug/Herb/Nutrient Interactions Projects	Renal Disease
April 24	April 25
Renal Disease	REVIEW
May 1 - Reading day	May 2th – Cumulative FINAL 9:30-11am

### **Course Policies**

**Attendance:** Attendance significantly improves test performance and you should attend all classes. During class, you are expected to be attentive and participate. Please arrive to class on time to avoid distracting your classmates. To eliminate distractions during class, laptop computers are to be used only for lecture slides or note taking. Please turn off cell phones and do not use other electronic devices during class.

**Absences**, If you expect to miss class, please use the University absence reporting website <a href="https://sims.rutgers.edu/ssra/">https://sims.rutgers.edu/ssra/</a> to indicate the date and reason for your absence (an email will automatically be sent to me). In cases where you must miss classes or recitations for periods longer than one week, please contact a Dean of Students for assistance to help verify your circumstances.

# **Academic Integrity**

Strict Adherence to Rutgers Academic Integrity Policy will be followed, and papers submitted will be examined on Turnitin.com. For information about student conduct, please see:

http://studentconduct.rutgers.edu/ Also, you can view the university's Academic Integrity Policy at the following website:. http://academicintegrity.rutgers.edu/integrity.shtml

#### STUDENT WELLNESS SERVICES

Just In Case Web App <a href="http://codu.co/cee05e">http://codu.co/cee05e</a>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty.

## **Disability Services**

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <a href="https://ods.rutgers.edu/">https://ods.rutgers.edu/</a> Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <a href="https://ods.rutgers.edu/students/registration-form">https://ods.rutgers.edu/students/registration-form</a>.

#### **Scarlet Listeners**

(732) 247-5555 / http://www.scarletlisteners.com/

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.