

# Medical Nutrition Therapy Supervised Experiential Learning Preceptor Syllabus

**Professional Science Master's in Applied Nutrition- Dietetics Emphasis** 

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# **Description of Program and Community Supervised Experiential Learning (SEL)**

The Professional Science Master's (PSM) in Applied Nutrition- Dietetics Emphasis at the University of Arizona is an Accreditation Council for Education in Nutrition and Dietetics (ACEND) accredited graduate program in which students are concurrently enrolled in graduate-level coursework and participate in nutrition professional practice settings. Students participate in a clinical professional setting to meet practice (SEL) hours and competencies required by the program and that align with ACEND graduate program standards. More information about the PSM- Dietetics Program is available at the following link: <a href="https://nutrition.cals.arizona.edu/psm-applied-nutrition-dietetics-emphasis">https://nutrition.cals.arizona.edu/psm-applied-nutrition-dietetics-emphasis</a>

# **Program Mission, Goals, and Objectives**

Mission: To provide advanced knowledge in nutrition and skills in dietetics, to successfully prepare competent graduates for entry-level practice as registered dietitians/registered dietitian nutritionists in the state and nation.

Goal #1: The program will provide graduates with quality education for entry into the workforce in nutrition and dietetics.

# Objectives:

- 1. "At least 80% of program graduates complete program/degree requirements within 1.5 years (150% of the program length)."
- 2. "Of graduates who seek employment, 50 percent are employed in nutrition and dietetics or related fields within 12 months of graduation."
- 3. "80% percent of program graduates take the CDR credentialing exam for dietitian nutritionists within 12 months of program completion."
- 4. "The program's one-year pass rate (graduates who pass the registration exam within one year of the first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%."

Goal #2: The program will provide graduates with supervised experiential learning opportunities to develop skills, knowledge, and beliefs to be successful in the workforce in nutrition and dietetics.

#### Objectives:

- 1. 80% of program graduates will rate the overall quality of the program as "good" or "excellent."
- 2. 80% of employers surveyed will rate the program graduates as "good" or "excellent" in preparation for entry level practice in a nutrition or dietetics related field.

# **Program Contact Information**

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#### **Affiliation Agreements**

An affiliation agreement must be established between the University of Arizona (UArizona) and the host site for a student to participate at the host facility. Once a student is officially admitted into the PSM- Dietetics Program, the program coordinator will reach out to the site contact to initiate the process of establishing an affiliation agreement. The agreement must be fully executed prior to the student starting at the host facility.

# **Preceptor Requirements**

ACEND recommends that program preceptors and faculty be trained on strategies to recognize and monitor biases in self and others and reduce instances of microaggressions and discrimination. ACEND provides resources and webinars on Diversity, Equity and Inclusion (DEI) topics:

https://www.eatrightpro.org/acend/about-acend/diversity-equity-and-inclusion

Preceptors will be asked to upload the following documents in the program's competency-based education portal:

- Resume/CV
- Current CDR card (if RDN or NDTR)
- Proof of completion of DEI training (if completed)

#### **Preceptor Continuing Professional Education Units (CPEU)**

Up to 3 CPEUs can be awarded per year to RDNs and NDTRs for precepting. Preceptors can complete the required forms then send them to the program director/coordinator for signature. Navigate to the following link to learn more about earning CPEUs for precepting: <a href="https://www.cdrnet.org/cpeu-credit-for-preceptors">https://www.cdrnet.org/cpeu-credit-for-preceptors</a>

#### Supervised Experiential Learning (SEL) Timeline

For the Medical Nutrition Therapy (MNT) SEL, students will be on-site 4 days/32 hours per week for the duration of the semester. Fall semester starts in mid-August and ends in mid-December. Spring semester starts in mid-January and ends in mid-May. Specific dates can be discussed with the prospective student or program coordinator and can be found in the University of Arizona Academic Calendar:

https://catalog.arizona.edu/2023-2024-academic-calendar

#### **SEL Course Objectives**

During this SEL, students will:

- Apply the principles of the nutrition care process for disease prevention and management to diverse populations.
- Perform the necessary calculations required to implement dietary and nutrient modifications for nutrition therapy.
- Locate, interpret, evaluate, and use professional literature to make ethical, evidence-based practice decisions.

# **Student Projects**

Students will be assigned semester-long projects to complete onsite during the MNT SEL. The two projects involve writing a topic review paper and completing a patient case study presentation. Review **Appendix A** for the patient case study presentation and **Appendix B** for detailed instructions for the topic review paper.

Project requirements can be adapted to fit the needs of the sight. Project deliverables will be graded by the SEL course instructor but should be reviewed and approved by the preceptor at each step of the process. Preceptors are encouraged to consider the work interns did for the project, as well as other activities they have completed, when completing the competency evaluations. Preceptors can reach out to the program coordinator to discuss project requirements if questions or concerns arise.

# **Topics Covered in Clinical Graduate Didactic Course:**

Students will concurrently be enrolled in an Advanced MNT course while completing their MNT SEL. The goal of the Advanced MNT course is to provide students with knowledge, tools and competencies related to medical nutrition therapy to prepare them to lead in the clinical setting. It is not required that all topics in the Advanced MNT course also be covered during the SEL; the topics are provided below only as suggested topics to review with students, if applicable:

Week	Topic
Week 1	Nutrition Assessment
Week 2	Diabetes
Week 3	Gastrointestinal Disease
Week 4	Renal Disease
Week 5	Liver Disease
Week 6	Pancreatitis
Week 7	Neurological Impairment

Week 8	Cancer
Week 9	Wound Healing
Week 10	Sepsis and Critical Illness
Week 11	Trauma/Surgery/Burns
Week 12	Short Bowel Syndrome
Week 13	Integrative Medicine
Week 14	Gut Microbiome
Week 15	Group Case Study
Week 16	MNT Paper and Presentation

# **Expected Learning Outcomes/ACEND Graduate Program Competencies**

Students will work towards meeting all ACEND graduate program competencies at entry level for dietitians by the end of the PSM- Dietetics Program. The ACEND competencies and performance indicators listed in **Appendix C** should be met during the student's Clinical SEL. Preceptors can reach out to the program coordinator if they identify that the student will not have the opportunity to meet a competency during their SEL or if they need clarification or suggestions on types of activities the student must engage in in order to meet the competency.

#### **Competency Evaluations and Student Time Log**

Evaluations and a student time log will be completed in a competency-based education portal, called iCompHost. The program coordinator will set up an account for the site preceptor(s) prior to the intern starting on site. Electronic evaluations are used to track students' progress toward meeting ACEND graduate program competencies at entry level for dietitians.

Preceptors will be asked to complete a competency evaluation at the midpoint and end of the MNT SEL. Midpoint competency evaluations are used to help the preceptor and student identify which key competencies are being met by the student during the first half of the SEL. If the student is not meeting important competencies, then the preceptor and student can establish a plan on how competencies can be met before the end of the SEL. Students will be expected to complete self-evaluations that preceptors can directly access and review in iCompHost.

Students will enter their daily time into iCompHost and preceptors will be asked to approve their time log by the end of the SEL.

# **Appendices**

# **Appendix A - Patient Case Study Presentation Instructions**

Prepare a PowerPoint presentation as outlined below. The oral presentation should be ~20-25 minutes long. Make sure you avoid using any patient-identifying information. Include in-text citations on the appropriate slides, as well as a reference list at the end of the presentation. The reference cited needs to come from evidence-based guidelines, systematic reviews, and/or scientific literature. You will need to submit a copy of your PowerPoint slides via the D2L assignment drop box folder.

#### **OUTLINE FOR CASE STUDY PRESENTATION**

This outline is to be used as a guide for the development of your case study powerpoint presentation. Each major topic needs to be addressed, but the orders and details can be changed to fit the specific case study.

- I. Overview of disease or condition
  - Pathophysiology of disease
  - Incidence of disease
  - Symptoms (Identify those reversible with nutritional intervention.)
    - Clinical
    - Pathological
  - Treatment (Discuss those applicable) medical, surgical, chemotherapy, dietary

#### II. General information:

- Patient's initials
- Patient's age
- Nationality
- Status in life job title, marital status

#### III. Report on Admission

- Date of admission
- Present illness onset, duration
- Medical Diagnosis/Diagnoses
- General condition upon admission
- General orders- diet, medication, drugs, etc.

#### IV. Special history

- Past Medical History
- Family History
- Social conditions affecting health economic, familial, emotional, and/or psychological

#### V. Nutrition Care Process

- Nutrition Assessment
  - o Anthropometric Data
  - o Pertinent Laboratory- explain what the value indicates, give normal ranges and bold abnormal values

- o Clinical Signs and symptoms
- o Dietary History and/or dietary recall
- o Medications and potential drug and nutrient interaction
- o Estimated nutritional needs
- o Summary of what the assessment means for the patient's nutrition needs, what are the primary nutrition concerns? What factors will impact the patient's nutrition treatment (i.e. socioeconomic, cognitive, religion/culture, personal, preferences, etc.)
- Nutrition Diagnosis (PES Statement) including rationale
- Nutrition Intervention with goals
- Nutrition Monitoring and Evaluation with goals
- Patient progress and reassessment on follow-up
  - o Did they meet the goals?
  - o What changes did you make to the nutrition care plan?

VI. List of References (AMA style)

# **Appendix B - Topic Review Paper Instructions**

By this time, you should have selected your patient for the case study presentation. You will be writing a topic review based on your patient's underlying medical condition (select one if the patient has multiple).

- The paper should be approximately 5-6 double-spaced pages excluding cover page (that
  includes title of the project, student's name, class designation (NSC 693C) and the date
  of submission), tables, figures, and references. A #12 font, 1-inch margins, and inclusion
  of appropriate headings must be used in the paper.
- The paper should have an introduction/background of the disease/medical condition (include pathophysiology of disease, underlying cause of disease, conditions predisposing patient to disease, typical course of treatment, prognosis, and prevention of disease).
- The paper should include application of MNT related to the disease/condition, recommendations for the practitioner, and conclusion.
- Tables and/or figures should be used to illustrate and/or summarize pertinent details, remember to cite the reference if you did not develop the material.
- The paper should include at least 10 references from peer-reviewed journals use the American Medical Association format for the citations.

# **Outline for Topic Review Paper:**

- I. Introduction and Background of Medical Condition/Disease
  - a. Pathophysiology of disease
  - b. Incidence and Prevalence
  - c. Symptoms (Identify those reversible with nutritional intervention)
    - Clinical
    - Pathological
  - d. Treatment (Discuss those applicable) medical, surgical, chemotherapy, dietary
  - e. Prognosis and Prevention of disease
- II. Nutrition Status
  - a. Impact of disease and treatment on nutritional status
  - b. Prevalence of malnutrition
- III. Medical Nutrition Therapy
  - a. Application of the nutrition care process in the clinical setting.
  - b. Oral diet therapy
  - c. Enteral Nutrition Therapy
  - d. Parenteral Nutrition Therapy
  - e. Recommendations for the practitioner

#### IV. Conclusion

- a. Summarize the background and evidence
- b. Summarize benefits and recommendations for MNT
- c. Include gaps in practice and what future research should cover

#### V. References

a. Using AMA style, list your references.

# **Appendix C – ACEND MNT Competencies & Performance Indicators**

# **Unit 1: Foundational Knowledge**

Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.

- 1.1 Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S)
  - 1.1.1 Analyzes the usefulness and limitations of epidemiological, clinical and other study designs and identifies trends in diet and disease. (S)
  - 1.1.3 Communicates epidemiological evidence related to the relationship between diet and the development of disease.(S)
- 1.2 Applies an understanding of anatomy, physiology, and biochemistry. (S)
  - 1.2.1 Analyzes the impact of food and nutrition on physiological processes. (S)
  - 1.2.2 Integrates knowledge of anatomy, physiology, and biochemistry to make decisions related to nutrition care.(S)
- 1.4 Integrates knowledge of chemistry and food science as it pertains to food and nutrition product development and when making modifications to food. (S)
  - 1.4.2 Integrates nutritional biochemistry knowledge to make informed food and nutrition decisions for optimal health. (S)
- 1.5 Applies knowledge of patho-physiology and nutritional biochemistry to physiology, health and disease. (S)
  - 1.5.2 Interprets and analyzes the effect of diet, fluids, electrolytes and nutritional status on the development and progress of the disease process.(S)
  - 1.5.3 Interprets and analyzes the effects of disease, clinical condition and treatment on nutritional health status. (S)
- 1.7 Integrates the principles of cultural competence within own practice and when directing services. (D)
  - 1.7.4 Identifies and implements strategies to address cultural biases and differences. (D)
  - 1.7.5 Applies culturally sensitive approaches and communication skills. (D)
- 1.8 Applies knowledge of pharmacology to recommend, prescribe and administer medical nutrition therapy. (S)
  - 1.8.2 Demonstrates understanding of pharmacokinetics, absorption, clearance, drug metabolism, latency period, drug and supplement metabolism, accumulation, half-life, and routes of administration. (S)
  - 1.8.3 Identifies potential drug and food interactions based on physiological responses to pharmacological agents and takes appropriate actions. (S)

- 1.9 Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health and wellness. (S)
  - 1.9.1 Critically evaluates evidence-based literature to inform decisions about use of complementary and integrative nutrition. (S)
  - 1.9.2 Applies an understanding of the impact of complementary and integrative nutrition on drugs, food, disease states and wellness. (S)
- 1.10 Applies knowledge of math and statistics. (S)
  - 1.10.3 Applies math skills to perform food and nutrition calculations. (S)
- 1.11 Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D)
  - 1.11.1 Interprets and communicates medical terminology to non-health professional audiences. (D)
  - 1.11.2 Uses acceptable medical abbreviations and appropriate medical terminology in all forms of communication. (D)
- 1.13 Demonstrates computer skills and uses nutrition informatics in the decision making process. (D)
  - 1.13.3 Operates nutrition informatics systems in practice. (D)
  - 1.13.4 Uses electronic databases to obtain nutrition information and evaluate credible sources in decision making. (D)
- 1.14 Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D)
  - 1.14.1 Evaluates, integrates and communicates nutritional requirements across the life cycle. (D)
  - 1.14.2 Identifies nutritional risk factors across the life cycle.(D)
- 1.15 Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S)
  - 1.15.2 Identifies, prioritizes and implements health risk reduction strategies for individuals, groups and populations. (S)
  - 1.15.5 Applies behavior change theories for nutritional health promotion and disease prevention. (S)

#### **Unit 2: Client/Patient Services**

Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.

2.2 Selects, develops and/or implements nutritional screening tools for individuals, groups or populations. (D)

- 2.2.1 Considers all client/patient factors when selecting, developing nutrition screening tools. (D)
- 2.2.4 Prioritizes care based on results of screening considering complexity of care needs. (D)
- 2.3 Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D)

# Nutrition Assessment

- 2.3.2 Interviews client/patient to collect subjective information considering the determinants of health. (D)
- 2.3.3 Conducts a nutrition focused physical exam. (D)
- 2.3.4 Takes a food and nutrition related medical history. (D)
- 2.3.10 Determines barriers that might influence a client/patient's nutritional status. (D)
- 2.3.12 Identifies patient appropriate validated formula and performs calculations to determine nutritional requirements. (D)

#### Diagnosis

- 2.3.14 Devises PES (problem, etiology and sign symptom) statement and outlines reasons for professional opinion cause and contributing factors. (D)
- 2.3.15 Prioritizes the nutrition diagnosis(es) . (D)  $\,$

#### Intervention

- 2.3.16 Develops an individualized plan of care that addresses nutritional care needs diagnosis and client/patient nutrition goals in collaboration with the client/patient and team members. (D)
- 2.3.18 Implements the nutrition plan of care or nutrition intervention with the client/patient and other team members. (D)

#### Monitoring/Evaluation

- 2.3.19 Monitors and evaluates impact of nutrition intervention on the nutrition diagnosis. (D)
- 2.3.22 Identifies barriers to meeting client/patient's nutrition goals and makes recommendations to modify the nutrition plan of care or nutrition intervention, and communicates changes to client/patient and others. (D)

#### Documentation

- 2.3.26 Documents all elements of the nutrition care process following professional standards and organizational policies. (D)
- 2.4 Implements or coordinates nutritional interventions for individuals, groups or populations. (D)

  <u>Medical Nutrition Therapy</u>
  - 2.4.1 Manages medical nutrition therapy for clients/patients. (D)
  - 2.4.3 Applies foundational science knowledge and medical nutrition therapy principles to establish, order, manage and evaluate the need for nutrition support when prescribing and administering nutritional oral, enteral and parenteral diets. (D)

# Education

2.4.9 Develops and provides evidence-informed nutritional wellness and therapeutic diet education to variety of audiences. (D)

#### Psychological Counseling and Therapies

- 2.4.14 Applies counseling principles and evidence-informed practice when providing individual or group sessions. (D)
- 2.4.19 Refers/transfers client/patient to appropriate health professionals when counseling therapy or client/patient's mental health issues are beyond personal competence or professional scope of practice.(D)
- 2.5 Prescribes, recommends and administers nutrition-related pharmacotherapy. (S)
  - 2.5.1 Applies knowledge of foundational sciences and disease when determining the appropriateness of the therapy. (S)
  - 2.5.4 Considers client/patient factors, nutritional impact, indications, side effects, contraindications, benefits, risks, alternatives and foundational sciences when prescribing, recommending and administering nutrition related drug therapy. (S)
  - 2.5.7 Applies the standard of practice, legislation, organizational policies and evidence-informed practices for prescribing. (S)
  - 2.5.10 Consults and refers/transfers client/patient to the appropriate health professional when client/patient's needs are beyond personal competence or professional scope of practice. (S)

# Unit 5: Leadership, Business, Management and Organization Demonstrates leadership, business and management principles to guide practice and achieve operational goals.

- 5.1 Demonstrates leadership skills to guide practice. (D)
  - 5.1.3 Communicates at the appropriate level and understands emotions and emotional situations. (D)
  - 5.1.4 Develops conversational and interpersonal skills. (D)
- 5.2 Applies principles of organization management. (D)

#### Management

5.2.10 Understands and respects roles and responsibilities of interprofessional team members. (D)

#### Time Management

5.2.18 Prioritizes activities to effectively manage time and workload. (D)

#### Motivation and Recognition

5.2.20 Models behaviors that maximize group participation by consulting, listening and communicating clearly. (D)

# Unit 6: Critical Thinking, Research and Evidence-Informed Practice Integrates evidence-informed practice, research principles and critical thinking into practice.

- 6.1 Incorporates critical thinking skills in practice. (D)
  - 6.1.1 Considers multiple factors when problem solving. (D)
  - 6.1.2 Incorporates the thought process used in critical thinking models. (D)
  - 6.1.3 Engages in reflective practice to promote change and continuous learning. (D)
- 6.2 Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D)
  - 6.2.2 Articulates a clear research question or problem and formulates a hypothesis. (D)
  - 6.2.5 Collects and retrieves data using a variety of methods (qualitative, quantitative) and technologies. (D)
  - 6.2.7 Translates and communicates research findings and conclusions through a variety of media. (D)
- 6.3 Applies current research and evidence-informed practice to services. (D)
  - 6.3.3 Integrates current research and evidence-informed practice findings into delivery of safe and effective nutrition care.(D)
  - 6.3.4 Analyzes and formulates a professional opinion based on the current research and evidence-based findings and experiential learning. (D)

#### **Unit 7: Core Professional Behaviors**

Demonstrates professional behaviors and effective communication in all nutrition and dietetics interactions.

- 7.1 Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D)
  - 7.1.1 Demonstrates ethical behaviors in accordance to the professional Code of Ethics.(D)
  - 7.1.4 Applies client/patient-centered principles to all activities and services. (D)
  - 7.1.6 Practices in a manner that respects diversity and avoids prejudicial treatment. (D)
  - 7.1.8 Maintains confidentiality and security in the sharing, transmission, storage and management of protected health information. (D)
- 7.2 Uses effective communication, collaboration and advocacy skills. (D)
  - 7.2.1 Applies effective and ethical communication skills and techniques to achieve desired goals and outcomes. (D)
  - 7.2.2 Works with and facilitates intraprofessional and interprofessional collaboration and teamwork. (D)
  - 7.2.4 Selects mode of communication appropriate to the messaging to meet the needs of the audience. (D)