APPENDIX B: BACHELOR'S DEGREE COMPETENCIES, PERFORMANCE INDICATORS, LEARNING ACTIVITIES, PRACTICE ILLUSTRATIONS AND ASSESSMENT STRATEGIES

Bachelor's Degree Programs in Nutrition and Dietetics (FB)

FB Unit 1: Foundational Knowledge Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations.				
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment	
Applies a basic understanding of environmental and genetic factors and food in the development and management of disease.	 1.1.1 Identifies and considers environmental and genetic factors that influence the development of disease. 1.1.2 Identifies and considers the influence of food consumption on the development of disease. 1.1.3 Identifies the foods needed to treat acute and chronic diseases. 	 Assess client's/patient's risk of disease based on family history, lifestyleand their environment. Take into consideration the individual's backgrounds, genetics when conducting an assessment and developing a nutrition care plan. Participate in community-based activities to identify environmental, behavioral and genetic factors effecting specific populations. List environmental risk factors for chronic diseases (e.g. Type 2 Diabetes, allergies). Identify evidence-based dietary guidance and relate the underlying evidence linking food consumption with disease prevention or development of the disease. Provide background on the disease state and relationship of how nutrition can play a role in the prevention of disease or how it is utilized in treatment. Recognize genetic and environmental factors associated with common diseases (e.g. cancers such as prostate or the colon). Provide education to those who have been diagnosed with common genetic related disease (e.g. hypertension, diabetes, cancer) on nutritional impacts and food consumption choices to minimize disease impact on quality of life. 	Case studies, course work, literature review, diverse experiential learning rotations • Review sample shopping carts to ascertain if the client is purchasing appropriate food based on their situation and diagnosis. • Discuss a case where an individual has developed a disease and review how the diet may have played a role; make diet change suggestion to help manage risk of the disease. • Write a menu or meal plan that reflects the US Dietary Guidelines or DASH Diet.	
1.2 Demonstrates an understanding of anatomy and physiology.	 1.2.1 Recognizes anatomical structures and explains the physiological functions of the body. 1.2.2 Describes the physiological processes of the human body. 1.2.3 Analyzes the impact of disease state, injury and food on different body systems and functions. 	 Explain how the organs and physical body structure are impacted by disease and how disease may alter proper function. Describe basic elements in the digestive process. Complete a physical assessment for nutrition status. Understand the medical notes in the clinical setting. Describe body organs, diseases that affect the organ, role of diet in prevention and treatment of affected organ. Explain and the impact of food on disease (e.g. irritable bowel syndrome, celiac disease, hypertension). 	Examination, case study, lab work, course work, simulation, field placement • Label an anatomical chart. • Test on physiological functions of specific anatomical components • Role play client/patient interaction,	

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				Present case studies that examine how the organs impact health and disease (e.g. recognize that inability for the pancreas to function properly can cause blood glucose concerns, lack of enzyme secretion)
1.3	1.3.1	Applies food safety principles across the life cycle.	Describe microbiology applications in food and nutrition.	Lab work, course work, field
Demonstrates an	1.3.2	Applies food safety principles during the flow of food.	Perform kitchen inspections; and identify food safety risks.	placement, presentation, case study
understanding of microbiology related to			Identify risks of various pathogens with inappropriate cooking and storage methods.	Take micro-organism samples from a kitchen in a hospital or
food and nutrition and food safety.			Educate clients/patient of food safety principles when preparing and storing foods.	long-term care setting from various surfaces and food at
			• Instruct the dietary staff of the proper handwashing, preparation and storage to prevent food-borne illness.	different stages (freshly prepared to four days after preparation). Review the results and identify
			• List the most prevalent food-borne illnesses and how they can most effectively be prevented.	implications to food safety. • Create client/patient food safety
			• Identify high-risk populations (e.g. clients/patients who are neutropenic).	information sheets.
			Apply HACCP understanding in foodservice environment.	Conduct a kitchen inspection,
			• Demonstrate how to test food for temperature, calibrate thermometers, clean cutting boards etc.	identify food safety concerns and make recommendation for
			Identify critical control points in a recipe.	change.
1.4	1.4.1	Applies fundamental chemistry and organic chemistry	Adjust recipes based on food science.	Examination, project work, case study,
Demonstrates knowledge of	1.4.2	principles to enhance understanding of food.	Troubleshoot when there is a problem with a food product.	lab work, cooking classes
chemistry and food science as it pertains to food and nutrition.		Applies nutritional biochemistry principles to the understanding of human nutrition health.	Explain how foods affect metabolism and how this may affect nutritionlong- term.	Lab demonstrations of food products and food science.
	1.4.3	·	Describe how food is broken down to the chemical components in the body.	Demonstration project for
	quality, acceptability and compatibility.	quality, acceptability and compatibility.	Create education materials that explain the origin of several different foods, how they were grown, and how nutrients or other substances present in them	nutrient/bioactive compound composition.
			are processed in the body.	Create a poster presentation of a
			Explain the reactions of certain cooking methods on foods.	principle of food experiment.
				 Conduct a cooking presentation related to preparing vegetables

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				and fruits in order to preserve color, nutrients, flavor and texture.
1.5 Applies knowledge of patho-physiology and biochemical functionality and their relationship to physiology.	1.5.1 1.5.2 1.5.3 1.5.4	disease process. Explains the effect of diet, fluids, electrolytes and nutritional status on the development and progress of the disease process.	 Understand how diet and food has an impact on disease state and organ function. Take into consideration laboratory values when screening or conducting a client/patient assessment. 	Clinical chart reviews, case study, simulation, field placement • Identify abnormal laboratory values and explain what nutritional changes can improve the values. • Participate in case studies with abnormal values, identify when referral or consultation is required. • Provide accurate diet instruction on how to use carbohydrate counting for controlling blood glucose.
Applies knowledge of social, psychological and environmental aspects of eating and food.	1.6.1 1.6.2 1.6.3 1.6.4	food and impacting nutritional status. Demonstrates an understanding of behavioral health as an overall component of health, wellness and nutritional status. Defines and discusses the practice of sustainability, food and water waste, reusable/biodegradable items, local produce sourcing and access to food.	 Identify the client's/patient's social and psychological factors that may impact food intake and nutritional status during the assessment and when developing a nutritional plan of care. Refer underserviced populations to resources to access healthy foods. Work collaborative with clients/patients from a diverse population both ethnically, culturally, and from a socioeconomic standpoint. Work with Community Partners, Food Banks, Homeless Programs, Nutritional Care in Behavioral Health. Explain services available in each community, understand the social needs of individuals and communities and offer appropriate referrals for care. Identify impact of local food environment and ways to improve it. Teach clients/patients and the food service operators how to eliminate foods waste. Identify key environmental factors that may affect services and/or access to food (economical, individual mobility, pollution, social-service systems). 	Case study, i experiential learning in diverse settings, prepare and present education materials, field trip, field placement, presentation Plan a menu based on socialeconomic status. Experience hands-on growing plants or spending volunteer hours on a produce farm. Volunteer to work within alternative populations to obtain exposure to different demographics. Case study - Explain possible avenues for food sources of an under employed family living in an urban area.
1.7	1.7.1	Demonstrates knowledge of the cultural competence models.	Undertake a process of reflection on one's own cultural identity and recognizes the impact of one's own culture on practice.	Case studies, presentations, course work, project work, self-assessment,

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Competencies	Exam	ple Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
Applies the principles of cultural competence within	1.7.2	Applies knowledge of foods, cultural foods, eating patterns and food trends.	Apply cultural competence includes cultural awareness, cultural security, cultural respect and cultural safety.	field trip or placement in a diverse cultural.
own practice.	1.7.3	Identifies challenges that arise when different cultures, values, beliefs and experiences exist between clients/patients and nutrition and dietetics professionals.	Incorporate cultural food patterns and preferences (e.g. Jewish dietary laws, hot and cold theory, holiday traditions) into practice (e.g. nutrition care plan, meal planning nutrition counseling, food preparation)	Presentation summarizing characteristics of assigned ethnic group and detailed discussion
	1.7.4	Identifies and implements strategies to address cultural biases and differences.	Describe a way of eating that conflicts with one's personal culturalmethod (religious, ethnic, etc.).	regarding dietary practices • Alter existing education material
	1.7.5	Applies culturally sensitive approaches and communication skills.	 Understand the family cultural influences and cultural foods. Understand meal planning, nutritional plan and cooking foods from different 	to be cultural appropriate for a specific culture.
	1.7.6	Develops awareness of one's own personal beliefs, values and biases to better serve clients/patients of different cultures and backgrounds.	cultures. • Consider that culture is beyond ethnical background and includes personal beliefs, values and sexual orientation.	Modify recipes and menus for different cultures.
		-	Utilize cultural sensitive and gender neutral language.	
1.8 Demonstrates knowledge of food and drug interactions.	1.8.1	Identifies the major pharmacological classifications to inform potential drug and food interactions. Recognizes significant drug and nutrient interactions to inform practice and ensure client/patient safety.	 Identify and educate others on food and drug interactions. Identify common drugs used for the treatment; identify the interaction with food; and list possible solutions to avoid the interaction. 	Examination, case studies, chart stimulated recall, experiential learning Review medication profile for specific clients/patients and identify food and drug interaction; assess patient understanding and compliance to food recommendations.
1.9 Demonstrates basic knowledge of integrative and functional nutrition	1.9.2	Identifies evidence-based literature and resources related to integrative and functional nutrition. Identifies the purpose, risks, disadvantages and contraindications of commonly used therapies.	 Direct client/patient and others to reliable and validate sources of information. Articulate the role and scope of practice for complementary health providers (e.g. natural path, chiropractor, Chinese medicine) 	Case study, literature review, field trip, paper • Review and compare findings for studies related to complementary and integrative nutrition to determine validity of the claims. • Observe other professions and write a paper on the scope of practices and similarities differences between professions. • Create a resource list of credible source of information

FB Unit 1: Foundational Knowledge Applies foundational sciences to food and nutrition knowledge to meet the needs of individuals, groups, and organizations. Competencies **Example Performance Indicators Learning Activities and Practice Illustrations Demonstration/Assessment** 1.10.1 Understands fundamental statistics concepts and basic • Upon reading a scientific report, determine if the results are statistically 1.10 Course work, case study, field application. relevant. placement Demonstrates knowledge of math and statistics. 1.10.2 Demonstrates understanding and applies mathematical • Calculate and apply nutritional requirements. Conduct a mock client/patient concepts, validated formulas and problem solving in • Measure ingredients and modify recipes assessment and calculate fluid and nutrition and food-related activities. calorie intake. • Calculate basic math formulates related to food and nutrition. • Compare products on an invoice • Perform calculations to manage budgets (e.g. sum, multiplication, percentage, (example: cost of sunflower oil averages) spray and soybean oil spray). 1.11.1 Communicates with health care professionals using basic • Read notes prepared by other health professionals. Chart review, case study, presentation, 1.11 medical terminology. course work, project work, participate Demonstrates knowledge of • Communicate effectively with other health professionals in rounds, field placement medical terminology when 1.11.2 Uses acceptable medical abbreviations and appropriate • Document nutritional assessment and treatment plan using appropriate communicating with medical terminology in oral and written communications. terminology. • Interpret a chart note, define individuals. 1.11.3 Demonstrates understanding of common terms used by other disciplines. 1.12 Applies appropriate cooking skills and techniques. • Provide nutritional analysis of menus for individuals/food service. Converts recipes and ingredients based on client/patient Demonstrates knowledge of 1.12.2 • Provide a food demonstration of a recipe and explain nutritional benefits of

and is able to manage food

preparation techniques"

preferences or dietary needs.

Reads and follows recipes.

1.12.3

1.12.4

1.12.5 1.12.6

1.12.7

properly.

tasteful.

Operates equipment and common culinary hand tools

Complies with and practices safe work habits, identifies

safety hazards and employs preventive safety measures.

Ensures foods are aesthetically pleasing, appealing and

Applies consistent portion control skills.

	medical words and answer questions based on that chart note. • Prepare client/patient education materials using laymen's terms.
 Provide nutritional analysis of menus for individuals/food service. Provide a food demonstration of a recipe and explain nutritional benefits of cooking food in this way. Apply knowledge of proper food preparation techniques, portion control methods when preparing menus, meal plans, educating others or conducting cooking classes. Follow recipes to insure consistent quality and taste. Recipe modification for health impact and recipe sizing adjustment. Answer food preparation questions. Select the appropriate measuring utensils to measure assigned ingredients. 	Examination, case studies, food demonstration, role play, laboratory/kitchen, project work, experiential learning • Provide a cooking demonstration. • Communicate to food service employees the proper methods to use for portion control of recipes. • Adjust a recipe to increase nutritional value of the food without compromising taste. • Design a menu for certain chronic disease states.
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Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
			Bake an item (as baking requires more accurate measurement)
1.13 Demonstrates computer skills and uses nutrition informatics in the decision making process.	 1.13.1 Applies nutrition informatics skills in the deprocess. 1.13.2 Describes factors to consider when access nutritional health information in electronic line. 1.13.3 Identifies trends in food and nutrition using information systems. 1.13.4 Uses electronic databases to obtain informations. 1.13.5 Uses technology and informatics skills proaggregate data and enhance practice and 	treatment. • Demonstrate a familiarity with the functions of clinical information system (e.g., computerized provider order entry, results reporting, electronic median records, report generation and meal ordering). • Use electronic resources to analyze nutrient content and adequacy of spenation. • Use computer programs to produce reports (e.g., allergy report, average)	 Document in an electronic health record. Generate an inventory report and place a mock order in an electronic ordering system.
1.14 Applies nutrition knowledge in the provision of nutrition care at all stages of the life cycle.	 1.14.1 Compares and contrasts nutrition needs of stages of the life cycle using validated too 1.14.2 Calculates nutritional needs of individuals comparative standards. 	ls and guidelines. stage across the lifespan.	Case study, simulation, examination (knowledge-based test), presentation, field placement Respond to hypothetical challenges for various stages of the lifecycle with appropriate nutrition recommendations. Write a three-day diet for someone with a chronic well-controlled disease.
1.15 Applies knowledge of nutritional health promotion and disease prevention for individuals and groups.	 1.15.1 Determines impact of physical activity and nutritional needs. 1.15.2 Compares the relationship between the dehealth and dimensions of wellness. 1.15.3 Applies knowledge of epidemiology related wellness and disease prevention. 1.15.4 Recognizes the cause of disease and three individuals and groups. 1.15.5 Identifies risk reduction strategies for individuals. 	 Educate patients/clients on the positive impact of physical activity. Identify risks of disease when conducting an assessment for an individual group. 	presentation, case studies

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Competencies	Example Performance Indicators Learning Activities and Practice Illustrations Demonstration/Assessment				
	'	ent about media, culture and peer influences on sof wellness.			
	1.15.7 Identifies e	ffects of deficiencies and toxicities of nutrients on health.			
		navior change theories for nutritional health and disease prevention.			

FB Unit 2: Client/Patient Services Applies and integrates client/patient-centered principles and competent nutrition and dietetics practice to ensure positive outcomes. **Demonstration/Assessment** Competencies **Example Performance Indicators Learning Activities and Practice Illustrations** 2.1 2.1.1 Conducts an assessment of the practice setting environment, • Conduct focus groups and administer surveys for a nutrition and diet product Project work, demonstration, course competitive landscape and stakeholder opinions to identify and or service. work, field placement in industry or Applies a framework to evaluate data needed to make decisions regarding nutritional community center • Identify and connect with community resources and services. assess, implement and products, programs and services. evaluate nutritional • Create an implementation plan for • Make recommendation for change to the product, program or services based 2.1.2 Identifies opportunities for nutritional intervention/ a prenatal nutrition class for program and services in on evaluation data. collaboration with others. improvement. healthy pregnant families. • Conduct an evaluation analysis and summary results. 2.1.3 Implements programs or services following predefined designs, • Conduct cooking classes for plans or models. healthy individuals or for clients/patients with chronic 2.1.4 Evaluates effectiveness of nutritional programs, products or diseases (e.g. diabetes, heart services by analyzing reasons for variance from expected failure, cardiac event, celiac outcomes and implements new strategies, as appropriate. disease). 2.1.5 Collaborates with appropriate stakeholders. • Create and administer a feedback survey to client/patients attending a community or hospital program. Make recommendations for modification based on collated data. • Coordinate and facilitate a resident food and nutrition committee meeting in a LTC facility. 2.2 2.2.1 Selects nutrition and activity screening tools taking into • Use a variety of validated screening tools individualized to patient needs. Case study, project work, simulation, consideration all client/patient factors. role play, field placement Conducts and interprets • Apply screening tool data and professional judgment to determine referral to 2.2.2 Compares nutrition screening results with normative references other practitioners (RDN, social worker, community program, physician, nurse). nutrition screening using Use fluid balance sheets and validated tools for to determine the nutritional risk level of individuals. • Determine the level of nutrition service needed based on the patient's/client's calorie counts to determine one's

nutritional history.

healthcare needs, predictability of the patient's/client's outcomes and

• Conduct an assessment with a client/patient whose health and nutrition status

is well-established and condition is stable and outcomes are predictable.

• Provide feedback on the utility of the screen tools to developers.

individuals, groups or

targeted populations.

2.3

2.2.3 Determines the appropriate service and referral needs.

2.3.1 Interviews client/patient to collect subjective information

considering the determinants of health.

own nutrient and fluid needs

• Conduct mock or real surveys and

identify key elements of the tool including areas for improvement.

Case study, role play, simulation, field

placement

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Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment			
Conducts a nutrition assessment on individuals with less complex or less acute nutritional health care needs when environmental supports are in place	 2.3.2 Collects, assesses and interprets vital signs and anthropometric measures. 2.3.3 Collects routine biochemical tests (e.g. capillary blood glucose levels). 2.3.4 Identifies abnormal and normal biochemical values and medical test/procedure results. 2.3.5 Determines barriers that might influence a client/patient's nutritional status. 2.3.6 Assesses client/patient readiness to learn or to make lifestyle changes. 	 Identify signs and symptoms indicating the client's/patient's condition is unstable, or unpredictable- requiring referral or consultation to another health professional (RDN, physician, social worker, nurse). Collect information related to the health determinates (e.g. social, economic, environmental, values and beliefs, environmental and social supports). Collect information related to the client's/patient's use of pharmacotherapy and dietary supplements. Identify abnormal biochemical values and diagnostic test results and refer to others to support the development of the nutrition care plan. Perform calculations to confirm nutritional requirement. 	 Conduct a nutrition assessment for a client/patient who is stable, health and nutrition needs are well established and outcomes are predictable. Review a case and identify when in the situation should the student consult or refer the client/patient to another health professional. Provide signs that the client/patient needs are more complex, or outcomes are unpredictable. 			
2.4 Creates PES (problem, etiology and sign or symptom) statement for less complex, nutritional health care needs when environmental supports are in place to inform the plan of care.	 2.4.1 Analyzes and synthesizes nutrition assessment data to inform nutrition diagnosis(es). 2.4.2 Prioritizes the nutrition diagnosis(es) to inform the plan of care. 	 Create PES Statement for patients/clients who condition is stable, healthand nutrition needs are well-established and longstanding and outcomes are predictable Nutrition Diagnosis term (the nutrition problem) The Etiology (the cause/s of the problem or Nutrition Diagnosis) The Signs and Symptoms (the evidence that the nutrition problem or Nutrition Diagnosis exists). 	Case study, simulations, modify triple plan, chart stimulated recall, chart review/audit field placement • Write a PES statement for case studies involving clients/patients with less complex nutrition needs (e.g. presents with a single mobility, is pre-diabetic, stable and longstanding health condition). • Include signs that are more complex requiring a referral to another health professional.			
Recommends and implements interventions in collaboration with the client/patient and other team members, when environmental supports are in place.	 2.5.1 Applies principles of medical nutrition therapy for clients/patients whose condition or nutritional status is less complex and nutrition diagnosis and prognosis are clearly established. 2.5.2 Applies education theories. 2.5.3 Modifies nutrition education materials or delivery methods to meet the needs of the client/patient or group. 2.5.4 Transfers nutrition care to RDN or other credentialed health professional when client/patient needs are more complex, when 	 Recommend and provide basic nutritional interventions (information sharing, education, coaching, referral to resources, meal plan) for patients/clients whose health and nutrition status is well-established (e.g. long-term diabetic, non-acute congestive heart failure, healthy prenatal women) and condition is stable and longstanding and outcomes are predictable. Determine the availability of services to support access to nutrition care and to help meet client/patient nutrition goals. Apply adult education theories when modifying or delivering client/patient education to individuals or groups. 	Presentations, case study, modified triple jump, simulation, field placement • Create education materials for an adult population allowing the group to share person experiences, value and beliefs. • Create a nutrition care plan for a client/patient whose needs and			

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Applies and integrat Competencies	tes client/patient-centered principles and competent nutrition and Example Performance Indicators	dietetics practice to ensure positive outcomes. Learning Activities and Practice Illustrations	Demonstration/Assessment		
•	environmental supports change or when client/patient care needs is beyond personal competence or professional scope of practice. 2.5.5 Documents all elements of the nutrition care process following professional standards and organizational policies. 2.5.6 Applies coding and billing procedures to assist in obtaining payment for nutrition services under alternate health care payment models when environmental supports are in place.	 Consider the client's/patient's age, literacy level and culture when modifying or delivery education. Document the assessment process, findings, measurable goals, the agreed upon nutrition care plan (including nutrition intervention), client/patient progress and outcomes. Demonstrate the billing and coding process. 	nutritional status are well established and predictable (e.g. pre-diabetic, healthy pregnant women, non-acute congestive heart failure) • Rate the level acuity of the client/patient nutritional needs based on health condition, predictability of the client care needs and outcomes; and the availability of supports (other staff members, equipment, laboratory testing, education materials), and refer to the appropriate nutrition and dietetic provider (e.g. RD or NDTR). • Enter billing codes for case- studies.		
2.6 Monitors and evaluates the impact of the intervention.	 2.6.1 Applies standardized nutrition care outcome indicators to measure nutrition interventions. 2.6.2 Evaluates client/patient's compliance with nutrition intervention. 2.6.3 Identifies barriers to meeting client/patient's nutritional goals. 2.6.4 Identifies reasons for deviation from expected nutrition outcomes for a given nutrition intervention for client/patient. 2.6.5 Makes and implements modifications to the plan of care or nutritional intervention in collaboration with the client/patient and health care team. 2.6.6 Summarizes and documents impact of the interventions on overall client/patient's nutrition outcomes. 2.6.7 Transfers nutrition care to RDN or other credentialed health professional_when client/patient needs become more complex, when environment support changes or when client/patient care needs is beyond personal competence or professional scope of practice. 	 Follow pre-defined indicators to monitor progress and outcome of the nutrition care plan. Identify solutions that positively impact the nutrition care plan and address client/patient needs; and recommend solutions to overcome identified barriers. Document the monitoring plan; provided client/patient education and their understanding of plan; and progress in meeting goals. 	Case studies, chart stimulated recall, modified triple jump exercise, field placement • Outline a monitoring plan based on a case study • Present a case study where a client/patient deviation from an established meal plan create undesirable outcomes. Make recommendations for modification to the nutrition care plan and meal plan.		

FB Unit 3: Food Systems Management Applies food system principles and management skills to ensure safe and efficient delivery of food and water.					
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment		
Manages the production, distribution and service of quantity and quality of food products.	 3.1.1 Plans, designs and coordinates nutritionally sound meals that meet client/patient's needs and promote nutritional health and disease management. 3.1.2 Ensures work activities and products reflect the organization's mission. 3.1.3 Considers opportunities to reduce the environmental impact of foodservice operations and enhance sustainability. 3.1.4 Implements processes to facilitate efficient and effective services. 	 Conduct an evaluation (using a pre-developed criteria and evaluation tool) of the production and distribution processes; and makes recommendations for improvement. Review client/patient feedback surveys and make recommendations for modifications based on established benchmarks. Make recommendations for design modification to a kitchen considering, safety, workflow, productivity, budget etc. Modify an existing kitchen layout to reduce carbon footprint. Create a new or modify an existing meal plan, including budget for an individual and small size organization or event. 	Project work, course work, case studies, field placement • Complete a capstone meal • Design a plan for introducing a new menu (e.g. employee cafeteria, school, hospital, long-term care facility, special event). • Conduct mock kitchen inspections. • Create a mock budget and menu plan for a small event.		
3.2 Coordinates the purchasing, receipt and storage of food products and services.	 3.2.1 Conducts a facility analysis of equipment and technological needs based on resource availability, anticipated future growth and sustainability. 3.2.2 Identifies and analyzes the need to engage internal or external stakeholders in an agreement or contract. 3.2.3 Applies ethical negotiation skills to manage contracts and professional agreements. 3.2.4 Coordinates human and financial resources to assure appropriate inventory control. 3.2.5 Develops, implements and uses inventory management systems to track and ensure accurate inventory reporting. 3.2.6 Analyzes inventory control as it pertains to the food and supplies of the foodservice operation. 3.2.7 Manages the process of receiving and storing products, demonstrating adherence to food safety code guidelines and regulations. 3.2.8 Manages the relationship between forecasting and production as it pertains to recipe needs and organizational demand. 	 Review and understand important terms of contract with suppliers. Follow required steps for purchasing supplies for the menu. Conduct a review of the inventory and storage; identify problem issues (e.g. waste, shortage, safety); and make recommendations. Identify potential local and national foodservices suppliers. Negotiate new and renewal contracts. Trace a food product from back dock to serving area, noting CriticalControl Points. 	Case study, mock inventory ordering, course work, role play, field placement • Prepare the specifications and the purchase order for procuring the food items for a one week meal plan. • Create a weekly ordering guide. • Complete a purchasing order requisition for food/service delivery		
3.3 Applies principles of food safety and sanitation to the storage, production and service of food	 3.3.1 Maintains currency in and follows applicable legislation and guidelines. 3.3.2 Follows safety legislation, regulations, guidelines, policies and procedures applicable to the practice setting environment and 	 Review and compare organizational policies to relevant legislation and guidelines; and identify issues, including non-compliance. Identify food safety vulnerabilities and violation; and make recommendations to address identified issues (e.g. holding temperatures, reheating 	Project work, presentation, case study, field placement • Participate in a mock accreditation process (e.g. Joint Commission,		

temperatures, hair nets, storage, cooling food for leftover, handwashing)

and service of food.

services provided.

CMS).

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	 3.3.3 Manages activities related to compliance with health and safety requirements. 3.3.4 Applies and educates others on food safety principles. 3.3.5 Identifies vulnerabilities in the food supply chain. 3.3.6 Adheres to and educates other on infection prevention and control measures. 3.3.7 Supports the implementation of an emergency preparedness plan and distribution of services pertaining to foodservice operations. 	 Use food safety and sanitation principles in the inspection of the production and service of food. Present staff education to encourage compliance with polices, guidelines and legislation; and increase awareness of infection control and prevention measures. Identify required actions to address food safety recall and damaged products. 	 Document refrigerator temperature for a defined period and evaluate the status of the refrigerator storage. Create a corrective action and monitoring plan (identify issues, list recommendations, changes, timelines, responsible staff). Present a case study where CMS identified a violation – identify what corrective actions would you take to address the violation; and how you monitor the situation. 			
3.4 Applies an understanding of agricultural practices and processes.	 3.4.1 Has a working knowledge of different agricultural food production systems and related terminology. 3.4.2 Identifies the need and establishes partnerships with local growers and producers. 	 Identify local food products in compliance with applicable regulations, by sourcing local food growers. Identify the potential impact of a local national, international or global disaster that may impact the foodservice process. Identify signification agricultural trends (e.g. genetically modified, organic foods, gluten free) that affect foodservice. 	 Knowledge-based test, Project work, case studies, presentation, field placement Create or modify an existing menu for a diverse ethnic population. Complete project work during or after farm hand rotation or tour of a farm. Create an onsite garden. Create a plan for a hospital food service program to form a partnership with a local farm to be a primary supplier of fruits and vegetables 			

FB Unit 4: Community and Population Health Nutrition Applies community and population nutrition health theories when providing support to community or population nutrition programs.					
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment		
4.1 Works collaboratively with others to assess, implement and evaluate community and population based programs.	 4.1.1 Conducts an assessment of the setting, competitive landscape and stakeholder opinions to identify and evaluate data needed to make decisions regarding community and population based programs. 4.1.2 Identifies opportunities for nutrition intervention and improvement. 4.1.3 Utilizes strategies to evaluate effectiveness, analyzing reasons for variance from expected outcome, and implements new strategies as appropriate. 4.1.4 Collaborates with appropriate stakeholders to support the implementation of the nutrition program plan. 4.1.5 Applies an evaluation framework, using approved tools and methods, to support the evaluation of the community nutrition program. 4.1.6 Makes modifications to the nutrition program or services based on data and in collaboration with others. 	 Develop and administer surveys to support the evaluation of a current community or nutrition public health program. Complete a summary report by conducting a literature search, analyzes the data and summarize findings. Make recommendations to improve community-based program. Promote nutrition programs and resources to address issues of food security, nutritional health and overall health and wellness. Participate in health and/or nutrition screening programs. Conduct an environmental scan of similar programs. Survey the population to define needs and wants. Collect population data and run descriptive statistical analysis. Interview similar program leadership to obtain insight into trials and tribulations. Conduct a literature search and compile references that support program goals, objectives and potential outcomes. 	Real or simulated community project, project work, presentation, field placement Create marketing/advertising material for a community-based program, farmers market. Develop a client/user feedback survey for a community-based nutrition program. Complete a briefing report related a to recent public health issues. Create a competitive landscape report. Write a proposal for developing or revising a small community program.		

FB Unit 5: Leadership, Business, Management and Organization Demonstrates leadership, business and management principles to guide practice and achieve operational goals.				
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment	
5.1 Demonstrates leadership skills	 5.1.1 Demonstrates understanding of social situations and team dynamics. 5.1.2 Communicates at the appropriate level and understands emotions and emotional situations. 5.1.3 Develops conversational and interpersonal skills. 5.1.4 Reflects on situations and critically evaluates outcomes and possible alternate courses of action. 5.1.5 Understands the mentoring role and practices mentoring and precepting others 	 Recognize different communication strategies and personality styles of individuals and how this impacts performance and professional relationships. Model leadership skills. 	Self-reflective/ assessment exercise, case studies, role play, field placement Lead a group project. Observe several team / committee meetings and identify the different leadership styles and how the difference affect the team dynamics.	
Applies organization management to direct staff and support department operations.	 Planning 5.2.1 Works within an established operational plan by monitoring budget, inventory control, labor and regular daily tasks. 5.2.2 Aligns work and department activities with organizational strategic plan, mission and vision. Organizing 5.2.3 Assigns responsibilities to various team members according to scope of practice and personal competence. 5.2.4 Sets and monitors clear targets for team members that are aligned with common objectives and goals. Management 5.2.5 Engages in human resource activities adhering to applicable legislation and regulations. 5.2.6 Applies understanding of psychological and sociological perspectives when managing staff and engaging in human resource activities. 5.2.7 Applies change management theories and conflict resolution skills to manage and promote positive change. 5.2.8 Uses persuasive communication skills to influence and produce a desired outcome during negotiations and conflict resolution discussions. 5.2.9 Understands and respects roles and responsibilities of the interprofessional team members. 	 Planning Maintain a current budget. Conduct an inventory audit and identify potential shrinkage source. Organizing Complete operational documentation (e.g. duty statement, workschedules, monitoring tools and performance evaluations) Conduct performance reviews and report performance issues; and make remedial recommendations. Participate in multi-department team meetings; and recognize the impact of the different department cultures. Management Participate in the hiring process. Develop a staffing schedule. Address staff or organizational conflict by identifying the potential source(s) of the conflict, required communication skills, and potential resolution. Controls Conduct a review and analysis monthly expenditures and budget for a food service operation. Collect data related to department statistics/ quality control/improvement (e.g. client/patient satisfaction surveys, temperature control) against benchmark. Participate in an accreditation process/audit. 	Role play, case study, project work, mock accreditation audit, field placement Input new data into a budget spreadsheet or software program (e.g. quick books). Create a staffing schedule. Update a mock budget using different software programs (e.g. excel, QuickBooks) Conduct an inventory audit. Review a current budget and assign required budget changes. Conduct mock interview and performance review; and create a remediation plan. Participate in a mock team building exercise, Write a job description. Conduct and tally results from a client/patient satisfaction survey. Complete a prioritization exercise noting a variety of tasks and	

FB Unit 5: Leadership, Business, Management and Organization Demonstrates leadership, business and management principles to guide practice and achieve operational goals.					
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment		
	Controls 52.10 Collects, understands and analyzes financial data to support fiscally responsible decision making. 52.11 Collects and reports data to support the analysis of the department's operational plan and budget. Time Management 52.12 Applies principles of time management to monitor and enhance personal productivity and productivity of others. 52.13 Prioritizes activities to effectively manage time and workload. Motivation and Recognition 52.14 Demonstrates appreciation for team involvement and the value and skills of each member. 52.15 Models behaviors that maximize group participation by consulting, listening and communicating clearly. 52.16 Takes innovative approaches to build support and maintain a diverse workforce.	Conduct a job analysis of operations and make written recommendations for improved productivity through improved time management. Time Management Assess productivity of staff against facility standard. Make recommendations for distribution of workflow. Create production schedule. Meet assignment and project timelines. Motivation and Recognition Participate in team building activities. Identify key staff members and their scope of practice in a variety of practice settings.	client/patient care needs; and rationalize plan of action. • Create award ceremony for students who have achieved goals.		
5.3 Applies project management principles to achieve project goals and objectives.	 5.3.1 Collaborates with others to define the project scope and project plan. 5.3.2 Monitors approved project plan to ensure deliverables are met within scope of the project scope, time and cost. 5.3.3 Reports potential and real risk and suggests options to resolve the risk. 	 Develop and implement a project using project management tools (e.g. Gantt Chart, scatter charts, risk assessment). Identify potential risks to the project and mitigate resolutions. 	Group work, project work, course work, field placement • Create project plan and risk analysis for a mock situation or a course project using Microsoft project software.		
5.4 Incorporates quality and performance improvement into nutrition and dietetics practice.	 5.4.1 Establishes goals for improving quality of services in collaboration with others. 5.4.2 Identifies quality and/or performance improvement indicators and supports the development of measurement tools. 5.4.3 Participates in the development of policies and performance measures for quality and quantity of work. 5.4.4 Ensures compliance with external standards, collects data and reports findings. 	 Collect data and compares to past data and the outcomes of the program. Participate in the development of client/patient feedback surveys Collect and review data to identify trends and issues; and make recommendation for change. 	Case study, project work, knowledge-based test, field placement • Conduct staff education session related to QA and QI (e.g. food storage, food preparation time management, new guidelines, diet education)		

Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
	 5.4.5 Collects data to assess the quality of services provided and identifies opportunities for improvement. 5.4.6 Evaluates and analyzes data, reports findings and makes recommendations for quality and/or performance improvement. 5.4.7 Communicates and collaborates with relevant stakeholders to implement changes to improve effectiveness and efficiency. 		Complete a workstation assessment and identify risk reduction strategies.
Incorporates risk management strategies into practice.	 5.5.1 Assesses potential and real risks to an individual, group and or organization. 5.5.2 Identifies and takes action to manage, reduce and or eliminate risk or hazards to self, others and the organization. 5.5.3 Supports implementation of risk management plan. 	 Identify and report risks (e.g. food allergies, safety, breach of confidentiality, staff harassment, patient/client complaints, staff incompetence) and make recommendations to address the risks. Prepare staff safety materials and education sessions. Follow infection control and prevention protocols (e.g. demonstrate proper gowning, knowledge of the isolation precaution symbols and terminology, sharps). 	Project work, mock or simulation, case study, field placement. • Complete an incident report based on a mock situation. • Complete a safety inspections checklist or audit. • Create staff safety materials/education session. • Educate staff on a safety plan and execute a staff training practice drill. • Review a case study where there is a potential or real risk to a client/patient, self or the organization; identify the risk and make recommendations to address the risks.

FB Unit 6: Critical Thinking, Research and Evidence-Informed Practice					
Integrates evidence-informed practice, resear	ch principles, and critical thinking into practice.				
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment		
6.1 Incorporates critical thinking skills in practice.	 6.1.1 Identifies how critical thinking allows for consideration of multiple factors when problem solving. 6.1.2 Incorporates the thought process used in critical thinking models. 6.1.3 Engages in reflective practice to promote change and continuous learning. 	 Identify a problem, including contributory factors and assess multiple solutions and outcomes. Weigh benefits and disadvantage of potential options and rationale actions. Reflect on past experiences and relevant education to make informed decisions. Problem solve with clients/patients with less complex health and nutrition needs. Consider all factors associated with making organizational changes. Identify potential hazards at each step in the food production process of a foodservice facility and design a plan to prevent the potential hazard from being realized. 	 Papers, project work, role play, case study, self-reflection Conduct nutrition screening for clients/patients, use data and professional judgment to determine the appropriate care provider. Review and contemplate the effect of making department/staffing schedule changes. Assess critical thinking in all papers, course work, projects, developing nutrition care plan, and during field placement. Present the student with a case study that starts as a less complex situation, then moves beyond the scope of an NDTR. Student to identify the client care needs that are more complex and require RDN/RD or another professional intervention. Take the temperature of foods on a serving line in a hospital foodservice kitchen. Determine any temperatures that are not meeting guidelines and develop a corrective action plan. 		

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6.2.1	Identifies basic steps of the scientific method
	and scientific processes.

- 6.2.2 Recognizes research ethics and responsible conduct in research.
- 6.2.3 Collects and retrieves data using a variety of methods and technologies.
- 6.2.4 Communicates pre-developed research messaging to a variety of audiences.

- Assess research results for validity, bias and application to practice.
- Assess research articles and formulate an educated decision.
- Define evidence-informed, and evidence-based practice.
- Review sound research and organizational guidelines when developing teaching goals for individuals or groups.
- Understand the principles of ethical research (e.g. consent, non-bias, conflict of interest).
- Read journal articles and summarize content and develop a conclusion.
- Apply accurate citations in all papers.

Research project, literature search, presentation, journal club

- Assist with the collection of data (e.g. conducts telephone surveys, interviews)
- Input survey questions using an online survey tool.
- Create a mini-research project during school or work with other colleagues on research project in related field.
- Create written and telephone questionnaire.
- Lead a journal club.
- Perform a taste-test of a food or a recipe and analyze the results.

Thinking, Research and Evidence-Informed Practice ce-informed practice, research principles, and critical thinking into practice.

- 6.3.1 Uses resources to find accurate and current research and evidence-based literature.
- 6.3.2 Understands basic components of assessing the strengths and limitations of research articles.
- 6.3.3 Uses research terminology when communicating with other professionals.
- 6.3.4 Evaluates current research and evidence-based practice findings to determine the reliability and credibility of information.
- 6.3. 5 Applies current research and evidenceinformed practice to the deliver safe and effective nutrition care.

- Interpret a piece of research to a lay audience.
- Create presentation based on evidence-based literature.
- Present information at an appropriate reading and education level.
- Create a nutrition care plan based on evidence-base literature and evidence-informed practice.
- Review the literature on a food science topic.

Presentation, project work, case study, literature review, field work

- Review a published research article and identify the implications to practice or on a client/patient population.
- Develop an educational hand-out based evidencebased literature.
- Identify a common dietary trend or myth and apply research studies to confirm or dispel reliability and validity of claim.
- Locate and discuss a Cochrane review or similar about a topic in nutrition, and explain the implications of this information for nutrition care.
- Review journal articles and research to determine whether they are accurate and appropriate to share with the community or clients/patients.

FB Unit 7: Core Professional Behaviors					
Demonstrates profession Competencies	onal behaviors and effective communication in all nutrition and Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment		
7.1 Assumes professional responsibilities to provide safe, ethical and effective nutrition services.	 7.1.1 Demonstrates ethical behaviors in accordance to the professional Code of Ethics. 7.1.2 Engages in self-reflective practice activities to develop and maintain ongoing competence and professional behaviors. 7.1.3 Adheres to nutrition related legislation, regulations and standards of practice. 7.1.4 Applies client/patient-centered principles to all activities and services. 7.1.5 Identifies and takes steps to manage unethical, incompetent and unsafe behavior. 7.1.6 Practices in a manner that respects diversity and avoids prejudicial treatment. 7.1.7 Adheres to legislative requirements and facility/employer guidelines regarding protection of privacy and security of information. 7.1.8 Maintains confidentiality and security in the sharing, transmission, storage and management of protected health information. 	 Demonstrate an understanding of Continuing Competence (CDR) requirements. Set SMART (specific, measurable, achievable, relevant, time-based) goals based on feedback from preceptors, peers and/or clients/patients. Attend ongoing trainings, seminars and webinars to keep abreast in thefield of nutrition and be competent. Complete a self-assessment of own knowledge, skill and judgment. Consider and incorporate personal experiences. Incorporate client's/patient's needs and wishes in the nutrition care plan. Demonstrate understanding of mandatory reporting obligations (e.g. child or elderly abuse, professional misconduct). Accept responsibilities and accountability for own actions and decisions. Recognize and maintain professional boundaries. Identify ethical situations and take steps to manage the ethical dilemma. Apply principles of informed consent process to ensure the client/patient can accept or refusing services. Demonstrate understanding of privacy and confidentiality legislation and organizational policies. Obtain client/patient consent for the collection, use, and disclosure of personal information. Demonstrate understanding of confidentiality laws and regulations such as the Health Insurance Portability and Accountability Act (HIPAA). 	Course work, self-reflection/assessment activities, CDR Dream Wizard, case study, project work, field placement Review state and CDR licensure and recertification requirement. Review ethical case studies and identify the ethical behaviors presented in the case (trust, respect, accountability, confidentiality etc.). Review ethical case studies that present an ethical dilemma, weigh the pros and cons of the situation and make recommends for managing the situation. Complete a self-reflective exercise to identify one's own beliefs and values, and how these attributes impact professional relationships and practice. Complete a learning module on the topic (confidentiality, privacy, HIPA).		
7.2 Uses effective communication, interprofessional collaboration and advocacy skills.	 7.2.1 Applies effective and ethical communication skills and techniques to achieve desired goals and outcomes. 7.2.2 Works with and facilitates intraprofessional and interprofessional collaboration and teamwork. 7.2.3 Participates in advocacy activities to change or promotenew legislation and regulation. 	 Communicate in a clear, effective and respectful manner. Select mode of communication to meet the needs of the audience. Identify and address barriers to communication. Adapt communication styles to meet the needs of diverse individuals, groups and populations. Ensure timely, clear, accurate and valid documentation using correct spelling and grammar. Demonstrate proficient use of nutrition informatics. Demonstrate networking skills to build liaisons. 	Role play, case studies, prepare education materials, presentations, field placement, chart review • Mentor a first-year student • Speak with a legislator. • Attend a legislative assembly meeting/ event. • Conduct an in-service.		

FB Unit 7: Core Professional Behaviors Demonstrates professional behaviors and effective communication in all nutrition and dietetics interactions.			
Competencies	Example Performance Indicators	Learning Activities and Practice Illustrations	Demonstration/Assessment
		 Understand the mentoring role and practices mentoring others. Communicate to others the role, scope of practice, areas of expertise and value of the RDN and NDTR. 	Conduct a chart review with preceptor.