

Medical Nutrition Therapy I: Nutrition Assessment & Diagnosis

11:709:483 (3 credits) Fall 2023

Pre or co-requisite: 11:709:400 or 401, 11:709:484 Nutrition Therapy Lab

Class times: Monday/Thursday 10:20-11:40 AM

Location: Mondays Davison Hall, Room 122; Thursdays Davison Hall, Room 216 (Cook/Douglass Campus)

CONTACT INFORMATION:

Instructor(s): Sonal Agarwal, MS, RD

Email: sonal.agarwal1@rutgers.edu

Office Hours: Friday 3-5pm (by appointment only)

COURSE WEBSITE, RESOURCES AND MATERIALS:

- Resources and materials will be made available on the Rutgers CANVAS website.
- All class-related documents, grades, and announcements for this class will be posted on our class CANVAS website. Students will be responsible for regularly checking Canvas for announcements and schedule changes. <https://canvas.rutgers.edu/>
- **Required Text:** Krause's Food and the Nutrition Care Process, 15th Edition, Mahan LK, Raymond JL. Elsevier, 2021. ISBN: 9780323636551
<https://evolve.elsevier.com/cs/product/9780323636551?role=student>
(Please note this textbook will also be used for MNT II)
- Recommended Text: Holli, Betsy B. & Beto, Judith A. (2018) Nutrition Counseling and Education Skills: A Guide for Professionals. 7th Edition. Philadelphia: Wolters Kluwer Health; 2018
- Recommended Subscription: Electronic Nutrition Care Process Terminology (eNCPT)
<https://www.ncpro.org/>
- Other Free Resources: Evidence Analysis Library (EAL)
<https://www.andevidencelibrary.com/sso.cfm?key=227F1AC0-C07A-4E96-B426-0FE99DE9F21B&u=rutgersunivesity>

COURSE DESCRIPTION:

Introduction to evidence-based methods for assessing nutritional status and diagnosing nutrition-related conditions via application of the Nutrition Care Process. Critical analysis of anthropometric, biochemical, clinical diet, and environmental measurements during nutrition-focused exams.

LEARNING GOALS:

Following completion of this course, students will be able to:

- Describe and apply the nutrition care process
- Conduct nutrition screenings, assessments, and determine energy requirements
- Interpret data on dietary intake, body composition, laboratory values, medical history and SES factors.
- Plan interventions to address nutrition problems while considering ethnic/racial factors affecting nutrition guidance and outcomes.
- Identify appropriate nutrition problems related to hydration, electrolytes and acid/base balance.
- Learn how nutritional genomics contributes to individualizing nutrition assessments and influences of chronic disease
- Identify appropriate data to monitor and evaluate success of nutrition interventions

- Use appropriate methods of documentation
- Understand the Nutrition Care Process using ADIME and PES documentation
- Understand and utilize different approaches to writing in the medical chart (SOAP in other disciplines)
- Understand the importance of health care delivery systems with a role of the dietitian acting in conjunction with other health care team members and understanding health care quality assurance.
- Learn about the joint commission of hospitalization and its role in monitoring quality of performance with a focus on dietitian/nutritionists.
- Gain knowledge about medical nutrition therapy related to hypertension and cardiovascular concerns in clinical situations.
- Use evidence-based guidelines from a range of sources including professional societies to make decisions to assist with patient care.
- Identify and describe the roles of others with whom the registered dietitian/nutritionist collaborates in the delivery of nutrition support and management of other patients.

2022 Core Knowledge for the RDN (KRDN) – Standards for the Didactic Programs in Dietetics:

Rutgers University 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 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions (i.e., heart healthy dietary guidelines and kidney stone/ceciac disease assignments).

KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols (i.e., lecture on EAL).

KRDN 1.3: Apply critical thinking skills (i.e., heart healthy dietary guidelines and kidney stone/ceciac disease assignments).

KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation (i.e., heart healthy dietary guidelines and kidney stone/ceciac disease assignments.)

KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics (i.e., in class discussions, role of dietitian homework).

KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates (i.e., in class discussions, role of dietitian homework).

KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions (i.e., in class discussions, Nutrition Care Process tutorial, quiz, exam)

KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups (i.e., lectures, in class discussions and simulations).

KRDN 3.4: Practice routine health screening assessments, including measuring blood pressure and conducting waived point-of-care laboratory testing (such as blood glucose or cholesterol) (i.e., lecture, in class practice of various anthropometric assessments).

KRDN 4.3*: Demonstrate an understanding of the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained (final exam).

KRDN 5.4: Practice resolving differences or dealing with conflict (i.e., in class discussions).

KRDN 5.5: Promote team involvement and recognize the skills of each member (i.e., in class discussions, role of dietitian homework).

*Indicates a Student Learning Outcome. If you receive less than 70% on an assessment of a KRDN Student Learning Outcome, you will be required to redo the assignment until you pass (no grade change). If not, you may not receive a Verification Statement required to enter a supervised practice program.

ASSIGNMENTS/RESPONSIBILITIES, GRADING & ASSESSMENT:

- Midterm (30%)
- Final Exam (30%)
- Quizzes (10 total) (10%)
- Assignments (4 total) (20%)
- Class participation/Attendance (10%)

Grading Scale:

GRADE SCALE	90-100	85-89	80-84	75-79	70-74	60-69	<60
% OF POINTS	A	B+	B	C+	C	D	F

Exams: All exams will be accessed via Canvas, and will be held in person. Final exam date TBD.

Quizzes and Assignments: Instructions are posted on the Canvas course site for the 10 quizzes and 3 assignments in this class. All quizzes and assignments will be due by 10am on the due date. Late submissions will receive a zero on quizzes and 5% deduction per day late).

Participation: In class activities (mandatory attendance) require active participation (10% of final grade).

Attendance: If you can't attend a class with activities due to medical or other reasons, please inform the instructor so you don't get marked off for the participation grade.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu>

COURSE SCHEDULE:

(co-requisite with Nutrition Therapy Lab) Chapters refer to Krause and Mahan 2021 (*Tentative syllabus - subject to change*)

	MNT I Topic	Assigned Readings
Thurs 9/7	Course Introduction Nutrition Care Process, MNT	Chap 18
Mon 9/11	Intake, Inflammation and Pathophysiology of Chronic Illness <i>Quiz 1: Medical Nutrition Terminology - Understanding Medical Words (due 9/11)</i>	Chap 1, 7 MedlinePlus - Understanding Medical Words Tutorial https://medlineplus.gov/medwords/medicalwords.html
Thurs 9/14	Nutrition Assessment: Client History & Communication Skills	Chap 4, 8
Mon 9/18	Biochemical Data Assessment Water, Electrolyte and Acid Balance <i>Quiz 2: Medical Nutrition Terminology - Abbreviations (due 9/18)</i>	Chap 3 MedlinePlus - Abbreviations https://medlineplus.gov/appendixb.html
Thurs 9/21	Significance of Medications, Drug Nutrient Interactions	Chap 5, Nutrient Drug Interactions
Mon 9/25	Medical Tests & Procedures in MNT <i>Quiz 3: Drug Nutrient Interactions quiz (due 9/25)</i>	
Thurs 9/28	Anthropometrics & NFPE * <i>Guest Lecture</i>	Chap 5
Mon 10/2	Estimating Energy, Protein and Fluid Needs	Chap 2 <i>Assignment 1: Create an ADIME (partial) note based on case study (due 10/16)</i>
Thurs 10/5	Nutrition Diagnosis (eNCPT) Appropriate Documentation	Chap 9, Chap 10 NCP self-study - watch 6 modules https://www.ncpro.org/encpt-tutorials
Mon 10/9	Disease Specific MNT, Nutrition -Genomics, EAL CVD: Evidence Based Practice <i>Quiz 4: Medical Nutrition Terminology - Blood, Heart and Circulation (due 10/9)</i>	Chap 6, Chap 32 MedlinePlus - Blood, Heart and Circulation https://medlineplus.gov/bloodheartandcirculation.html
Thurs 10/12	CVD: Evidence Based Practice	

	MNT I Topic	Assigned Readings
Mon 10/16	Oncology (Breast CA, etc) <i>Quiz 5: Medical Nutrition Terminology - Cancers (due 10/16)</i> <i>Assignment 1 due</i>	Chap 35 MedlinePlus - Cancers https://medlineplus.gov/cancers.html <i>Assignment 2 (Group): Presentation and handout: dietary guidelines with recipe (due 11/6)</i>
Thurs 10/19	Oncology (Breast CA, etc)	
Mon 10/23	GI Intolerances (IBS, Celiac & Food Allergy) <i>Quiz 6: Medical Nutrition Terminology - Gastrointestinal (due 10/23)</i>	Chap 25 MedlinePlus - Gastrointestinal https://medlineplus.gov/digestivesystem.html
Thurs 10/26	GI Intolerances (Gastrectomy, Gastroparesis, IBD)	Chap 26, 27
Mon 10/30	<u>Midterm</u>	
Thurs 11/2	NAFLD, Gallbladder and Kidney Stones <i>Quiz 7: Medical Nutrition Terminology - Urinary (due 11/2)</i>	Chap 28, 34 MedlinePlus - Urinary System https://medlineplus.gov/kidneysandurinarysystem.html
Mon 11/6	Pregnancy and Lactation <i>Assignment 2 due (in class presentation)</i>	Chap 14, 15
Thurs 11/9	Intro to Pediatric Nutrition <i>Quiz 8: Medical Nutrition Terminology - Children and Teenagers (due 11/9)</i>	Chap 16, 17 MedlinePlus - Children and Teenagers https://medlineplus.gov/childrenandteenagers.html
Mon 11/13	Pediatric Nutrition - FTT/malnutrition, Food Allergies, other diseases	<i>Assignment 3: diet interventions based on evidenced based research for case study (due 12/4)</i>
Thurs 11/16	Endocrine (PCOS//Thyroid) <i>Quiz 9: Medical Nutrition Terminology - Endocrine (due 11/16)</i>	Chap 30 MedlinePlus - Endocrine System https://medlineplus.gov/endocrinesystem.html
Mon 11/20	Obesity/MI	Chap 20
Thurs 11/23	THANKSGIVING BREAK	
Mon 11/27	Eating Disorders/MI <i>*Guest Lecture</i>	Chap 21

	MNT I Topic	Assigned Readings
	<i>Quiz 10: Medical Nutrition Terminology - Mental Health (due 11/27)</i>	MedlinePlus - Mental Health https://medlineplus.gov/mentalhealthandbehavior.html
Thurs 11/30	Motivational interviewing (MI)	
Mon 12/4	Motivational interviewing (MI) <i>Assignment 3 due</i>	<i>Assignment 4: billing and coding assignment (due 12/14)</i>
Thurs 12/7	Billing & Coding	
Mon 12/11	Role of a Dietitian discussion /Final Review	
Thurs 12/14	<i>Final Exam TBD</i> <i>Assignment 4 due</i>	

FINAL EXAM/PAPER DATE AND TIME

Online Final Exam Schedule: <http://finalexams.rutgers.edu/>

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>



School of Environmental
and Biological Sciences

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/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

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. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

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: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <https://rutgers.campuslabs.com/engage/organization/scarletlisteners>

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