#### FN 454/654 Medical Nutrition Therapy

Fall 2023

**Course Description**: 3 cr. In-depth study of nutrition assessment parameters used in the development of a nutrition care plan. Current counseling theories; interviewing and counseling techniques for use with various nutrition-related diagnoses will be taught. Completion or concurrent enrollment in FN 457 Advanced Nutrition and Human Metabolism required and FN 373 Nutrition in the Life Cycle is required.

**Class Schedule**

* Lecture, Monday and Wednesday
	+ Monday: **3:30-4:45pm,** CPS Room 229
	+ Wednesday: Virtual (asynchronous)

**Instructor**

Kylie DeSmet, MS, RD

 email: kdesmet@uwsp.edu

 CPS, Room 207

 **Office Hours**: Monday and Wednesday 2:00-3:30 OR Email for availability

**Texts:**

* Text rental: Krause and Mahan, eds. Food and the Nutrition Care Process, 15th ed. ELSEVIER, 2021.

**Library Resources:**

[*Nutrition Care Manual*](http://metalib.wisconsin.edu:80/V/ISMGF4GG55MDA429U844XGU5S9CLSUBMBQ6XQ5XNJFXEI26MI9-36491?func=native-link&resource=UWI50170)

The ADA Nutrition Care Manual (NCM) is a publication of the Academy of Nutrition & Dietetics. It is the preeminent source of research-based nutrition information and clinical tools available to dietitians, dietetic technicians, and other health care professionals. Full text information is available concerning the nutritional needs of various medical disorders and diseases.

*International Dietetics & Nutrition Terminology Reference Manual: Standardized Language for the Nutrition Care Process*, 4th ed. American Academy of Nutrition and Dietetics, Chicago, IL, 2012.

*eNCPT*-electronic Nutrition Care Process Terminology Reference Manual

Directions to access the *Nutrition Care Manual* and *eNCPT Reference Manual*:

These E-books are listed among the Library Article Databases, use either: [Find article databases](http://metalib.wisconsin.edu.ezproxy.uwsp.edu/V/?func=find-db-1); [Browse databases A-](http://metalib.wisconsin.edu.ezproxy.uwsp.edu/V/?func=find-db-1-locate&mode=locate&F-WCL=&F-WPB=&F-WFL=&F-WRD=&F-WTY=Index&restricted=all)Z; and the [Article databases by subject](http://library.uwsp.edu/researchpoint/categories.htm) > in the Health/Medicine and Wellness categories.

**Course Objectives:**

Students will be able to:

1. Identify the essentials of a nutrition care plan
2. Demonstrate effective knowledge of specific nutrition –related disorders
3. Identify appropriate assessment measures for selected disease states and conditions, including malnutrition
4. Define and interpret appropriate medical terminology and assessment tools
5. Demonstrate effective use of tools for nutrition counseling and communication skills in appropriate settings
6. Select and apply appropriate strategies when presented with nutrition problems
7. Adapt counseling strategies based on self-evaluations and client evaluations

**ACEND: 2022 Standards for Didactic Programs in Nutrition & Dietetics**

KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-

 based practice decisions.

KRDN 1.2 Select and use appropriate current information technologies to locate and apply evidence-based guidelines

 and protocols.

KRDN 1.3 Apply critical thinking skills.

\*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.

\*KRDN: 3.5: Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health and

 Disease

\*Competencies with an asterisk are assessed and reported to ACEND

**Society for Nutrition Education and Behavior (SNEB) Competencies for Promoting Healthy Individuals, Communities, and Food Systems**

1. **Basic Food Knowledge**

1.4: Explain how to use food labeling to evaluate the appropriateness of a food

1.5: Explain the dietary prevention of, and management approaches associated with, the major diet-related public health issues.

 **4**. **Physical Activity**

4.2: Describe the benefits of regular physical activity as a means of prevention and management of public health issues including chronic diseases.

 **9. Written, Oral, and Social Medica Communication**

9.1 Communicate effectively in written, visual, and oral form, with individuals, the media, and other groups, in ways that are appropriate for diverse audiences.

9.3:   Engage and educate through simple, clear, and motivational language appropriate for diverse audiences.

 **10. Nutrition Education Research Methods**

10.1: Analyze, evaluate, and interpret nutrition education research and apply it to practice.

**LEARNING ENVIRONMENT**

Rights and Responsibilities

UWSP values a safe, honest, respectful, and inviting learning environment. The *Rights and Responsibilities* document explains how instructors and students are expected to maintain this environment. For more information go to: <http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx>

Academic Integrity

Academic integrity is central to the mission of higher education and dishonesty is not tolerated. Please refer to the UWSP “Student Academic Standards and Disciplinary Procedures” section of *the Rights and Responsibilities* document, Chapter 14. [Wisconsin Legislature: Chapter UWS 14](https://docs.legis.wisconsin.gov/code/admin_code/uws/14)

Special Accommodations

If you require classroom and/or exam accommodations, please register with the Disability Services Office and then contact me at the beginning of the course.

[Disability Resource Center (DRC) - University of Wisconsin-Stevens Point (uwsp.edu)](https://www.uwsp.edu/disability-resource-center/)

In-class use of electronic devices

Cell-phones, iPods, and laptop computers may be used for class-related work such as note taking or accessing relevant resources. You are on your honor to not access unrelated websites, play games, text message, tweet, etc. during class.

Attendance

Students should plan to attend as many face-to-face classes as possible and all online asynchronous lectures. Students are responsible for all information presented, and all information covered in online format during independent learning sessions. Notify the instructor by email if an absence is anticipated. If you are unable to attend due to health status, please email the instructor, so an attempt can be made to coordinate alternative learning opportunities.

Assignments & In Class Activities

Assignments will be graded on professionalism, appropriate grammar, use of scientific terminology, and proper punctuation and spelling. Promptness is expected. Late assignments which have not been discussed prior to the deadline will have **5% deducted each day the assignment is late.**

**Learning Activities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Points** | **Objective** | **Competency Demonstrated** |
| Your Story  |  **5** | Introduction |  |
| Case Studies Written (1)Oral (1) |  100 | Apply nutrition care process to disease or condition. | KRDN: 1.1, 1.2, 1.3, 3.1\* |
| Therapeutic Diet Assignment | 25 | Develop appreciation for the implementation of therapeutic diets and identify ways to better counsel clients. | KRDN: 1.2, 1.3, 3.1\* |
| Condition worksheets(EN, PN, CVD, DM 4 total) | 120 | Demonstrate calculation skills; demonstrate understanding of and apply lecture material. | KRDN: 1.1, 1.2, 1.3, 3.1\* |
| ADIME Counseling Assignment | 30 | Recognize key concepts in the NCP and be able to apply ADIME using the information obtained. | KRDN: 1.1, 1.2, 1.3, 3.1\* |
| Quizzes |  100 | Review or apply material from lectures | KRDN: 1.1, 1.2, 1.3, 3.1\*, 3.5\* |
| Exams (2) | 120 | Assess knowledge & understanding of key concepts in the NCP. | KRDN: 1.1, 1.2, 1.3, 3.1\*, 3.5\* |
| Final Exam | 100 | Assess knowledge & understanding of key concepts in the NCP. | KRDN: 1.1, 1.2, 1.3, 3.1\*, 3.5\* |
| Total Points | 600 |  |  |

\*Competencies with an asterisk are assessed and reported to ACEND

|  |  |
| --- | --- |
| **Percent** | **Letter Grade** |
| 93-100 | A |
| 90-92 | A- |
| 87-89 | B+ |
| 83-86 | B |
| 80-82 | B- |
| 77-79 | C+ |
| 73-76 | C |
| 70-72 | C- |
| 67-69 | D+ |
| 63-66 | D |
| 60-62 | D- |
| <59 | F |

**FN 454 Tentative** Course Schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Date** | **Topic** | **Readings** **Assignments to Review****Case Presentation in class** | **Assignment/Quiz/Exam Due** |
| **1** | Sep 6**Virtual**  | **Course Overview: Nutrition Care Manual (NCM), Nutrition Care Process (NCP)**Assessment, Diagnosis, Intervention, Monitoring and Evaluation (ADIME), Evidence-based guidelines (EBNPG) | * Chpt. 9
* Nutrition Care Process Infographic
* **Therapeutic Diet Assignment**
* **Written & Oral Cases**
* **Polypharmacy Case**
 | **Your story: Due 9/10** |
| **2** | Sep 11 | **Nutrition Screening & Assessment**Nutrition deficiencies and risk factors | * Chpt 4
* Chpt 2
* Nutrition Care Manual (NCM)-resources tab, nutrition screening
 |  |
| **2** | Sep 13**Virtual** | **Food/Nutrition Related History:**Intake: Data collection methods; Energy Intake and requirements, Indirect Calorimetry, Equations | * Assessment Video and Snapshot
* NCM-resources tab, energy metabolism
* **ADIME Nutrition Counseling Assignment**
 | **Therapeutic Diet Assignment: Due 9/17** |
| **3** | Sep 18 | **Energy Intake**: Energy requirements, Estimating Energy Requirements; Indirect Calorimetry, Equations | * Chpt 2
* NCM-resources tab, energy metabolism
 |  |
| **3** | Sep 20**Virtual** | **Food/Nutrition Related History***Medication and Herbal Supplement Use*Food & Drug Interactions | * Appendix 13

* **Condition Worksheets**
 | **Canvas Quiz 1: Due 9/24** |
| **4** | Sep 25 | **Anthropometric Measurements**Weight, height/length, head circumference, skinfold, WHO & CDC Growth Charts, BMI | * Chpt 5
* Appendix 3-11
 |  |
| **4** | Sep 27**Virtual** | Biochemical Data, Medical Tests and Procedures: electrolytes, renal, serum proteins, hepatic, glucose, endocrine. Minerals, vitamins, lipids, nutritional anemia | * Appendix 12
 |  |
| **5** | Oct 2 | **Exam 1** (covers thru 9/28 biochem) [In Class] |  |  |
| **5** | Oct 4**Virtual** | Fluid, electrolyte, acid-base balance | * Chpt 3
* Appendix 14
 | **Polypharmacy Case Part 1 (Questions 1-13): Due 10/8** |
| **6** | Oct 9 | Client History: NutrigenomicsInflammation & Chronic Disease | * Chpt 6
* Chpt 7
 |  |
| **6** | Oct 11**Virtual** | Nutrition-Focused Physical FindingsMalnutrition criteria | * Chpt 6
* Chpt 7
* Appendix 11
 | **Canvas Quiz 2: Due 10/15** |
| **7** | Oct 16 | Nutrition DiagnosisPES Statement | * Chpt 9
* Diagnosis Material (Snapshot, Terminology, Etiology Matrix, Video)
 |  |
| **7** | Oct 18**Virtual** | Nutrition Intervention: Plan-prioritize nutrition dx, goal setting, nutrition Rx, time & frequency | * Intervention Material (Snapshot, Terminology, Video)
 | **Canvas Quiz 3: Due 10/22**  |
| **8** | Oct 23 | (M&E) Monitor & Evaluate: Monitor, Measure, Evaluate | * Chpt 9
* Monitor & Evaluate Material (Snapshot, Terminology, Video)
 |  |
| **8** | Oct 25**Virtual** | **Exam 2** (covers through M&E)[On Canvas] |  | **Exam 2: 10/25** **Polypharmacy****Case Part 2 (Questions 14-26): Due 10/29** |
| **9** | Oct 30 | Enteral Nutrition (EN): Part 1 | * Chpt 12
* Appendix 15

* **EN Worksheet**
* **PN Worksheet**
 | **ADIME Counseling Assignment: Due 11/5** |
| **9** | Nov 1**Virtual** | Enteral Nutrition (EN): Part 2 |  | **EN Worksheet: Due 11/12** |
| **10** | Nov 6 | Enteral Nutrition (EN): Calculations |  |  |
| **10** | Nov 8**Virtual** | Parenteral Nutrition (PN) | * Chpt 12
* Appendix 16
 |  |
| **11** | Nov 13 | Parenteral Nutrition (PN): Part 2/Calculations |  | **PN Worksheet: Due 11/19****EN/PN Quiz: Due 11/19** |
| **11** | Nov 15**Virtual**  | Diabetes (Definition, Screening, Diagnostic Criteria) | * Chpt 29
* Appendix 18
* NCM-Diabetes Information
 |  |
| **12** | Nov 20 | Diabetes Complications |  |  |
| **12** | Nov 22**Virtual** | Diabetes MNT |  |  |
| **13** | Nov 27 | Diabetes MNT | **Presentations by:*** **Type 1 DM Case-Group 1**
* **Gestational DM Case-Group 2**
 | **DM Worksheet: Due 12/3** |
| **13** | Nov 29**Virtual** | CVD | * Chpt 32
* Appendix 11
* Appendix 23
* NCM-CVD Information
 |  |
| **14** | Dec 4 | CVD MNT |  |  |
| **14** | Dec 6**Virtual** | HNT |  |  |
| **15** | Dec 11 | HF & Transplant | **Presentations by:*** **HTN & CVD Case-Group 3**
* **HF Case-Group 4**
 |  |
| **15** | Dec 13**Virtual** | Anemia |  | **CVD worksheet due 12/15** **Diabetes/CVD/ Anemia Quiz: 5 due 12/15** |
| **16** | **Final Exam**  |  |