Accreditation Council for Education in Nutrition and Dietetics



The attached crosswalk aligns ACEND's Curriculum and Learning Activities for the 2022 Standards for DPD, CP, and DI, programs and the FEM Standards for GP programs to CDR's Registration Examination for Dietitians Study Outline-2022-2026. The purpose of this crosswalk is to support faculty and students by ensuring ACEND-accredited programs are meeting the content provided in the CDR Study Outline to adequately prepare students for the CDR Registration Examination for Dietitians.

A systematic review was conducted by four content experts, who are all RDNs and have experience serving as program directors of ACEND-accredited programs. The content experts independently reviewed the CDR Study Outline and identified the ACEND learning activities, knowledge requirements, competencies, and performance indicators that aligned with each subtopic within the overall topic identified on the Study Outline. The results of these four, independent reviews were compiled into one document and three of the four content experts discussed all items until consensus was reached. The final draft was compared to the FEM/2022 RDN Competency Crosswalk for accuracy and consistency.

This systematic review revealed that each CDR outline topic/subtopic had multiple ACEND-required elements aligned to it, demonstrating congruence between the ACEND-required curriculum and the topics/subtopics provided within the CDR Study Outline. To minimize assumptions some ACEND concepts that may span across multiple topics, such as critical thinking, were only included within CDR Study Outline topics/subtopics that explicitly identified it, rather than all the possible areas where they may be covered.

A number of challenges were uncovered during this review.

- 1. First, the CDR Study Outline exam subtopics are broad or vague, while the ACEND Standards are designed to be specific. Therefore, some interpretation of what these might include was warranted. For example, the CDR Study Outline lists "Public policy advocacy and legislation" as a subtopic and "vegetables and fruits" under the "physical and chemical properties of food" within the subtopic of "food science" with no additional information for context.
- 2. Second, some subtopics were covered in multiple areas of the outline, making it difficult to differentiate among them. For example, on the CDR Study Outline "Marketing mix" was under the "Marketing analysis" subtopic and as its own subtopic of "Marketing mix principles".
- 3. Third, some subtopics overlapped such as "menu" and "menu development" making the distinction among these difficult.

These limitations of the Study Outline made the exercise more challenging as the context was not always clear for some subtopics. In these situations, the content experts utilized the other items listed within the subtopics, as they were available, to inform the alignment with the detailed ACEND competencies.

The overall findings of the systematic review confirmed that there is alignment between the ACEND curriculum and the CDR Study Outline and that ACEND Standards and competencies go above and beyond the topics/subtopics identified in the CDR Study Outline. Future recommendations include a revision to the CDR Study Outline to update and clarify items and enhance its usefulness to dietetic educators and students.

Crosswalk of the Accreditation Council for Education in Nutrition and Dietetics (ACEND®) Curriculum and Learning Activities for 2022 and FEM Standards and the Commission on Dietetic Registration (CDR) Registration Examination for Dietitians Study Outline

For use by ACEND Program Faculty, Students, and Preceptors

Acronyms used in document:

RDN =Registered Dietitian Nutritionist

FEM = Future Education Model

RE =Required Element

PI=Performance Indicator

KRDN = Knowledge requirement for Registered Dietitian Nutritionists

CRDN =Competency for Registered Dietitian Nutritionists

Miller's Pyramid levels in parentheses: K = Knows, S= Shows, D=Does

CDR RDN Exam Domain I – Principles of Dietetics (21%)		
	CDR RDN Exam TOPIC A – Food, Nut	rition and Supporting Sciences
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Food science	 1.3: Applies knowledge of microbiology and food safety. (S) (Pls: 1.3.1-1.3.2) 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) (Pls: 1.4.1-1.4.3) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (Pls 3.3.2-3.3.4) Additional potential Pls: 1.10.3, 1.12.4, 3.4.1 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. KRDN 4.5 Apply safety and sanitation principles related to food, personnel and customers.
2. Composition of food	 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) (PIs: 1.4.1-1.4.3) 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations.

	• Additional potential PIs: 1.13.1, 1.13.2, 1.13.4, 2.4.10, 3.4.2	RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan.
3. Principles of normal nutrition	 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (PIs: 1.1.2-1.1.3, 1.1.5) 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (PIs: 1.2.1-1.2.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (PIs: 1.5.1-1.5.4) 1.14: Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D) (PIs: 1.14.1-1.14.4) Additional potential PIs: 1.9.1 	 RE 3.1.a.6: Role of environment food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology. KRDN 3.5: Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health and disease.
4. Principles of human anatomy, physiology, microbiology, and biochemistry	 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (Pls: 1.1.2-1.1.3, 1.1.5) 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (Pls: 1.2.1-1.2.2) 1.3: Applies knowledge of microbiology and food safety. (S) (Pls: 1.3.1-1.3.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (Pls: 1.5.1-1.5.4) Additional potential Pls: 1.4.2, 1.6.1, 1.6.2, 2.4.2 	 RE 3.1.a.6: Role of environment food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. KRDN 3.5: Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health and disease.
5. Social determinants of health (e.g., income, culture, social status, education, physical environment, social network, genetics,	 RE 3.2.c: Learning experiences must address and build competency in diversity, equity and inclusion. The program must ensure that students have the skills to recognize biases in self and others and adapt to, understand and embrace the diversity of the human experience. 	 RE 3.1.a.6: Role of environment food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan.

gender, race, and sexual orientation)	 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (PIs: 1.1.2-1.1.3, 1.1.5) 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (PIs: 1.6.1, 1.6.3-1.6.4) Additional potential PIs: 1.7.3, 1.15.3, 1.15.4, 1.16.1 CDR RDN Exam TOPIC B – Education, C 	 RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination. KRDN 3.5: Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health and disease. Communication and Technology
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Components of the educational plan	 RE 3.2.c: Learning experiences must address and build competency in diversity, equity and inclusion. The program must ensure that students have the skills to recognize biases in self and others and adapt to, understand and embrace the diversity of the human experience. RE 3.2.d: Learning experiences must incorporate a variety of educational approaches necessary for delivery of curriculum content to meet learner needs and competencies. 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (Pls: 1.15.1-1.15.5) 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (Pls: 2.1.1-2.1.4) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (Pls: 2.4.6-2.4.18) 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.2: Develop an educational session or program/educational strategy for a target population. KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives.

	 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (Pls: 4.1.2-4.1.7) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (Pls: 7.2.1-7.2.2, 7.2.4) Additional potential Pls: 2.3.1, 5.2.1, 6.3.2 	 CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1 Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.8: Design, implement and evaluate presentations to a target audience. CRDN 3.9: Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.12: Deliver respectful, science-based answers to client/patient questions concerning emerging trends. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
2. Education Theories	 RE 3.2.d: Learning experiences must incorporate a variety of educational approaches necessary for delivery of curriculum content to meet learner needs and competencies. 	 RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion.
	 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (PIs: 1.6.1-1.6.4) 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (PIs: 1.7.1-1.7.6) 	 KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.2: Develop an educational session or program/educational strategy for a target population.

	 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (PI 1.15.1-1.15.5) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (PIs: 2.4.6-2.4.12) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) 	 KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change.
3. Implementation	 RE 3.2.d: Learning experiences must incorporate a variety of educational approaches necessary for delivery of curriculum content to meet learner needs and competencies. 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (PIs: 2.1.1-2.1.4) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (PIs: 2.4.6-2.4.19) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.2-4.1.7) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (PIs: 7.2.1-7.2.2, 7.2.4) Additional potential PIs: 1.10.2, 1.14.1, 1.14.3, 1.14.4, 2.3.2, 5.1.3, 5.1.4, 6.3.3 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions, and develop plans to monitor the effectiveness of these interventions. KRDN 3.2: Develop an educational session or program/educational strategy for a target population. KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional

4. Evaluation of		 Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.2: Demonstrate professional writing skills in preparing professional communications. CRDN 2.3: Demonstrate active participation, teamwork and contributions in group settings. CRDN 2.4 Function as a member of interprofessional teams. CRDN 2.6: Refer clients and patients to other professionals and services when needs are beyond individual scope of practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1 Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.8: Design, implement and evaluate presentations to a target audience. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.12: Deliver respectful, science-based answers to client/patient questions concerning emerging trends. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources.
educational outcomes	 RE 3.2.d: Learning experiences must incorporate a variety of educational approaches necessary for delivery of curriculum content to meet learner needs and competencies. 	 KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems,

	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (Pls: 2.1.1-2.1.4) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.19-2.3.25) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (Pls: 2.4.7-2.4.8, 2.4.12, 2.4.18) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (Pls: 4.1.2-4.1.7) Additional potential Pls: 2.3.26, 5.1.5, 5.4.4, 7.2.4 	 determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.8: Design, implement and evaluate presentations to a target audience.
5. Client information	 RE 3.2.d: Learning experiences must incorporate a variety of educational approaches necessary for delivery of curriculum content to meet learner needs and competencies. 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 1.11: Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D) (Pls: 1.11.1-1.11.2) 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (Pls: 7.1.1, 7.1.3-7.1.8) Additional potential Pls: 2.3.26, 7.2.1 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics.

		 KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.10: Demonstrate professional attributes in all areas of practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.12: Deliver respectful, science-based answers to client/patient questions concerning emerging trends.
6. Healthcare and nutrition informatics systems/technologies	 1.13: Demonstrates computer skills and uses nutrition informatics in the decision-making process. (D) (PIs: 1.13.1-1.13.5) Additional potential PIs: 2.3.4, 6.2.5, 7.1.7, 7.1.8 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with

		 accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 4.4: Apply current information technologies to develop, manage and disseminate nutrition information and data.
7. Public policy advocacy and legislation	 4.2: Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy. (D) (Pls: 4.2.1-4.2.3) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (Pls: 7.2.2-7.2.4) Additional potential Pls: 2.5.7, 5.2.7, 7.1.3 	 RE 3.1.a.9: Fundamentals of public policy, including the legislative and regulatory basis of nutrition and dietetics practice. RE 3.1.a.10: Licensure and certification in the practice of nutrition and dietetics. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 2.3: Assess the impact of a public policy position on nutrition and dietetics profession. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 2.8: Participate in a nutrition and dietetics professional organization and explain the significant role of the organization. KRDN 2.9: Defend a position on issues impacting the nutrition and dietetics profession. KRDN 5.4: Practice resolving differences or dealing with conflict. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.3: Demonstrate active participation, teamwork and contributions in group settings. CRDN 2.4 Function as a member of interprofessional teams. CRDN 2.13: Advocate for local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.

CDR RDN Exam TOPIC C – Research Applications		
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Types of research	 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (PIs: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) Additional potential PIs: 1.1.1, 1.10.1 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies
2. Research process (e.g., secure funding, hypothesis testing, study design, Institutional Review Board (IRB), statistical analysis, results, and discussion)	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.2) 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (Pls: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) Additional potential Pls: 1.1.4 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies.
3. Data collection, analysis, interpretation, and outcomes to make decisions	 1.10: Applies knowledge of math and statistics. (S) (PIs: 1.10.1-1.10.2) 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (PIs: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols.

	Additional potential Pls: 1.1.1, 1.9.1, 1.13.1, 1.13.5, 2.2.2, 4.1.5	 KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies.
4. Application of statistical analysis (e.g., analysis, interpretation, and integration of evidence-based research findings)	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.2) 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (Pls: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies.
5. Presentation of research data and outcomes	 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (Pls: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) 7.2: Uses effective communication, collaboration and advocacy skills. (Pls: 7.2.1, 7.2.4) Additional potential Pls: 1.1.3, 4.1.7 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.

6. Report research findings (e.g., write manuscripts, translation of results for diverse uses)	 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (PIs: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (PIs: 7.2.1, 7.2.4) Additional potential PIs: 1.1.3, 2.4.10, 4.1.7, 5.4.1 	 CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 2.2: Demonstrate professional writing skills in preparing professional communications. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 4.4: Apply current information technologies to develop, manage and disseminate nutrition information and data. RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 2.2: Demonstrate professional writing skills in preparing professional communications. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media.
7. Use of grading systems (e.g., Evidence Analysis Library) and the application of evidence analysis as	 6.2: Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research. (D) (Pls: 6.2.1-6.2.7) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) 	 RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.

the basis for practice decisions.	Additional potential PIs: 1.13.4	 KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols.
		 CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data.
	CDR RDN Exam Domain II – Nutrition Car	re for Individuals and Groups (45%)
	CDR RDN Exam TOPIC A – Scre	eening and Assessment
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Nutrition screening	 RE 3.2.a: Learning experiences must prepare students for professional practice with clients/patients with various conditions, including, but not limited to overweight and obesity; disordered eating; developmental, intellectual, behavioral health, neurological, and endocrine disorders; cancer; malnutrition; and cardiovascular, gastrointestinal and renal diseases. RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (PIs: 1.7.1-1.7.6) 2.2: Selects, develops and/or implements nutritional screening tools for individuals, groups or populations. (D) (PIs: 2.2.1-2.2.4) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 2.4: Function as a member of interprofessional teams. CRDN 2.5: Work collaboratively with NDTRs and/or support personnel in other disciplines.

	Additional potential PIs: 1.14.2, 5.2.10, 7.2.2	 CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.
2. Nutrition assessment of individuals	 RE 3.2.a: Learning experiences must prepare students for professional practice with clients/patients with various conditions, including, but not limited to overweight and obesity; disordered eating; developmental, intellectual, behavioral health, neurological, and endocrine disorders; cancer; malnutrition; and cardiovascular, gastrointestinal and renal diseases. RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. 1.1: Applies an understanding of environmental, molecular factors (e.g., genes, proteins, metabolites) and food in the development and management of disease. (S) (PIs: 1.1.2-1.1.3, 1.1.5) 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (PIs: 1.2.1-1.2.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (PIs: 1.5.1-1.5.4) 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (PIs: 1.6.1-1.6.4) 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (PIs: 1.7.1-1.7.6) 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.12: Health care delivery systems (such as accountable care organizations, managed care, medical homes, local health care agencies). RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences.

	 1.8: Applies knowledge of pharmacology to recommend, prescribe, and administer medical nutrition therapy. (S) (Pls: 1.8.1-1.8.3) 1.9: Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health and wellness. (S) (Pls: 1.9.1-1.9.3) 1.11: Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D) (Pls: 1.11.1-1.11.2) 1.14: Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D) (Pls: 1.14.1-1.14.4) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (Pls: 1.15.1-1.15.5) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.1-2.3.12) Additional potential Pls: 1.10.3, 2.4.7, 2.4.13, 2.5.3, 	 CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.2: Conduct nutrition focused physical exams. CRDN 3.3: Perform routine health screening assessments including measuring blood pressure, conducting waived point-of-care laboratory testing (such as blood glucose or cholesterol), recommending and/or initiating nutrition-related pharmacotherapy plans (such as modifications to bowel regimens, carbohydrate to insulin ratio, B12 or iron supplementation). CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change.
3. Nutrition assessment of populations and community needs assessment	 5.5.1, 6.1.1, 7.2.2, 7.2.4 1.1: Applies an understanding of environmental, molecular factors (e.g., genes, proteins, metabolites) and food in the development and management of disease. (S) (Pls: 1.1.1-1.1.3, 1.1.5) 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (Pls: 1.6.1-1.6.4) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (Pls: 1.15.1-1.15.5) 1.16: Gains a foundational knowledge on public and global health issues and nutritional needs. (K) (Pls: 1.16.1-1.16.3) 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (Pls: 2.1.1-2.1.4) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.9: Fundamentals of public policy, including the legislative and regulatory basis of nutrition and dietetics practice. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems,

	 practice settings. (D) (PIs: 2.3.1-2.3.2, 2.3.4-2.3.6, 2.3.8-2.3.12) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.1-4.1.7) 4.2: Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy. (D) (PIs: 4.2.1-4.2.2) Additional potential PIs: 1.13.1, 1.13.4, 1.14.1, 1.14.4, 3.4.1, 7.2.2, 7.2.4 	 determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits.
	CDR RDN Exam TOPI	C B – Diagnosis
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
Relationship between nutrition diagnoses and medical diagnoses	 RE 3.2.a: Learning experiences must prepare students for professional practice with clients/patients with various conditions, including, but not limited to overweight and obesity; disordered eating; developmental, intellectual, behavioral health, neurological, and endocrine disorders; cancer; malnutrition; and cardiovascular, gastrointestinal and renal diseases. 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan.

	 RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. 	 KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions.
	 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (Pls: 1.1.2-1.1.3, 1.1.5) 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (Pls: 1.2.1-1.2.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (Pls: 1.5.1-1.5.4) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (Pls: 1.15.1-1.15.5) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.13-2.3.15) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) Additional potential Pls: 1.6.4, 1.7.3, 2.4.2, 5.5.1 	 CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.
2. Data sources and tools for nutrition diagnosis	 1.13: Demonstrates computer skills and uses nutrition informatics in the decision-making process. (D) (PIs: 1.13.1-1.13.5) 6.3: Applies current research and evidence informed practice to services. (D) (PIs: 6.3.1-6.3.4) Additional potential PIs: 1.11.2, 2.3.1, 7.2.1 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems,
		 determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.

	CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations
3. Diagnosing nutrition problems for individuals and groups • RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. • 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (Pls: 1.1.1-1.1.5) • 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (Pls: 1.2.1-1.2.2) • 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (Pls: 1.5.1-1.5.4) • 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) • 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.13-2.3.15) • 6.3: Applies current research and evidence-informed practice to services. (D) (Pls: 6.3.1-6.3.4) • Additional potential Pls: 1.15.2, 2.4.1, 2.4.2, 5.1.5, 5.2.18, 6.1.1, 6.1.2	of differing ages and health status, in a variety of settings. CRDN 4.4: Apply current information technologies to develop, manage and disseminate nutrition information and data. RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.3: Apply critical thinking skills. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions.

		 CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 1.5: Incorporate critical-thinking skills in overall practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations
4. Etiologies (e.g., cause/contributing risk factors)	 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (Pls: 1.1.2-1.1.5) 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (Pls: 1.2.1-1.2.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (Pls: 1.5.1-1.5.4) 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.13-2.3.15) 6.1: Incorporates critical thinking skills in practice. (D) (Pls: 6.1.1-6.1.2) 6.3: Applies current research and evidence-informed practice to services. (D) (Pls: 6.3.1-6.3.4) Additional potential Pls: 1.14.2, 1.15.1, 1.15.3, 5.5.1 	 of differing ages and health status, in a variety of settings. RE 3.1.a.1: Research methodology, interpretation of research literature and integration of research principles into evidence-based practice. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6 Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology and anthropology. KRDN 1.3: Apply critical thinking skills. KRDN 2.6 Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems,

		 determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.5: Incorporate critical-thinking skills in overall practice. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.
5. Signs and symptoms (e.g., defining characteristics)	 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (PIs: 1.2.1-1.2.2) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (PIs: 1.5.1-1.5.3) 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (PIs: 1.7.1-1.7.6) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.13-2.3.15) Additional potential PIs: 6.1.1, 6.1.2 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.
6. Documentation	 RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice.

with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults.

- 1.11: Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D) (PIs: 1.11.1-1.11.2)
- 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.26-2.3.27)
- Additional potential Pls: 1.11.2, 7.1.7, 7.1.8, 7.2.1

- RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements.
- RE 3.1.a.13: Coding and billing of nutrition and dietetics services to obtain reimbursement for services from public or private payers, fee-for-service and value-based payment systems.
- KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.
- KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements
 to assess nutritional parameters, diagnose nutrition related problems,
 determine appropriate nutrition interventions and develop plans to
 monitor the effectiveness of these interventions.
- KRDN 4.3: Demonstrate an understanding of the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.
- CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.
- CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition
 Care Process including use of standardized nutrition terminology as a part
 of the clinical workflow elements for individuals, groups and populations
 of differing ages and health status, in a variety of settings.
- CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media.
- CRDN 4.9: Engage in the process for coding and billing for nutrition and dietetics services to obtain reimbursement from public or private payers, fee-for-service and value-based payment systems.

CDR RDN Exam TOPIC C – Planning and Intervention		
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
Nutrition care for health promotion and disease prevention Output Description Output	 1.9: Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health and wellness. (S) (PIs: 1.9.1-1.9.3) 1.14: Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D) (PIs: 1.14.1-1.14-4) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (PIs: 1.15.1-1.15-5) 1.16: Gains a foundational knowledge on public and global health issues and nutritional needs. (K) (PIs: 1.16.1-1.16.3) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.16-2.3.18) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (PIs: 2.4.1-2.4.5, 2.4.9) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.1-4.1.7) 5.5: Develops and leads implementation of risk management strategies and programs. (D) (PIs: 5.5.1-5.5.3) 6.3: Applies current research and evidence-informed practice to services. (D) (PIs: 6.3.1-6.3.4) 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1, 7.1.3-7.1.8) Additional potential PIs: 1.4.2, 1.7.5, 1.11.1, 1.13.3, 2.1.1, 2.1.4, 2.3.26, 2.4.10, 2.4.11, 2.4.12, 6.1.1, 6.1.2, 7.2.1, 7.2.4 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 2.3: Assess the impact of a public policy position on the nutrition and dietetics profession. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination.

- KRDN 2.9: Defend a position on issues impacting the nutrition and dietetics profession.
- KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements
 to assess nutritional parameters, diagnose nutrition related problems,
 determine appropriate nutrition interventions and develop plans to
 monitor the effectiveness of these interventions.
- KRDN 3.2: Develop an educational session or program/educational strategy for a target population.
- KRDN 3.3: Demonstrate counseling and education methods to facilitate behavior change and enhance wellness for diverse individuals and groups.
- KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services.
- KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.
- CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives.
- CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice.
- CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data.
- CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.
- CRDN 2.10: Demonstrate professional attributes in all areas of practice.
- CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition
 Care Process including use of standardized nutrition terminology as a part
 of the clinical workflow elements for individuals, groups and populations
 of differing ages and health status, in a variety of settings.
- CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media.

		 CRDN 3.8: Design, implement and evaluate presentations to a target audience. CRDN 3.9: Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.12: Deliver respectful, science-based answers to client/patient questions concerning emerging trends. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).
2. Medical Nutrition Therapy	 RE 3.2.a: Learning experiences must prepare students for professional practice with clients/patients with various conditions, including, but not limited to overweight and obesity; disordered eating; developmental, intellectual, behavioral health, neurological, and endocrine disorders; cancer; malnutrition; and cardiovascular, gastrointestinal and renal diseases. RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. 1.1: Applies an understanding of environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease. (S) (PIs: 1.1.1-1.1.5) 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.12: Health care delivery systems (such as accountable care organizations, managed care, medical homes, local health care agencies). RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology.

- 1.2: Applies an understanding of anatomy, physiology, and biochemistry. (S) (PIs: 1.2.1-1.2.2)
- 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) (PIs: 1.4.1-1.4.3)
- 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (PIs: 1.5.1-1.5.4)
- 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (PIs: 1.6.1-1.6.4)
- 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (PIs: 1.7.1-1.7.6)
- 1.8: Applies knowledge of pharmacology to recommend, prescribe, and administer medical nutrition therapy. (S) (PIs: 1.8.1-1.8.3)
- 1.9: Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health and wellness. (S) (PIs: 1.9.1-1.9.3)
- 1.11: Applies knowledge of medical terminology when communicating with individuals, groups and other health professionals. (D) (PIs: 1.11.1-1.11.2)
- 1.14: Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D) (PIs: 1.14.1-1.14.4)
- 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (PIs: 1.15.1-1.15.5)
- 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.16-2.3.18)
- 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations.
 (D) (PIs: 2.4.1-2.4.19)
- 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4)

- KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.
- KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics.
- KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates.
- KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion.
- KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions.
- CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice.
- CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.
- CRDN 2.4: Function as a member of interprofessional teams.
- CRDN 2.5: Work collaboratively with NDTRs and/or support personnel in other disciplines.
- CRDN 2.6: Refer clients and patients to other professionals and services when needs are beyond individual scope of practice.
- CRDN 2.10: Demonstrate professional attributes in all areas of practice.
- CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public.
- CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences.

	 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1, 7.1.3-7.1.8) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (PIs: 7.2.1-7.2.2, 7.2.4) Additional potential PIs: 1.10.3, 1.12.2, 5.1.3, 5.1.4, 5.2.10, 5.2.19, 6.1.1, 6.2.7 	 CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media.
3. Implementation and promotion of national dietary guidance	 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 1.14: Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle. (D) (Pls: 1.14.1-1.14.4) 1.15: Applies knowledge of nutritional health promotion and disease prevention for individuals, groups and populations. (S) (Pls: 1.15.1-1.15.5) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (Pls: 2.4.6-2.4.12) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (Pls: 4.1.1-4.1.7) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) Additional potential Pls: 4.2.2, 5.2.1, 5.3.1, 7.2.1, 7.2.4 	 RE 3.1.a.3: Principles and techniques of effective education, counseling and behavior change theories and techniques. RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.6: Role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention. RE 3.1.a.9: Fundamentals of public policy, including the legislative and regulatory basis of nutrition and dietetics practice. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 2.3: Assess the impact of a public policy position on nutrition and dietetics profession. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 3.2: Develop an educational session or program/educational strategy for a target population.

4. Development of	• 2 1: Annlies a framework to assess develon	 KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 3.9: Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience. CRDN 3.10: Use effective education and counseling skills to facilitate behavior change. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.12: Deliver respectful, science-based answers to client/patient questions concerning emerging trends. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
4. Development of programs and services	 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (PIs: 2.1.1-2.1.4) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.2-4.1.7) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. KRDN 3.2: Develop an educational session or program/educational strategy for a target population. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data.

	 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) Additional potential Pls: 1.15.4, 2.4.6, 2.4.8, 4.2.2, 5.2.1, 5.2.11, 5.2.12, 5.2.14 	 KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies. CRDN 4.9: Engage in the process for coding and billing for nutrition and dietetics services to obtain reimbursement from public or private payers,
	CDR RDN Exam TOPIC D – Mo	fee-for-service and value-based payment systems.
	CDR RDR EXAMINATION CD INC	THEORING UND EVOLUCION
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
Monitoring progress and updating previous care	 RE 3.2.b: Learning experiences must prepare students to implement the Nutrition Care Process with various populations of diverse cultures, genders and across the life cycle including infants, children, adolescents, adults, pregnant/lactating females and older adults. 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.19-2.3.25) Additional potential PIs: 1.8.3, 1.9.3, 2.5.2, 2.5.5, 2.5.9 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.

2. Measuring outcome indicators using evidence-based guides for practice	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.19-2.3.25) 6.3: Applies current research and evidence informed practice to services. (D) (Pls: 6.3.1-6.3.4) Additional potential Pls: 2.4.1, 2.4.2, 4.1.6, 5.2.15, 5.4.1, 5.4.2 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. KRDN 1.1: Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions. KRDN 1.2: Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 4.3: Conduct clinical and client service quality management activities (such as quality improvement or quality assurance projects).
3. Evaluating effectiveness and outcomes of nutrition interventions for individuals and populations	 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (Pls: 2.3.19-2.3.25) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (Pls: 2.4.8-2.4.12) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (Pls: 4.1.2-4.1.7) 5.4: Leads quality and performance improvement activities to measure, evaluate and improve a program's services, products and initiatives. (D) (Pls: 5.4.1-5.4.5) 	 RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.

4. Relationship with outcome measurement systems and quality improvement	 Additional potential PIs: 2.1.4, 3.2.2, 5.2.15, 5.2.16 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (PIs: 2.1.1-2.1.4) 2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.19-2.3.25) 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (PIs: 2.4.1-2.4.5) 5.4: Leads quality and performance improvement activities to measure evaluate and improve a program services products and initiatives. (D) (PIs: 5.4.1-5.4.5) 	 CRDN 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media CRDN 4.3: Conduct clinical and client service quality management activities (such as quality improvement or quality assurance projects). RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies. CRDN 4.3: Conduct clinical and client service quality management
5. Determining continuation and transition of care	2.3: Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings. (D) (PIs: 2.3.16-2.3.18)	 activities (such as quality improvement or quality assurance projects). RE 3.1.a.5: Principles of medical nutrition therapy, the Nutrition Care Process, and clinical workflow elements. RE 3.1.a.12: Health care delivery systems (such as accountable care organizations, managed care, medical homes, local health care agencies).

	 2.4: Implements or coordinates nutritional interventions for individuals, groups or populations. (D) (PIs: 2.4.1-2.4.5) Additional potential PIs: 2.3.22, 2.4.6, 2.4.8, 2.4.12, 2.4.18, 2.4.19, 2.5.9, 2.5.10, 5.2.16 	 KRDN 3.1: Use the Nutrition Care Process and clinical workflow elements to assess nutritional parameters, diagnose nutrition related problems, determine appropriate nutrition interventions and develop plans to monitor the effectiveness of these interventions. CRDN 2.6: Refer clients and patients to other professionals and services when needs are beyond individual scope of practice. CRDN 3.1: Perform Medical Nutrition Therapy by utilizing the Nutrition Care Process including use of standardized nutrition terminology as a part of the clinical workflow elements for individuals, groups and populations of differing ages and health status, in a variety of settings.
	CDR RDN Exam Domain III – Management of Food	
	CDR RDN Exam TOPIC A – Fui	nctions of Management
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Functions	 5.2: Applies principles of organization management. (D) (Pls: 5.2.1-5.2.22) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) 5.4: Leads quality and performance improvement activities to measure, evaluate and improve a program's services, products and initiatives. (D) (Pls: 5.4.1-5.4.5) 5.5: Develops and leads implementation of risk management strategies and programs. (D) (Pls: 5.5.1-5.5.3) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (Pls: 7.2.1) Additional potential Pls: 5.1.5, 6.1.1, 6.1.2 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.4: Apply the principles of human resource management to different situations. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.

		 CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 2.2: Demonstrate professional writing skills in preparing professional communications. CRDN 2.7: Apply change management strategies to achieve desired outcomes. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling). CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness). CRDN 5.5: Demonstrate the ability to resolve conflict. CRDN 5.6: Promote team involvement and recognize the skills of each member.
2. Management characteristics	 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 5.1: Demonstrates leadership skills to guide practice. (D) (Pls: 5.1.1-5.1.5) 5.2: Applies principles of organization management. (D) (Pls: 5.2.1-5.2.22) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) 5.5: Develops and leads implementation of risk management strategies and programs. (D) (Pls: 5.5.1-5.5.3) 	 RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice. RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology

- 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1-7.1.8)
- 7.2: Uses effective communication, collaboration and advocacy skills. (D) (PIs: 7.2.1-7.2.2, 7.2.4)
- Additional potential PIs: 5.4.5, 1.7.5, 5.2.7

- KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation.
- KRDN 2.5: Identify and describe the work of interprofessional teams and the roles
- KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion.
- KRDN 4.1: Apply management theories to the development of programs or services.
- KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data.
- KRDN 4.4: Apply the principles of human resource management to different situations.
- KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.
- KRDN 5.4: Practice resolving differences or dealing with conflict.
- KRDN 5.5: Promote team involvement and recognize the skills of each member.
- CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data.
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.
- CRDN 2.3: Demonstrate active participation, teamwork and contributions in group settings.
- CRDN 2.7: Apply change management strategies to achieve desired outcomes.
- CRDN 2.8: Demonstrate negotiation skills.
- CRDN 2.10: Demonstrate professional attributes in all areas of practice.
- CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public.
- CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences.
- CRDN 4.1: Participate in management functions of human resources (such as training and scheduling).
- CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food.

	CDR RDN EXAM TOPIC B – Hum	 CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness). CRDN 5.1: Perform self-assessment that includes awareness in terms of learning and leadership styles and cultural orientation and develop goals for self-improvement. CRDN 5.4: Advocate for opportunities in professional settings (such as asking for additional responsibility, practicing negotiating a salary or wage or asking for a promotion). CRDN 5.5: Demonstrate the ability to resolve conflict. CRDN 5.6: Promote team involvement and recognize the skills of each member.
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Employment laws and regulations	7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1-7.1.8)	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.10: Licensure and certification in the practice of nutrition and dietetics. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.4: Apply the principles of human resource management to different situations. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling).
2. Employment standards	 5.2: Applies principles of organization management. (D) (Pls: 5.2.1-5.2.7, 5.2.10, 5.2.17-5.2.18) 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (Pls: 7.1.1, 7.1.3-7.1.8) 	RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings.

	Additional potential PIs: 5.1.6	 KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.4: Apply the principles of human resource management to different situations. KRDN 5.5: Promote team involvement and recognize the skills of each member.
3. Employment processes	1.7: Integrates the principles of cultural competence within own practice and when directing services. (D)	 CRDN 2.10: Demonstrate professional attributes in all areas of practice. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling). CRDN 5.6: Promote team involvement and recognize the skills of each member. RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice.
	 (Pls 1.7.1-1.7.6) 5.1: Demonstrates leadership skills to guide practice. (D) (Pls: 5.1.1-5.1.6) 5.2: Applies principles of organization management. (D) (Pls: 5.2.2-5.2.10, 5.2.17-5.2.22) 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (Pls: 7.1.1, 7.1.3-7.1.8) 7.2: Uses effective communication, collaboration and advocacy skills. (D) (Pls: 7.2.1, 7.2.4) Additional potential Pls: 3.1.4 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. RE 3.1.a.17: Human behavior, psychology, sociology or anthropology.
		 KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates.

- KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion.
- KRDN 4.1: Apply management theories to the development of programs or services.
- KRDN 4.4: Apply the principles of human resource management to different situations.
- KRDN 5.2: Identify and articulate one's skills, strengths, knowledge and experiences relevant to the position desired and career goals.
- KRDN 5.3: Practice how to self-advocate for opportunities in a variety of settings (such as asking for needed support, presenting an elevator pitch).
- KRDN 5.4: Practice resolving differences or dealing with conflict.
- KRDN 5.5: Promote team involvement and recognize the skills of each member.
- KRDN 5.6: Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.
- CRDN 2.10: Demonstrate professional attributes in all areas of practice.
- CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public.
- CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences.
- CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media.
- CRDN 4.1: Participate in management functions of human resources (such as training and scheduling).
- CRDN 5.2: Identify and articulate one's skills, strengths, knowledge and experiences relevant to the position desired and career goals.
- CRDN 5.4: Advocate for opportunities in professional settings (such as asking for additional responsibility, practicing negotiating a salary or wage or asking for a promotion).
- CRDN 5.5: Demonstrate the ability to resolve conflict.
- CRDN 5.6: Promote team involvement and recognize the skills of each member.
- CRDN 5.7: Mentor others.

CDR RDN Exam TOPIC C – Financial Management		
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
Budgeting processes and fiscal periods	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 5.2: Applies principles of organization management. (D) (Pls: 5.2.1, 5.2.11-5.2.16) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.
	• Additional potential Pls: 3.1.6, 3.2.1, 3.2.2, 4.1.3	 CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
2. Financial monitoring	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 5.2: Applies principles of organization management. (D) (Pls: 5.2.1, 5.2.11-5.2.16) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) Additional potential Pls: 3.1.6, 3.2.2 	 KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 4.5: Analyze quality, financial and productivity data for use in planning.
	CDR RDN Exam TOPIC D – Mark	eting and Public Relations
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Marketing analysis	 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.1-4.1.7) 5.2: Applies principles of organization management. (D) (PIs: 5.2.9-5.2.16) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services.

	Additional potential PIs: 1.6.1, 1.15.4, 2.1.4, 7.2.1, 7.2.4	 KRDN 3.2: Develop an educational session or program/educational strategy for a target population. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.8: Design, implement and evaluate presentations to a target
		 CRDN 3.9: Develop nutrition education materials that are culturally and age appropriate and designed for the literacy level of the audience. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.8: Develop a plan to provide or develop a product, program or continue that includes a hydroty studies.
2. Pricing	 1.10: Applies knowledge of math and statistics. (S) (PIs: 1.10.1-1.10.3) 5.2: Applies principles of organization management. (D) (PIs: 5.2.1, 5.2.115.2.16) 	 service that includes a budget, staffing needs, equipment and supplies. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.
	Additional potential PIs: 4.1.7, 5.3.1	 CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
3. Public relations	5.4: Leads quality and performance improvement activities to measure, evaluate and improve a	RE 3.1.a.2: Communication and documentation skills sufficient for entry into professional practice.

	program's services, products and initiatives. (D) (PIs: 5.4.1-5.4.5) • 7.2: Uses effective communication, collaboration and advocacy skills. (D) (PIs: 7.2.1, 7.2.4) • Additional potential PIs: 1.7.5, 3.1.3, 3.2.3, 5.2.5	 KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation. KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination. CRDN 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 2.2: Demonstrate professional writing skills in preparing professional communications. CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public. CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences. CRDN 3.7: Demonstrate effective communication and documentation skills for clinical and client services in a variety of formats and settings, which include telehealth and other information technologies and digital media. CRDN 4.4: Apply current information technologies to develop, manage and disseminate nutrition information and data.
4. Marketing mix principles	 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (PIs: 2.1.1-2.1.4) 4.1: Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D) (PIs: 4.1.2-4.1.7) 5.2: Applies principles of organization management. (D) (PIs: 5.2.10-5.2.16) Additional potential PIs: 7.2.1, 7.2.4 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. CRDN 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 3.11: Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.5: Analyze quality, financial and productivity data for use in planning.

CDR RDN Exam Topics	CDR RDN Exam TOPIC E – Quality Manag ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	 CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies. ement and Regulatory Compliance ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Regulatory guidelines (e.g., federal, state, local and accreditation agencies)	 4.2: Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy. (D) (PIs: 4.2.1-4.2.3) 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1, 7.1.3-7.1.8) Additional potential PIs: 1.16.1, 2.3.27, 2.5.7, 3.3.1, 3.3.2, 3.4.2, 7.2.3 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.8: Continuous quality management of food and nutrition services. RE 3.1.a.9: Fundamentals of public policy, including the legislative and regulatory basis of nutrition and dietetics practice. RE 3.1.a.10: Licensure and certification in the practice of nutrition and dietetics. RE 3.1.a.11: Individual National Provider Identifier (NPI). RE 3.1.a.13: Coding and billing of nutrition and dietetics services to obtain reimbursement for services from public or private payers, fee-for-service and value-based payment systems. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. KRDN 2.3: Assess the impact of a public policy position on the nutrition and dietetics profession. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 4.3: Demonstrate an understanding of the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Professional

2. Process, implementation, evaluation	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 2.1: Applies a framework to assess, develop, implement and evaluate products, programs and services. (D) (Pls: 2.1.1-2.1.4) 	 Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.13: Advocate for local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession. CRDN 4.9: Engage in the process for coding and billing for nutrition and dietetics services to obtain reimbursement from public or private payers, fee-for-service and value-based payment systems. RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services. KRDN 4.2: Evaluate a budget/financial management plan and interpret
	 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (Pls: 3.2.1-3.2.7) 5.2: Applies principles of organization management. (D) (Pls: 5.2.11-5.2.16) 5.3: Applies project management principles to achieve project goals and objectives. (D) (Pls: 5.3.1-5.3.4) 5.4: Leads quality and performance improvement activities to measure, evaluate and improve a program's services, products and initiatives. (D) (Pls: 5.4.1-5.4.5) Additional potential Pls: 3.1.2, 3.1.4, 3.1.6, 4.1.6, 4.1.7, 5.2.17 	 KRDN 4.7: Evaluate a budget/initial management plan and interpret financial data. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.2: Evaluate research and apply evidence-based guidelines, systematic reviews and scientific literature in nutrition and dietetics practice. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies. CRDN 4.3: Conduct clinical and client service quality management activities (such as quality improvement or quality assurance projects). CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).

2.6		
3. Scope of practice and standards of professional performance (SOP, SOPP)	 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1-7.1.8) Additional potential PIs: 2.3.26, 2.4.5, 2.4.19, 2.5.6, 2.5.7, 2.5.10, 5.2.3 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.10: Licensure and certification in the practice of nutrition and dietetics. KRDN 2.2: Describe the governance of nutrition and dietetics practice,
		such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics. • KRDN 2.5: Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates.
		 CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.6: Refer clients and patients to other professionals and services when needs are beyond individual scope of practice. CRDN 2.10: Demonstrate professional attributes in all areas of practice.
4. Code of ethics	 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1-7.1.8) Additional potential PIs: 3.1.7, 3.2.2, 6.2.4, 7.2.1 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. KRDN 2.2: Describe the governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics.
		 CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.

		CRDN 2.10: Demonstrate professional attributes in all areas of practice.	
	CDR RDN Exam Domain IV – Foodservice Systems (13%)		
	CDR RDN Exam TOPIC A –	Menu Development	
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)	
1. Menu	 1.12: Demonstrates knowledge of and is able to manage food preparation techniques. (D) (PIs: 1.12.1-1.12.4) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (PIs: 3.1.1-3.1.8) 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (PIs: 3.4.1-3.4.3) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. 	
2. Menu development	 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) (Pls: 1.4.1-1.4.3) 1.5: Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S) (Pls: 1.5.1-1.5.3) 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (Pls: 1.6.1-1.6.4) 1.7: Integrates the principles of cultural competence within own practice and when directing services. (D) (Pls: 1.7.1-1.7.6) 1.12: Demonstrates knowledge of and is able to manage food preparation techniques. (D) (Pls: 1.12.1-1.12.4) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (Pls: 3.1.1-3.1.8) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. RE 3.1.a.16: Cultural humility, self-reflection, and diversity, equity and inclusion. KRDN 2.4: Discuss the impact of health care policy and different health care delivery systems on food and nutrition services. 	

- 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (PIs: 3.3.1-3.3.4)
- 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (PIs: 3.4.1-3.4.3)
- 5.2: Applies principles of organization management. (D) (PIs: 5.2.1-5.2.16)
- KRDN 2.6: Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion.
- KRDN 2.7: Describe contributing factors to health inequity in nutrition and dietetics including structural bias, social inequities, health disparities and discrimination.
- KRDN 3.6: Develop nutritionally sound meals, menus and meal plans that promote health and disease management and meet client's/patient's needs.
- KRDN 4.1: Apply management theories to the development of programs or services.
- KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data.
- KRDN 4.4: Apply the principles of human resource management to different situations.
- KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers.
- KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.
- CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives.
- CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data.
- CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.
- CRDN 2.11: Show cultural humility in interactions with colleagues, staff, clients, patients and the public.
- CRDN 2.12: Implement culturally sensitive strategies to address cultural biases and differences.
- CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources.

	CDR RDN Exam TOPIC B — Procurement, Pr	 CRDN 3.14: Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling). CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.6: Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Procurement, receiving, and inventory management	 1.10: Applies knowledge of math and statistics. (S) (Pls: 1.10.1-1.10.3) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (Pls: 3.1.1-3.1.8) 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (Pls: 3.2.1-3.2.7) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (Pls: 3.3.1-3.3.4) 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (Pls: 3.4.1-3.4.3) 5.2: Applies principles of organization management. (D) (Pls: 5.2.1-5.2.16) 5.4: Leads quality and performance improvement activities to measure evaluate and improve a program services products and initiatives. (D) (Pls: 5.4.1-5.4.5) 	 RE 3.1.a.4: Governance of nutrition and dietetics practice, such as the Scope of Practice for the Registered Dietitian Nutritionist and the Code of Ethics for the Profession of Nutrition and Dietetics, and interprofessional relationships in various practice settings. RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement.

	 7.1: Assumes professional responsibilities to provide safe, ethical and effective nutrition services. (D) (PIs: 7.1.1, 7.1.3-7.1.8) Additional potential PIs: 1.4.3, 1.6.3, 1.13.3, 1.16.2 	 CRDN 1.1: Select indicators of program quality and/or customer service and measure achievement of objectives. CRDN 1.3: Justify programs, products, services and care using appropriate evidence or data. CRDN 1.4: Conduct projects using appropriate research or quality improvement methods, ethical procedures and data analysis utilizing current and/or new technologies. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 2.10: Demonstrate professional attributes in all areas of practice. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.6: Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).
2. Principles of quantity food preparation and processing	 1.3: Applies knowledge of microbiology and food safety. (S) (Pls: 1.3.1-1.3.2) 1.12: Demonstrates knowledge of and is able to manage food preparation techniques. (D) (Pls: 1.12.1-1.12.4) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (Pls: 3.3.1-3.3.4) 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 3.6: Develop nutritionally sound meals, menus and meal plans that promote health and disease management and meet client's/patient's needs.

	 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (PIs: 3.4.1-3.4.3) Additional potential PIs: 1.7.2 	 KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 3.14: Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).
3. Food production control procedures	 1.3: Applies knowledge of microbiology and food safety. (S) (Pls: 1.3.1-1.3.2) 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) (Pls: 1.4.1-1.4.3) 1.12: Demonstrates knowledge of and is able to manage food preparation techniques. (D) (Pls: 1.12.1-1.12.4) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (Pls: 3.1.1-3.1.8) 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (Pls: 3.2.1-3.2.7) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (Pls: 3.3.1-3.1.4) 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (Pls: 3.4.1-3.4.3) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan. KRDN 3.6: Develop nutritionally sound meals, menus and meal plans that promote health and disease management and meet client's/patient's needs. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with

	 5.5: Develops and leads implementation of risk management strategies and programs. (D) (PIs: 5.5.1-5.5.3) Additional potential PIs: 1.6.3, 1.16.2, 5.2.1, 5.2.13 	 accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 3.14: Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.6: Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).
4. Production systems	 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) (PIs: 1.4.1-1.4.3) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (PIs: 3.1.1-3.1.8) 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services.
5. Distribution and service	3.1: Directs the production and distribution of quantity and quality of food products. (D) (PIs: 3.1.1-3.1.8)	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services.

	CDR RDN Exam TOPIC C — S	 CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.6: Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.
CDR RDN Exam Topics	ACEND FEM (RE 3.2, Competencies, and *PIs) *PIs are provided in the Appendix	ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs)
1. Sanitation	 1.3: Applies knowledge of microbiology and food safety. (S) (Pls: 1.3.1-1.3.2) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (Pls: 3.3.1-3.3.4) 5.5: Develops and leads implementation of risk management strategies and programs. (D) (Pls: 5.5.1-5.5.3) Additional potential Pls: 1.6.3, 1.12.1, 7.1.3 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).

2. Food safety	 1.3: Applies knowledge of microbiology and food safety. (S) (PIs: 1.3.1-1.3.2) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (PIs: 3.3.1-3.3.4) 5.5: Develops and leads implementation of risk management strategies and programs. (D) (PIs: 5.5.1-5.5.3) 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. RE 3.1.a.15: Organic chemistry, biochemistry, anatomy, physiology, genetics, microbiology, pharmacology, statistics, logic, nutrient metabolism, integrative and functional nutrition and nutrition across the lifespan.
	 Additional potential Pls: 1.4.2, 1.12.1, 1.12.2, 3.1.5, 3.1.7, 3.2.6 	 KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers.
		 CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness).
3. Safety	 5.5: Develops and leads implementation of risk management strategies and programs. (D) (PIs: 5.5.1-5.5.3) Additional potential PIs: 1.12.1, 1.15.2, 3.1.7, 3.3.2, 5.2.7, 7.1.3 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.4: Apply the principles of human resource management to different situations. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling). CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food.

	CDR RDN Exam TOPIC D – Equipr ACEND FEM (RE 3.2, Competencies, and *PIs)	CRDN 4.10: Analyze risk in nutrition and dietetics practice (such as risks to achieving set goals and objectives, risk management plan, or risk due to clinical liability or foodborne illness). ment and Facility Planning
1. Facility layout	 *PIs are provided in the Appendix 1.3: Applies knowledge of microbiology and food safety. (S) (PIs: 1.3.1-1.3.2) 3.1: Directs the production and distribution of quantity and quality of food products. (D) (PIs: 3.1.1-3.1.8) 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (PIs: 3.2.1-3.2.7) 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (PIs: 3.3.1-3.3.3) 5.2: Applies principles of organization management. (D) (PIs: 5.2.1-5.2.9, 5.2.11-5.2.16) 5.3: Applies project management principles to achieve project goals and objectives. (D) (PIs: 5.3.1-5.3.4) Additional potential PIs: 1.3.2, 1.10.3, 2.1.3, 7.1.7 	 ACEND 2022 Standards (RE 3.1 and KRDNs /CRDNs) RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.8: Continuous quality management of food and nutrition services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.2: Evaluate a budget/financial management plan and interpret financial data. KRDN 4.4: Apply the principles of human resource management to different situations. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. KRDN 5.5: Promote team involvement and recognize the skills of each member. CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.

		 CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.1: Participate in management functions of human resources (such as training and scheduling). CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.5: Analyze quality, financial and productivity data for use in planning. CRDN 4.7: Conduct feasibility studies for products, programs or services with consideration of costs and benefits. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies. CRDN 5.6: Promote team involvement and recognize the skills of each member.
2. Equipment	 3.1: Directs the production and distribution of quantity and quality of food products. (D) (PIs: 3.1.1-3.1.7) 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (PIs: 3.2.1-3.2.7) Additional potential PIs: 5.2.8 	 RE 3.1.a.7: Management theories and business principles required to deliver programs and services. RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. KRDN 3.2: Develop an educational session or program/educational strategy for a target population. KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.6: Explain the processes involved in delivering quality food and
		 CRDN 2.1: Practice in compliance with current federal regulations and state statutes and rules, as applicable, and in accordance with accreditation standards and the Scope of Practice for the Registered Dietitian Nutritionist, Standards of Practice, Standards of Professional Performance, and Code of Ethics for the Profession of Nutrition and Dietetics.

		 CRDN 3.8: Design, implement and evaluate presentations to a target audience. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
3. Sustainability	 1.6: Applies knowledge of social, psychological and environmental aspects of eating and food. (S) (PIs: 1.6.1-1.6.4) 3.2: Oversees the purchasing, receipt and storage of products used in food production and services. (D) (PIs: 3.2.1-3.2.7) 3.4: Applies and demonstrates an understanding of agricultural practices and processes. (S) (PIs: 3.4.1-3.4.3) Additional potential PIs: 1.6.3, 1.16.2, 3.1.8 	 RE 3.1.a.14: Food science and food systems, food safety and sanitation, environmental sustainability, global nutrition, principles and techniques of food preparation and development, modification and evaluation of recipes, menus and food products acceptable to diverse populations. CRDN 3.13: Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources. CRDN 4.6: Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.
4. Emergency preparedness and contingency planning	 3.3: Applies principles of food safety and sanitation to the storage, production and service of food. (D) (PIs: 3.3.1-3.3.4) 5.2: Applies principles of organization management. (D) (PIs: 5.2.1, 5.2.3-5.2.16) 5.5: Develops and leads implementation of risk management strategies and programs. (D) Additional potential PIs: 3.3.3, 4.1.1, 4.1.2, 4.1.4, 4.1.5, 5.3.3, 5.4.2 	 KRDN 4.1: Apply management theories to the development of programs or services. KRDN 4.4: Apply the principles of human resource management to different situations. KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers. KRDN 4.7: Evaluate data to be used in decision-making for continuous quality improvement. KRDN 5.4: Practice resolving differences or dealing with conflict. CRDN 4.2: Perform management functions related to safety, security and sanitation that affect employees, clients, patients, facilities and food. CRDN 4.5: Analyze quality, financial and productivity data for use in planning CRDN 4.8: Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.

Appendix

Competencies and Performance Indicators (PIs) (FEM Standards)

^{*}Denotes an enhanced competency

Competencies	Performance Indicators
Applies an understanding of environmental, molecular factors (e.g., genes, proteins, metabolites) and food in the development and management	 1.1.1 Analyzes the usefulness and limitations of epidemiological, clinical and other study designs and identifies trends in diet and disease. (S) 1.1.2 Demonstrates general understanding of nutrition and genetics, as it relates to health conditions. (K) 1.1.3 Communicates epidemiological evidence related to the relationship between diet and the development of disease. (S) 1.1.4 Demonstrates an understanding of research techniques and processes used to study the relationship between molecules
of disease. (S)	(e.g., genes, proteins, metabolites) and microbes with disease states. (K) 1.1.5 Identifies the influence of food consumption on the development of diseases. (K)
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)
1.3 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)
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)	 1.4.1 Analyzes the role of fundamental chemistry and organic chemistry principles on food, human health and metabolism. (S) 1.4.2 Integrates nutritional biochemistry knowledge to make informed food and nutrition decisions for optimal health. (S) 1.4.3 Evaluates the chemical nature and composition of food on food quality, acceptability and compatibility. (S)
1.5 Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health and disease. (S)	 1.5.1 Examines nutritional biochemical indicators specific to the disease process. (K) 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) 1.5.4 Analyzes the correlation between mental health conditions and nutritional health. (S)
1.6 Applies knowledge of social,	1.6.1 Formulates food and nutrition services considering psychological and social factors to meet the needs of individuals, communities and populations. (S)

environmental aspects of eating and food. (S)	Articulates the impact of nutritional health on psychiatric disorders. (S) Integrates knowledge of maximizing sustainability, food and water waste, reusable/ biodegradable items, local and global
and food. (S)	
1	produce sourcing and access to food. (S)
	5.4 Analyzes the environmental factors affecting access to services and/or adequate nutrition. (S)
	7.1 Demonstrates knowledge of the cultural competence models. (K)
	7.2 Applies knowledge of foods eating patterns and food trends. (S)
cultural competence within own practice and when directing services. (D)	7.3 Identifies challenges that arise when different cultures, values, beliefs and experiences exist between clients/patients and nutrition and dietetics professionals. (S)
	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	7.6 Develops awareness of one's own personal beliefs, values and biases to better serve clients/patients of different cultures and backgrounds. (S)
Applies knowledge of pharmacology to recommend,	Identifies the classifications of nutraceutical pharmacological agents and the action of the body. (K) Demonstrates understanding of pharmacokinetics, absorption, clearance, drug metabolism, latency period, drug and supplement metabolism, accumulation, half-life, and routes of administration. (S) Identifies potential drug and food interactions based on physiological responses to pharmacological agents and takes
nutrition therapy. (S)	appropriate actions. (S)
	2.1 Critically evaluates evidence-based literature to inform decisions about use of complementary and integrative nutrition. (S)
impact of complementary and	Applies an understanding of the impact of complementary and integrative nutrition on drugs, food, disease states and wellness. (S)
integrative nutrition on drugs, disease, health and wellness. (S)	2.3 Identifies indications, use and contraindications of complementary and integrative nutrition. (K)
_	0.1 Chooses appropriate statistical methods, performs statistical analysis and interprets results in various data analysis situations. (S)
statistics. (S)	0.2 Communicates information on statistical methods, results and interpretation, both orally and in writing. (S)
1	10.3 Applies math skills to perform food and nutrition calculations. (S)
1.11 1	1.1 Interprets and communicates medical terminology to non-health professional audiences. (D)
Applies knowledge of medical terminology when communicating with individuals, groups and other health	1.2 Uses acceptable medical abbreviations and appropriate medical terminology in all forms of communication. (D)
professionals. (D)	
	2.1 Demonstrates understanding of safe work habits and safety hazards and employs preventive safety measures. (K)
Demonstrates knowledge of and	22 Converts recipes and ingredients based on client/patient's preferences or dietary needs. (D)
is able to manage food preparation techniques (D)	23 Develops recipes and menus and increases or decreases quantities served from the recipe. (D)
	24 Evaluates recipes using sensory evaluation methods. (D)

1.13* Demonstrates computer skills	1.13.1 Analyzes appropriate data in electronic format to make best decisions related to nutrition and diet. (S)
	1.13.2 Evaluates accuracy and reliability when accessing and evaluating nutrition information in electronic format. (S)
and uses nutrition informatics in the decision making process. (D)	1.13.3 Operates nutrition informatics systems in practice. (D)
the decision making process. (b)	1.13.4 Uses electronic databases to obtain nutrition information and evaluate credible sources in decision making. (D)
	1.13.5 Uses technology and informatics skills proficiently to aggregate data, enhance practice and client/patient care. (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) 1.14.3 Teaches the benefits of physical activity across the life cycle to individuals, groups and populations. (D) 1.14.4 Explains and takes into consideration how nutrients, nutritional supplements and hydration influence physical activity and wellness. (K)
1.15*	1.15.1 Recognizes and communicates the cause of disease and nutrition risks. (K)
Applies knowledge of nutritional	1.15.2 Identifies, prioritizes and implements health risk reduction strategies for individuals, groups and populations. (S)
health promotion and disease	1.15.3 Examines the influence of the determinants of health on health and wellness. (S)
prevention for individuals, groups and populations. (S)	1.15.4 Designs food and nutrition activities for various audiences considering factors relevant to individuals, groups and communities. (S)
	1.15.5 Applies behavior change theories for nutritional health promotion and disease prevention. (S)
1.16* Gains a foundational	1.16.1 Examines the trends, policies and current issues that impact public and global health from existing, new and reemerging diseases that spread through immigration, travel and global trade. (K)
knowledge on public and global health	1.16.2 Examines the impact of global food supply and sustainability and related factors. (K)
issues, policies and nutritional needs. (K)	1.16.3 Examines how globalizing processes impact nutrition, nutrition education and nutrition related diseases in developing countries. (K)

Unit 2: Client/Patient Services

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

Competencies	Performance Indicators
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)
	2.1.2 Designs nutritional products, programs or services that promote consumer nutritional health, dimensions of wellness, and lifestyle management. (D)
	2.1.3 Creates a work plan or project plan to implement nutritional programs and services or launch products. (D)
	2.1.4 Conducts an evaluation of a product, program or service by analyzing reasons for variance from expected outcomes and implements new strategies as appropriate. (D)
2.2 Selects, develops and/or implements nutritional screening	2.2.1 Considers all client/patient factors when selecting, developing nutrition screening tools. (D)
	2.2.2 Evaluates the validity and reliability of the nutrition screening tools and modifies based on current evidence-informed practice. (S)

tools for individuals, groups or	2.2.3 Leads the implementation of nutrition screening tools in collaboration with other health professionals. (D)
populations. (D)	2.2.4 Prioritizes care based on results of screening considering complexity of care needs. (D)
2.3	Nutrition Assessment
Utilizes the nutrition care	2.3.1 Selects and implements nutrition assessment tools for individuals, groups or populations. (D)
process with	2.3.2 Interviews client/patient to collect subjective information considering the determinants of health. (D)
individuals, groups or	2.3.3 Conducts a nutrition focused physical exam. (D)
populations in a variety of practice settings. (D)	2.3.4 Takes a food and nutrition related medical history. (D)
produce seeminger (2)	2.3.5 Assesses physical activity and history of physical activity. (D)
	2.3.6 Collects, assesses and interprets anthropometric measures and body composition. (D)
	2.3.7 Orders, collects and interprets biochemical tests. (D)
	2.3.8 Analyzes diagnostic test results relevant to nutrition (e.g. diagnostic imaging related to fluoroscopy, swallowing evaluation, enteral feeding tube placement). (D)
	2.3.9 Identifies signs and symptoms of nutrient deficiencies or excesses. (D)
	2.3.10 Determines barriers that might influence a client/patient's nutritional status. (D)
	2.3.11 Determines accuracy and currency of nutrition assessment data. (D)
	2.3.12 Identifies patient appropriate validated formula and performs calculations to determine nutritional requirements. (D) <u>Diagnosis</u>
	2.3.13 Analyzes and synthesizes nutrition assessment data to inform nutrition diagnosis(es) and nutritional plan of care. (D)
	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)
	2.3.17 Orders nutrition prescriptions to address nutritional goals. (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)
	2.3.20 Develops and applies nutrition care outcome indicators to measure nutrition intervention. (D)
	2.3.21 Assesses client/patient's compliance with nutrition intervention. (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)
	2.3.23 Summarizes impact of nutrition interventions on client/patient's nutrition outcomes, considering client/patient- centered care. (D)
	2.3.24 Identifies, analyzes and communicates reasons for deviation from expected nutrition outcomes. (D)

	2.3.25 Evaluates the availability of services to support access to nutrition care and to help meet client/patient nutrition goals. (D)
	 Documentation 2.3.26 Documents all elements of the nutrition care process following professional standards and organizational policies. (D) 2.3.27 Demonstrates coding and billing procedures to obtain payment for nutrition services under alternate health care payment models. (D)
2.4*	Medical Nutrition Therapy
Implements or coordinates	2.4.1 Manages medical nutrition therapy for clients/patients. (D)
nutritional interventions for individuals, groups or	2.4.2 Applies and integrates understanding of foundational sciences to manage medical nutrition therapy, diet and disease management. (D)
populations. (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) 2.4.4 Considers and applies all relevant factors when recommending the use of oral nutritional supplements. (D) 2.4.5 Refers/transfers care to relevant professionals when client/patient needs or required interventions are beyond personal competence or professional scope of practice. (D)
	<u>Education</u>
	2.4.6 Applies education theories, adult learning, pedagogy and education principles when developing, modifying, delivering or implementing education materials. (D)
	2.4.7 Assesses audience's readiness to learn and identifies barriers to learning. (D)
	2.4.8 Develops or modifies nutrition education materials or delivery methods to meet the needs of the audience. (D)
	2.4.9 Develops and provides evidence-informed nutritional wellness and therapeutic diet education to variety of audiences. (D)
	2.4.10 Translates basic to advanced food and nutrition science knowledge into understandable language tailored to the audience. (D)
	2.4.11 Communicates complex nutrition information to broad and diverse audiences. (D)
	2.4.12 Evaluates effectiveness of nutrition education and makes modifications as required. (D) <u>Psychological Counseling and Therapies</u>
	2.4.13 Assesses client/patient's nutritional needs and appropriateness for the recommended counseling or therapy. (D) 2.4.14 Applies counseling principles and evidence-informed practice when providing individual or group sessions. (D)
	2.4.15 Identifies the indications, contraindications, benefits, risks and limitations of the counseling or therapy. (K)
	2.4.16 Demonstrates understanding of transference and counter transference in the therapeutic relationship. (K)
	2.4.17 Demonstrates awareness of various appropriate counseling techniques. (K)
	2.4.18 Evaluates effectiveness of the counseling or therapy and makes modifications as required. (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*	2.5.1 Applies knowledge of foundational sciences and disease when determining the appropriateness of the therapy. (S)
Prescribes, recommends and administers nutrition- related pharmacotherapy. (S)	2.5.2 Demonstrates awareness of food and drug interactions. (S)
	 2.5.3 Assesses client/patient factors to determine the client/patient's indication for the nutrition-related pharmacotherapy. (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)
	2.5.5 Critically analyzes the potential negative effects of the nutrition therapy or supplement and determines the required knowledge, skill and judgment required to manage negative outcomes. (S)
	2.5.6 Prescribes, recommends and administers nutrition related pharmacotherapy adhering to the professional standards and evidence-informed practice. (S)
	2.5.7 Applies the standard of practice, legislation, organizational policies and evidence-informed practices for prescribing. (S)
	2.5.8 Applies the principles of safe drug administration. (S)
	2.5.9 Monitors the response and the effects of the nutrition related drugs on the individual and takes the required action to make modifications or adjustments. (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 3: Food Systems Management

Applies food systems principles and management skills to ensure safe and efficient delivery of food and water.

Competencies	Performance Indicators
3.1*	3.1.1 Manages or oversees the planning, designing and coordination of meals to ensure delivery of nutritionally sound meals. (D)
Directs the production and distribution of quantity and quality of food products. (D)	3.1.2 Analyzes the workflow design and makes recommendations for modifications or approves for implementation. (D)
	3.1.3 Communicates the organization's mission and how work activities impact the services and organization. (D)
	3.1.4 Establishes and analyzes policies and performance measures for quality and quantity of work. (D)
	3.1.5 Implements systems to report on local, state and federal compliance. (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)
	3.1.8 Investigates and optimizes opportunities to reduce the environmental impact of foodservice operations and to enhance sustainability. (D)

3.2* Oversees the purchasing, receipt and storage of products used in food production and services. (D)	3.2.1	Follows a matrix or measures to evaluate the need for financial, technical and equipment resources for the provision of foodservices. (D)
	3.2.2	Applies ethical decision making to determine the need for reduction or increase in resources. (D)
	3.2.3	Creates internal or external professional relations and/or agreements to solve problems in foodservice operations. (D)
	3.2.4 3.2.5	Acts as a departmental and organizational liaison between contractual parties involved. (S) Demonstrates knowledge of inventory control as it pertains to the food and supplies of the foodservice operation. (K)
	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	3.3.1	Maintains currency in and follows applicable legislation and guidelines. (D)
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)
	3.3.3	Develops a plan to minimize vulnerabilities in the food supply chain. (D)
	3.3.4	Takes into consideration food allergies when preparing menus and foods. (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 A. Community and Danu	lation	Hoolth Nutrition

Unit 4: Community and Population Health Nutrition

Applies community and population nutrition health theories when providing support to community or population nutrition programs.

Competencies	Performance Indicators
4.1* Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs. (D)	4.1.1 Recognizes how determinants of health, epidemiological findings, health disparities, political interest, availability of resources, and accessibility influence the nutritional health and well-being of a community and population. (D)
	4.1.2 Conducts community and population based assessments considering all relevant factors. (D)
	4.1.3 Identifies the resources and connects with partners needed for sustainability of the program. (D)
	4.1.4 Develops and implements a program considering relevant data addressing the nutrition needs of the community or population. (D)
	4.1.5 Interprets and uses nutrition surveillance and global health and safety data. (D)
	4.1.6 Evaluates the program using measurement indicators and outcomes. (D)
	4.1.7 Communicates evaluation findings, outcomes, recommendations and research findings to promote change and justify program. (D)
4.2	4.2.1 Interprets legal terminology used to establish nutrition regulations and policies for populations. (K)
Engages in legislative and regulatory activities that address	4.2.2 Navigates governmental, intergovernmental and nongovernmental organizations to promote nutrition legislation and regulations that address public, population and global nutrition health. (D)

community, population and global nutrition health and nutrition policy. (D)	4.2.3 Analyzes political interests and their impact on program development, goals and objectives. (D)
Unit 5: Leadership, Business,	Management and Organization
Demonstrates leadership, business	and management principles to guide practice and achieve operational goals.
Competencies	Performance Indicators
5.1*	5.1.1 Exhibits self-awareness in terms of personality, learning, leadership style and cultural orientation. (S)
Demonstrates leadership skills to	5.1.2 Demonstrates understanding of social cues and team dynamics. (K)
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)
	5.1.5 Reflects on situations and critically evaluates outcomes and possible alternate courses of action. (D)
	5.1.6 Understands the mentoring role and practices mentoring and precepting others. (D)

5.2*	Planning
Applies principles of organization	5.2.1 Establishes operational plan considering budget, inventory control, labor and regular daily tasks. (D)
management. (D)	5.2.2 Aligns plans with the organizational strategic plan, mission and vision. (D)
	Organizing
	5.2.3 Assigns responsibilities to various team members according to scope of practice and personal competence. (D)
	5.2.4 Sets and monitors clear targets for team members, departments and the organization aligned with common objectives and goals. (D)
	5.2.5 Demonstrates an understanding of how individuals and groups interact within the organization. (D) 5.2.6 Takes into consideration individual and organizational culture and behaviors when planning and managing. (D)
	<u>Management</u> 5.2.7 Engages in, manages or leads human resource activities adhering to applicable legislation and regulations. (D)
	5.2.7 Engages in, manages or leads human resource activities adhering to applicable legislation and regulations. (D)5.2.8 Integrates change management theories and conflict resolution skills to manage and promote positive change. (S)
	5.2.9 Uses persuasive communication skills to influence or produce a desired outcome during negotiations and conflict
	resolution discussions. (D)
	5.2.10 Understands and respects roles and responsibilities of inter professional team members. (D)
	<u>Controls</u>
	5.2.11 Collects, understands and analyzes financial data to support fiscally responsible decision making. (D)
	5.2.12 Conducts cost effectiveness and cost benefit analyses to identify ways to meet budget priorities. (D)
	5.2.13 Analyzes components of a productivity system including units of service and work hours and makes recommendations. (D)
	5.2.14 Sets controls to analyze the progress and effectiveness of the operational plan and budget. (D)
	5.2.15 Collects and analyzes data to evaluate outcomes and determine if established goals and objectives are met. (D)
	5.2.16 Reevaluates the plan to make modifications to ensure positive outcomes and that goals and objectives are met. (D)
	Time Management
	5.2.17 Applies principles of time management to monitor and enhance personal productivity and productivity of others. (D)
	5.2.18 Prioritizes activities to effectively manage time and workload. (D)
	Motivation and Recognition
	5.2.19 Promotes team involvement and values the skills of each member. (D)
	5.220 Models behaviors that maximize group participation by consulting, listening and communicating clearly. (D)
	5.2.21 Takes innovative approaches to build support and maintain a diverse workforce. (D)
	5.2.22 Coaches and advises team leaders on resolving differences or dealing with conflict. (D)
5.3*	5.3.1 Leads the development and completion of a project plan and budget. (D)

Applies project management principles to achieve project goals and objectives. (D)	 5.3.2 Identifies the project strengths, weaknesses, opportunities and threats. (D) 5.3.3 Identifies and manages potential and real risks to the plan, individuals or organization. (D) 5.3.4 Conducts regular review of project to note strengths and opportunities for improvement and to implement adjusted actions. (D)
5.4 Leads quality and performance improvement activities to measure evaluate and improve a program 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)
	5.4.4 Develops, implements and communicates an ongoing measuring and monitoring system to ensure ongoing quality and performance improvement. (D)
	5.4.5 Applies change management theories and principles to effectively implement change. (D)
5.5	5.5.1 Assesses potential and real risks to an individual, group and or organization. (D)
Develops and leads implementation of risk management strategies and programs. (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.

Competencies	Performance Indicators
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)	6.2.1 Identifies, explains and applies the steps of the scientific method and processes. (D)
	6.2.2 Articulates a clear research question or problem and formulates a hypothesis. (D)
	6.2.3 Identifies and demonstrates appropriate research methods. (D)
	6.2.4 Interprets and applies research ethics and responsible conduct in research. (D)
	6.2.5 Collects and retrieves data using a variety of methods (qualitative, quantitative) and technologies. (D)
	6.2.6 Analyzes research data using appropriate data analysis techniques (qualitative, quantitative, mixed). (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)	6.3.1 U	Ises research terminology when communicating with other professionals and publishing research. (D)
		Critically examines and interprets current research and evidence-informed practice findings to determine the validity, eliability and credibility of information. (D)
		i.3.3 Integrates current research and evidence- informed practice findings into delivery of safe and effective nutrition are. (D)
		i.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.

Competencies	Performance Indicators
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)
	7.1.2 Engages in self-reflective practice activities to develop and maintain ongoing competence and professional behaviors. (D)
	7.1.3 Adheres to nutrition related legislation, regulations and standards of practice. (D)
	7.1.4 Applies client/patient-centered principles to all activities and services. (D)
	7.1.5 Identifies and takes steps to manage unethical, incompetent and unsafe behavior. (S)
	7.1.6 Practices in a manner that respects diversity and avoids prejudicial treatment. (D)
	7.1.7 Adheres to legislative requirements and facility/employer guidelines regarding protection of privacy and security of information. (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)
	7.2.3 Participates in advocacy activities to change or promote new legislation and regulation. (D)
	7.2.4 Selects mode of communication appropriate to the messaging to meet the needs of the audience. (D)