THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE & LIFE SCIENCES
Nutritional Sciences & Wellness

Foodservice 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 foodservice professional setting to meet practice hours and competencies required by the program and that align with ACEND graduate program standards. More information about the program is available at the following link: https://snsw.arizona.edu/graduate/online-distance-programs/psm-applied-nutrition-dietetics

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: Applied Nutrition - Dietetics Graduate Program graduates will possess knowledge required to become a Registered Dietitian Nutritionist (RDN).

Objectives:

1. At least 80% of students complete program requirements within 1.5 years (150% of the program length).
2. At least 80 percent of program graduates take the CDR credentialing exam for dietitian nutritionists within 12 months of program completion.
3. The program's one-year pass rate (graduates who pass the registration exam within one year of first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%.
4. At least 80% of program graduates will rate the overall quality of the program as "excellent" or "good".

Goal #2: Applied Nutrition - Dietetics Graduate Program graduates are versatile, highly skilled professionals, prepared with the skills, knowledge and confidence to excel in the field of nutrition and dietetics.

Objectives:

1. Of graduates who seek employment, at least 50 percent are employed in nutrition and dietetics or related fields within 12 months of graduation.
2. At least 80% of employers surveyed will rate the program graduates as: "above average" "excellent" or "good" in preparation for entry-level practice in a nutrition- or dietetics-related field.
3. At least 80% of graduates responding to alumni surveys will rate their abilities to work as entry-level Registered Dietitian Nutritionists as: "above average" "excellent" or "good".

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 provides resources and trainings to prepare preceptors as mentors: ACEND Resources

Per accreditation requirements, we must keep updated preceptor documents on file. Preceptors will be asked to provide the following documentation:

- Resume/CV
- Current CDR card (if RDN or NDTR)

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: CDR CPEU Credit for Preceptors

Supervised Experiential Learning (SEL) Schedule

Students are expected to be at their Food Service Management (FSM) SEL site **2 days/16 hours per week** for the duration of the academic semester, totaling around **250 hours** by the end of the experience.

- Fall semester starts in mid-August and ends in mid-December
- Spring semester starts in mid-January and ends in mid-May
- Students must have off all University observed holidays and breaks

Specific semester start/end dates and holidays/breaks can be found in the University of Arizona Academic Calendar: Academic Calendar | University of Arizona

Students are scheduled over the required minimum hours (~250) to allow a buffer for events

such as sickness, emergencies and any other schedule conflicts. If students meet the required hours for the SEL and/or the program before the final scheduled day of their experience, they can discuss with the preceptor if they can end their experience early. Preceptors can choose to continue to have the student come on site until the last scheduled day of the semester, or allow the students to finish their FSM SEL once they have the minimum required hours and have completed all program requirements (projects, competencies, etc).

SEL Course Objectives

During this SEL, students will:

- Design plans for quantity, food preparation, portion control, and customer service.
- Modify recipe/formulation for specific purposes, such as nutrient enhancement, quality improvement, and ingredient substitution.
- Complete 250 hours of supervised experiential learning.

Student Projects

Students will be assigned semester-long projects to complete onsite during the foodservice SEL. The two projects involve developing a theme meal for service, from idea inception, preparation, planning, cooking and service; and developing and implementing a quality improvement project. Review **Appendix A** for detailed instructions for the Menu Project and **Appendix C** for the Quality Improvement Project. Project requirements can be adapted to fit the needs of the site. 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. Review **Appendix B** for a list of competencies that will be associated with completion of the Menu Project and **Appendix D** for a list of competencies that will be associated with completion of the Quality Improvement Project. Preceptors will be asked to complete the project evaluation by the end of the experience. Preceptors can reach out to the program coordinator to discuss project requirements if questions or concerns arise.

Topics Covered in Graduate Didactic Course:

Students will concurrently be enrolled in an Advanced Foodservice Management course while completing their foodservice SEL. The goal of the Advanced Foodservice Management course is to provide students with knowledge, tools and competencies related to foodservice systems management to prepare them to lead in institutional food service management and entrepreneurial roles. It is not required that all topics in the Advanced Foodservice Management course also be covered during the SEL; the topics are provided below only as suggested topics to review with students, if applicable:

Module 1: Food Safety Management	
Week 1	*Food Safety and HACCP Plans*

Week 2	*Food Allergens and Cross Contact*
Week 3	*Personal Hygiene and Quality/ Performance Improvement*
Module 2: Purchasing, Receiving, and Storing	
Week 4	*Inventory Control and Purchasing*
Week 5	*Receiving and Storing*
Module 3: Menu Development	
Week 6	*Cultural Menu Production*
Week 7	*Menu Production for Chronic Disease*
Module 4: Equipment and Facility Design	
Week 8	*Equipment and Materials*
Week 9	*Facility Design and Layout*
Module 5: Financial Management	
Week 10	*Revenue and Profit/Loss*
Week 11	*Budgets and Financial Monitoring*
Module 6: Functions of Management and Human Resources	
Week 12	*Management and Leadership Styles*
Week 13	*Human Resources - Creating job descriptions and interview questions*
Week 14	*Human Resources- Conducting interviews and hiring*
Final Project	
Week 15	*Final Project Preparation/Completion*- Policy and Procedure Manual

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. Students should meet all ACEND competencies and performance indicators listed in **Appendix B, Appendix D, and Appendix E** during their Food Service Management SEL.

Competency Evaluations and Student Time Log

Electronic competency evaluations and a student time log will be completed in a competency-based education portal, called Competency. The program coordinator will set up an account for the site preceptor(s) prior to the student 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 4 competency evaluations:

1. Midpoint evaluation of ACEND FSM Competencies & Performance Indicators (**Appendix E**)- Halfway through the experience
2. Menu Project Competencies & Performance Indicators (**Appendix B**)- After completion of the project
3. Quality Improvement Project Competencies & Performance Indicators (**Appendix D**)- After completion of the project
4. Final Evaluation of ACEND FSM Competencies & Performance Indicators (**Appendix E**)- At the end of the experience

Students will be expected to complete self-evaluations and can provide them to the preceptors. 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. If the preceptor or student has questions regarding how a specific competency can be met or if there are concerns that a competency will not be met during the experience, please reach out to the program coordinator to establish a plan.

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

Appendix A- Menu Project Instructions

Project Summary:

1. Review current standards and guidelines for recipe and menu development in your facility. Review customer satisfaction surveys on the current menu.
2. Work with your preceptor and other personnel to revise or create a menu based on the facility's needs.
3. Create a budget for the menu.
4. Test the menu you created by making small portions of the meals.
5. Manage and participate in the menu/meal production.
6. Discuss the outcomes of the menu project in a written report.

Directions:

Project Preparation

- If appropriate, conduct and/or evaluate a customer satisfaction survey for the current menu. Discuss with your preceptor possible menu changes needed based on the results of the survey or based on needs of the facility.
- Review the facility's current nutrition care manual (if applicable), guidelines and regulations for menu development.
- With your preceptor, define the parameters of the menu project with the goal to meet the needs of the facility. Discuss the following:
    - What type of menu they would like you to revise/create (i.e a catered meal; multiple entrees, sides and beverages to be served during lunch; meals for a full day- breakfast, lunch and dinner, etc.)
    - If there are any specific components/ingredients they would like you to include in your menu
    - Any regulations that need to be considered (ex: components of school lunches or medical diet order requirements)
    - Equipment and labor/staffing availability
    - Food and labor costs
    - Nutritional requirements (RDA's, DRI's)
    - Sustainability practices and minimizing food waste

Menu Design

- Create a menu based on the parameters you discussed with your preceptor during the project preparation process. Work with your preceptor and other personnel to revise or create a menu based on the facility's resources and needs.
- Review the menu you created with your preceptor and other appropriate personnel for approval.
- Analyze the menu using food composition tables and a computerized nutritional analysis software program.
- Change the menu as needed to meet the RDA's, DRI's or other parameters for the population you are serving.

Menu Budget

- Prepare and present a budget - present the budget in a table format with the following items, each making up a column:
    - Ingredients used in the meal
    - Specifications of the item (how many per oz?)
    - Price
    - Amount used for the menu
    - Price per amount used
    - Then estimate the total cost of the meal by adding up the price per amount used column.
    - Determine the cost of the meal per person and deduct it from the amount charged per meal. This will provide you with the profit.

Menu Testing

- Prepare small portions of at least 2 menu items to test the recipes for visual appeal, texture, variety, balance, etc.
- Utilize food science principles and quality tests (taste panel, AP-EP, cooking methods, yield study) for each recipe.
- Revise recipes if needed.

Meal Production

- Participate in the ordering process for the menu.
- Prepare a customer satisfaction survey to determine the outcome of the meal. Review with your preceptor and revise as needed.
- Prepare a plan for the preparation, service, and clean-up of the meal.
    - Make sure to consider all sanitation and facility regulations and requirements. Review with your preceptor.
    - Prepare a production log that you will use to track the actual production.
    - Supervise and participate in the meal production and service. Make sure to note on your production log the timing of each step, problems as they occurred, and the solutions you chose to do.
    - Supervise and participate in the clean-up procedures. Once again, note the problems and solutions as well as open issues that need to be addressed.
- Review the production log, reflect on your experience and review customer satisfaction survey results for acceptability by the facility population. Analyze and summarize the results, and present them to your preceptor and other appropriate staff.

Analysis and Discussion - In a written report (2-3 pages) discuss the outcomes of the menu project.

- What did you observe?
- Was it well received by customers?
- Was it well received by staff?
- Do you see any future improvements?

- What worked, what didn't, and why?
- What would you do differently?
- What did you learn?

Appendix B- Menu Project Competencies & Performance Indicators

Unit 1: Foundational Knowledge
Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.

1.4 Integrates knowledge of chemistry and food science as it pertains to food and nutrition product development and when making modifications to food. (S)

1.4.3 Evaluates the chemical nature and composition of food on food quality, acceptability and compatibility. (S)

Unit 3: Food Systems Management
Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.

3.3 Applies principles of food safety and sanitation to the storage, production and service of food. (D)

3.3.4 Takes into consideration food allergies when preparing menus and foods. (D)

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

5.2 Applies principles of organization management. (D)

5.2.1 Establishes operational plan considering budget, inventory control, labor and regular daily tasks. (D)

5.2.12 Conducts cost effectiveness and cost benefit analyses to identify ways to meet budget priorities. (D)

5.2.15 Collects and analyzes data to evaluate outcomes and determine if established goals and objectives are met. (D)

5.3 Applies project management principles to achieve project goals and objectives. (D)

5.3.1 Leads the development and completion of a project plan and budget. (D)

5.3.4 Conducts regular review of project to note strengths and opportunities for improvement and to implement adjusted actions. (D)

Appendix C- Quality Improvement Project Instructions

Background:
Quality and performance improvement refers to the process by which an organization assures that the services provided meets or exceeds their established standards. People "working smarter" are the real key to improving performance in any operation. Thus, management must understand human nature (i.e. their staff and the quality of work life or work environment) to ensure performance and productivity improve. Factors to consider when improving a process as well as productivity are product quality, customer satisfaction, and the input/output ratio.

The key steps for a performance improvement study are: Plan – Do – Study – Act [PDSA].

1. Plan: review the process; study and analyze current conditions, environmental factors and the standards; determine how it can be improved and identify data for analysis; develop tools and training.
2. Do: take action on a limited basis; pilot test the new idea/process to achieve improvement.
3. Study: determine whether the action plan was effective; analyze pre and post pilot test data - indicators, observations, surveys, etc.; modify the new process if necessary to achieve the desired improved outcome.
4. Act: implement the change and establish an ongoing evaluation and monitoring system to sustain the improvement OR abandon the change and develop a new plan, i.e., repeat the cycle.

The Quality and Process/Performance Improvement Project for this rotation will focus on only the *Plan, Do and Study* phases. It is expected that interns work with department staff to develop improvements, gain experience in leadership as well as management skills. The outcomes may include development of in-service training, educational materials, and/or new policies and procedures.

Project Summary:

1. Observe the operation in which you are completing your rotation. Participate in the supervision of department activities.
2. Identify a food or management issue (i.e. improper food handling, sick workers, workflow efficiency, etc.) for your project.
3. Prepare a proposal for your chosen topic and review your proposal with your preceptor for approval.
4. Research the literature related to the food or management issue you have identified.
5. With you preceptor, determine your project intervention/output - examples include: 15 minute in-service training with visuals (i.e. PowerPoint and handouts) to selected staff, development of educational materials and/or creation of new policies and procedures.
6. Implement interventions.
7. Prepare a QI project paper on your selected topic.

Directions:

Project Preparation

- Review the facility's Policy and Procedure Manual to gain full insight into daily operations.
- Participate in the supervision of department activities. Observe the layout of the facility, workflow efficiency, communication and operating procedures followed by staff.
- Identify food or management issues in the facility.
- Review the literature on issues you identified and select one topic for your project.

Written Topic Proposal and Program Evaluation and Review Technique (PERT) Chart (This proposal must be given to your preceptor for topic approval)

- Define the problem or state a simple research question based on the facility's situation and need.
- With you preceptor, determine your project intervention/output - examples include: 15 minute in-service training with visuals (i.e. PowerPoint and handouts) to selected staff, development of educational materials and/or creation of new policies and procedures.
- Develop 2 outcome objectives of your project.
- Create a PERT diagram with a detailed list of activities included in your project plan and with the anticipated amount of time each task will take.
    - PERT Chart Concept: Use of a diagram to plan activities and estimate the time required to complete each activity. The chart helps organize and spot possible scheduling difficulties, estimate completion time, and control the entire process.
    - PERT Chart Process:
        - List all activities to be performed for the project.
        - Arrange the activities sequentially.
        - Estimate time needed to complete each activity.

Intervention Implementation Steps

- Review the literature regarding standards and best practices for your chosen topic.
- Develop the project intervention (i.e. 15 minute in-service training, development of educational materials and/or creation of new policies and procedures)
    - Create a pre and post questionnaire/quiz to assess knowledge of staff before and after the intervention.
    - Create a monitoring plan for post-intervention.
- Present intervention to appropriate staff selected by your preceptor.
- Work with your preceptor and the staff to implement selected improvements.
- Follow monitoring plan post-intervention and assess appropriate staff for improvements.

Students will write a paper based on their QI project and submit it to their course instructor.

Appendix D- Quality Improvement Project Competencies & Performance Indicators

Unit 1: Foundational Knowledge
Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.

1.3 Applies knowledge of microbiology and food safety. (S)

1.3.1 Applies food safety principles of microbiological food spoilage and strategies for controlling microbial growth. (S)

1.3.2 Implements key principles and practices to make foods safe for consumption at all stages during the flow of food. (S)

Unit 3: Food Systems Management
Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.

3.1 Directs the production and distribution of quantity and quality food products. (D)

3.1.2 Analyzes the workflow design and makes recommendations for modifications or approves for implementation. (D)

3.1.4 Establishes and analyzes policies and performance measures for quality and quantity of work. (D)

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

5.4 Leads quality and performance improvement activities to measure, evaluate and improve a program's services, products and initiatives. (D)

5.4.1 Identifies and communicates quality and/or performance improvement indicators and benchmarks using evidence-informed practice. (D)

5.4.2 Develops quality and/or performance improvement measurement tools and analyzes data to inform baselines and to identify root causes and potential solutions. (D)

5.4.3 Develops, implements and communicates a quality and/or performance improvement action plan for further improvement and monitors impact. (D)

Appendix E – ACEND FSM Competencies & Performance Indicators

Unit 1: Foundational Knowledge
Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.

1.4 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)

1.6 Applies knowledge of social, psychological and environmental aspects of eating and food. (S)

1.6.3 Integrates knowledge of maximizing sustainability, food and water waste, reusable/ biodegradable items, local and global produce sourcing and access to food. (S)
1.6.4 Analyzes the environmental factors affecting access to services and/or adequate nutrition. (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)

1.10 Applies knowledge of math and statistics. (S)

1.10.3 Applies math skills to perform food and nutrition calculations. (S)

1.12 Demonstrates knowledge of and is able to manage food preparation techniques. (D)

1.12.2 Converts recipes and ingredients based on client/patient's preferences or dietary needs. (D)
1.12.3 Develops recipes and menus and increases or decreases quantities served from the recipe. (D)
1.12.4 Evaluates recipes using sensory evaluation methods. (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)

Unit 2: Client/Patient Services
Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes.

2.1 Applies a framework to assess, develop, implement and evaluate products, programs and services. (D)

2.1.1 Conducts or coordinates an assessment of the environment, competitive landscape and stakeholder opinions to identify and evaluate data needed to make decisions regarding nutritional products, programs and services. (D)

Unit 3: Food Systems Management
Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.

3.1 Directs the production and distribution of quantity and quality food products. (D)

3.1.6 Directs and analyzes the evaluation of foodservice production and services to inform, change, and/or budget resources and department or corporate direction. (D)

3.1.7 Establishes a culture that is ethical and free of safety and health hazards. (D)

3.2 Oversees the purchasing, receipt and storage of products used in food production and services. (D)

3.2.2 Applies ethical decision making to determine the need for reduction or increase in resources. (D)

3.2.6 Applies the principles of the process of receiving and storing products demonstrating adherence to food safety code, nutrition guidelines and regulations. (D)

3.2.7 Applies the relationship between forecasting and production as it pertains to recipe needs and organizational demand. (D)

3.3 Applies principles of food safety and sanitation to the storage, production and service of food. (D)

3.3.2 Incorporates the required safety and nutritional health policies and procedures in the organization's mission and policies. (D)

3.4 Applies and demonstrates an understanding of agricultural practices and processes.(S)

3.4.1 Has a working knowledge of different agricultural food production systems and related terminology and concepts including potential nutritional impact. (K)

3.4.2 Understands the local and global food markets and applicable nutrition regulations. (S)

3.4.3 Identifies and supports partnerships with local and global food growers and producers. (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)

5.2.5 Demonstrates an understanding of how individuals and groups interact within the organization. (D)

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

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

5.3 Applies project management principles to achieve project goals and objectives. (D)

5.3.2 Identifies the project strengths, weaknesses, opportunities and threats. (D)

5.5 Develops and leads implementation of risk management strategies and programs. (D)

5.5.1 Assesses potential and real risks to an individual, group and or organization. (D)

5.5.2 Identifies and takes action to manage, reduce and or eliminate risk to self, others and the organization. (D)

5.5.3 Develops risk management plans and protocols. (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)

7.1.6 Practices in a manner that respects diversity and avoids prejudicial treatment. (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)

7.2.4 Selects mode of communication appropriate to the messaging to meet the needs of the audience. (D)