Please use the following template to insert learning outcomes into your course syllabi.

Delete all outcomes **EXCEPT** those that are addressed in the course at the level of ‘3 – this is a major focus of the course’. Copy and paste the remaining table in your course syllabi.

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| **FSHN Department and Program Outcomes Assessment:** |
| *All graduates from the FSHN Department should be able to demonstrate the General Department Outcomes. This course will contribute to your ability to:* |
| 1. **Communicate effectively with others in one-on-one, small group, and large group situations.** |
| 1. **Prepare and deliver effective presentations of technical information to food science and nutrition professionals and to the general public.** |
| 1. **Accurately interpret data and research literature to solve complex problems.** |
| 1. **Critically evaluate information on food science and nutrition issues appearing in the popular press.** |
| 1. **Conscientiously apply your profession's code of ethics in your work.** |
| 1. **Demonstrate social and cultural competence relative to diversity and inclusions.** |
| **7. Analyze the environmental dimensions of issue facing professionals.** |
| **8. Facilitate and participate effectively in a team.** |
| **9. Plan and implement purposeful life-long learning activities with the aim of improving professional competence.** |
| **10. Demonstrate creativity in the discipline in ways that have practical benefits.** |
| *Students should also be able to demonstrate FSHN Program-Specific Outcomes, grouped by program: Culinary Food Science (CS), Food Science (FS), Dietetics/Diet and Exercise (KRDN), Nutritional Sciences-pre health professional (NSH), Nutritional Sciences-wellness (NSW). This course will contribute to your ability to:* |
| **CS 1. Explain the chemistry underlying the properties of various food components.** |
| **CS 2. Discuss the major chemical reactions that occur during food preparation and storage.** |
| **CS 3. Discuss the important pathogens and spoilage microorganisms in foods.** |
| **CS 4. Explain the effects of common food preparation methods and food storage conditions on survival and growth of microbial contaminants. Obtain food protection manager certification (e.g. ServSafe®).** |
| **CS 5. Discuss basic principles of common food preservation methods.** |
| **CS 6. Discuss basic principles and practices of cleaning and sanitation in food preparation operations.** |
| **CS 7. Interpret statistical data as used in food science applications.** |
| **CS 8. Use appropriate computer software to perform required tasks or solve problems in food science.** |
| **CS 9. Conduct appropriate sensory evaluation tests to answer specific questions regarding food attributes or consumer preferences.** |
| **CS 10. Describe techniques that can be used to monitor quality of raw ingredients and final products.** |
| **CS 11. Locate and interpret government regulations regarding the manufacture and sale of food products.** |
| **CS 12. Summarize and critically discuss current topics of importance in culinary & food science.** |
| **CS 13. Identify and explain nutrients in foods and the specific functions in maintaining health.** |
| **CS 14. Apply food science knowledge to describe functions of ingredients in food.** |
| **CS 15. Apply marketing and advertising principles to describe consumer behavior in food selection.** |
| **CS 16. Demonstrate leadership, entrepreneurial characteristics, and professional behaviors.** |
| **CS 17. Identify specific culinary trends including the cultural and regional cuisines.** |
| **CS 18. Apply culinary terminology knowledge to described food products.** |
| **CS 19. Utilize standard weights and measures to demonstrate scaling/ measurement techniques.** |
| **CS 20. Apply principles of menu planning and food presentation.** |
| **CS 21. Demonstrate proficiency when using culinary techniques, culinary equipment and knives during food preparation.** |
| **CS 22. Apply principles from the various facets of culinary science and related disciplines to solve practical, real- world problems.** |
| **CS 23. Modify recipe/formulation for specific purposes, such as nutrient enhancement, quality improvement, and ingredient substitution.** |
| **FS 1. Explain the chemistry underlying the properties of various food components.** |
| **FS 2. Discuss the major chemical reactions that occur during food processing and storage.** |
| **FS 3. Discuss the important pathogens and spoilage microorganisms in foods, the most likely sources of these organisms, and the conditions under which they grow.** |
| **FS 4. Explain the effects of common food processing systems and food storage conditions on survival and growth of microbial contaminants.** |
| **FS 5. Discuss the basic principles of food preservation methods, including high and low temperature, drying and water activity control, high pressure, extrusion, fermentation, and aseptic processing.** |
| **FS 6. Discuss basic principles and practices of cleaning and sanitation in food processing operations, as well as requirements for water utilization and waste management.** |
| **FS 7. Interpret statistical data as used in food science applications.** |
| **FS 8. Use appropriate computer software to perform required tasks or solve problems in food science.** |
| **FS 9. Conduct appropriate sensory evaluation tests to answer specific questions regarding food attributes or consumer preferences.** |
| **FS 10. Describe techniques that can be used to monitor quality of raw ingredients and final products.** |
| **FS 11. Locate and interpret government regulations regarding the manufacture and sale of food products.** |
| **FS 12. Summarize and critically discuss current topics of importance in food science.** |
| **FS 13. Explain functions of specific nutrients in maintaining health.** |
| **FS 14. Identify what foods are good sources for what nutrients.** |
| **FS 15. Apply principles from the various facets of food science and related disciplines to solve practical, real-world problems.** |
| **FS 16. Discuss the response of microorganisms to environmental stress factors, and the principles of sanitation practices to control microorganisms.** |
| **FS 17. Explain spoilage and deterioration mechanisms in foods.** |
| **FS 18. Select appropriate techniques to solve specific problems in food analysis.** |
| **FS 19. Correctly use appropriate laboratory techniques in food chemistry and food analysis.** |
| **FS 20. Discuss the role of beneficial microorganisms in foods and their use in fermentation processes.** |
| **FS 21. Correctly use appropriate laboratory techniques to enumerate, isolate, and identify microorganisms in foods.** |
| **FS 22. Identify and describe the appropriate unit operations required to produce different types of food products.** |
| **FS 23. Perform mass and energy balances for a given food process.** |
| **FS 24. Discuss the properties and uses of various packaging materials.** |
| **KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions.** |
| **KRDN 1.2 Use current information technologies to locate and apply evidence-based guidelines and protocols.** |
| **KRDN 1.3 Apply critical thinking skills.** |
| **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 Nutrition and Dietetics Practice and the Code of Ethics for the Profession of Nutrition and Dietetics; and describe interprofessional relationships in various practice settings.** |
| **KRDN 2.3 Assess the impact of a public policy position on nutrition and dietetics practice.** |
| **KRDN 2.4 Discuss the impact of health care policy and different health care delivery systems on food and nutrition services.** |
| **KRDN 2.5 Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.** |
| **KRDN 2.6 Demonstrate an understanding of cultural competence/sensitivity.** |
| **KRDN 2.7 Demonstrate identification with the nutrition and dietetics profession through activities such as participation in professional organizations and defending a position on issues impacting the nutrition and dietetics profession.** |
| **KRDN 2.8 Demonstrate an understanding of the importance and expectations of a professional in mentoring and precepting others.** |
| **KRDN 3.1 Use the Nutrition Care Process to make decisions, identify nutrition-related problems and determine and evaluate nutrition 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 3.4 Explain the processes involved in delivering quality food and nutrition services.** |
| **KRDN 3.5 Describe basic concepts of nutritional genomics.** |
| **KRDN 4.1 Apply management theories to the development of programs or services.** |
| **KRDN 4.2 Evaluate a budget and interpret financial data.** |
| **KRDN 4.3 Describe the regulation system related to billing and coding, what services are reimbursable by third party payers, and how reimbursement may be obtained.** |
| **KRDN 4.4 Apply the principles of human resource management to different situations.** |
| **KRDN 4.5 Describe safety principles related to food, personnel and consumers.** |
| **KRDN 4.6 Analyze data for assessment and evaluate data to be used in decision-making for continuous quality improvement.** |
| **NSH 1. Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical evidence-based practice decisions.** |
| **NSH 2. Use current information technologies to locate and apply evidence-based guidelines and protocols.** |
| **NSH 3. Demonstrate effective and professional oral and written communication and documentation and use of current information technologies when communicating with individuals, groups and the public.** |
| **NSH 4. Apply knowledge of biochemistry and physiology to human nutrient metabolism.** |
| **NSH 5. Explain rationale for nutrient intake recommendations across the lifespan.** |
| **NSH 6. Design and critique evidence-based nutrition interventions for the prevention and control of chronic diseases.** |
| **NSH 7. Develop a research proposal, conduct research, interpret and report research results.** |
| **NSW 1. Apply knowledge of the role of nutrition and healthy eating for disease prevention and wellness.** |
| **NSW 2. Explain how public policies are formed and implemented.** |
| **NSW 3. Explain the structure and components of food systems and analyze the relationships between nutritional health and food selection.** |
| **NSW 4. Explain the influence of public policy on consumer behavior related to food choice.** |
| **NSW 5. Develop effective strategies to engage populations in promotion of nutritional well-being.** |
| **NSW 6. Demonstrate effective program planning and evaluation.** |
| **Health Coach Option:** |
| 1. **Apply knowledge of the role of physical activity in disease prevention and wellness.** |
| 1. **Synthesize strategies that facilitate behavior changes for enhanced health.** |
| **Food Service Option:** |
| 1. **Plan, organize, coordinate and evaluate food service operations relative to the budget/financial data, food safety regulations, human resource management, and continuous quality improvement.** |
| **Family Health Option:** |
| 1. **Synthesize approaches to wellness across the life span that strengthen families.** |
| **Global Health and Policy Option:** |
| 1. **Synthesize integrative strategies to develop resource systems and policies that benefit global health.** |