

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

Nutrition and Disease (709:498; 3 credits)

Spring, 2021

Monday: and Thurs 10:55 - 12:15

Course Location: Virtual

CONTACT INFORMATION:

Instructor: S. Shapses, PhD, RDN, Department of Nutritional Sciences (secondary:Dept Medicine)

Phone: 848-932-9403; shapses@rutgers.edu

Office Hours: Monday (4:30-5:30 (Zoom link in course) or after class **or by appointment.**

- Dr. Shapses Office Hours: By appointment and you can self-book an appointment:
<http://sueshapses.youcanbook.me/>
- Teaching Assistant: Melissa Woortman; maw317@Rutgers.edu Office Hours after class (thurs) and TBD.

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Course Prerequisites: Advanced Nutrition (one semester of 709:401 or 709:402).

COURSE WEBSITE, RESOURCES AND MATERIALS:

- Resources and materials will be made available on the class Canvas website.
- **Text: Krause's Food and the Nutrition Care Process, 15th Edition, Mahan LK, Raymond JL. Elsevier, 2021.** <https://evolve.elsevier.com/cs/product/9780323636551?role=student>
- **ADA Exchange booklet for diabetes project (optional to purchase)**
- **Optional:** Nelms, M, Roth, S. Medical Nutrition Therapy:A Case Study Approach. 5th Ed. Cengage Learning, 2017. 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, case studies 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 understand the Nutrition Care Process using ADIME (PES) and understand the contributions of biochemical assessment, Nutrition Focused Physical Exam (anthropometric etc) and emerging information from personalized nutrition and genetics.
6. To become familiar with case studies, and for the diabetes case study students will learn how to calculate a diabetic diet.
7. To translate complicated medical nutrition treatment into practical patient care.
8. Demonstrate effective knowledge in the pathophysiology of disease states. and professional oral and written communication and documentation. Describe the interaction of nutrition and diet with specific diseases.

ASSIGNMENTS/RESPONSIBILITIES & ASSESSMENT:

- Exam I 22%
- Exam II 22%
- Exam III 23%
- Flipped Class (5%); Topic weekly quizzes (6%); Herb/Drug 5%; Nutr Assessment and Care Plan (4%); Other in-class case studies/participation- 8%; Db Case Study 5%

Participation – In class activities (mandatory attendance for guest lectures, etc). Topic quizzes will be done independently and can be taken up to 2 times (highest score used for your grade)

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).

Tentative Schedule: (subject to adjustment)

Monday	Thursday
No class (key: * indicates case studies)	January 21 - Introduction/Nutritional Assessment
January 25 Nutrition Care process / Case study (ADIME/PES)	January 28 Gastrointestinal Diseases Submit Nutr Assessment Case Study
February 1 Gastrointestinal Diseases - mini-case study*	February 4 Gastrointestinal Diseases*
February 8 - Immune System (COVID other diseases)	February 11 – Brain and Nutrient interactions - flipped
February 15 Legal /Ethical Issues (Dr. Cross)*	February 18 Exam I
February 22 Methods of Nutrition Support (Ent. Nutrition)*	February 25 Nutritional Support (Parenteral Nutrition; TPN * calculations, with an inter-professional approach
March 1 Respiratory Disease	March 4 Inborn Errors (Dr. Watford)
March 8 National Nutrition Month Endocrine disorders and Diabetes	March 11 Diabetes - Write a diabetic diet
March 14 - Spring break	March 17 - Spring break
March 22 Liver Disease (submit Db project) Intro Drug/Herb/Nutrient Interactions	March 25 Cardiovascular - R Zurfluh, MS, RD
March 29 – Exam II	April 1 – Hypertension*
April 5 – Osteoporosis	April 8– Obesity
April 12 – Cancer (submit ½ page drug/herb project)	April 15 - Drug/Herb/Nutrient Interactions
April 19 - Renal Disease Part I	April 22 – Drug/Herb/Nutrient Interactions
April 26 - Renal Disease – Part II*	April 29 - Sepsis Injury Burns*
May 3 - REVIEW	Mon May 10 – EXAM 3 (60 min) – 9am-12N

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 <https://sims.rutgers.edu/ssra/> 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>

AVAILABLE STUDENT SUPPORT SERVICES

- ***If you are having personal or other problems, there are many options at Rutgers for assistance.***
 - Student Affairs office can help with issues related to your experience at Rutgers and when you don't know where to start when looking for assistance, contact the [Dean of Students office](#).
 - If are in need of *mental health* services, please use our readily available services. Rutgers [Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services](#) (CAPS)
 - If you need some temporary guidance, there is "***Let's Talk***" – which is a CAPS service offering drop-in hours at locations across campus. No appointment is necessary. <http://health.rutgers.edu/medical-counseling-services/counseling/therapy/community-based-counseling/#runbhc>
- **If you are in need of *physical health* services** due to illness, please reach out to:
Rutgers Health Services – New Brunswick: <http://health.rutgers.edu/>
- **If you do not have enough food**, there is a Food Pantry on College Ave campus that is exclusively for Rutgers Students. <http://ruoffcampus.rutgers.edu/food/>
- If you need accommodation for a ***disability***, obtain a Letter of Accommodation from the Office of Disability Services that provides student-centered and inclusive services. <https://ods.rutgers.edu>
- If you are a **military veteran** or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <http://veterans.rutgers.edu/>
- If you are in **need of legal services**, please use our readily available services: <http://rusls.rutgers.edu/>
- If you are in need of additional ***academic assistance***, please use our readily available services. Rutgers University-New Brunswick Learning Center: <https://rlc.rutgers.edu/>.

- If you or somebody you know has been victimized by a *crime, interpersonal violence* (e.g., stalking, sexual assault), support is available at the Rutgers Office for Violence Prevention and Victim assistance. <http://vpva.rutgers.edu>

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., in-class 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).