

## **CORE COMPETENCIES FOR NUTRITION, DIETETICS AND FOOD SCIENCE GRADUATE STUDENTS**

### **Family & Consumer Sciences (FCS) Department, California State University Northridge**

Students who graduate from the Masters Program in the FCS Department with an emphasis in Nutrition, Dietetics and Food Science should be able to demonstrate the following core competencies. For students who chose the comprehensive examinations as a culminating experience, these core competencies will form the foundation for the six questions on their exam. One question will come from Core Competencies 1, 2, and 3. At least one question will come from Core Competencies 4 and 5, and at least one question will come from Core Competencies 6 and 7.

#### **Core Competency 1: Integration of Nutrition, Dietetics and Food Science with Family and Consumer Sciences (FCS)**

Students should be able to:

- Explain how their interest area within Nutrition, Dietetics and Food Science fits within the broader umbrella of FCS.
- Discuss how Nutrition, Dietetics and Food Science address the issues important in FCS, and/or
- Explain the ethical issues and ethical practices of an FCS professional.

#### **Core Competency 2: Application and Comparison of Nutrition, Dietetics and Food Science-related Theories**

Students should be able to (1) provide a brief overview of each theory, (2) explain the assumptions of each theory, (3) compare and contrast how each theory might address a Nutrition, Dietetics and Food Science issue, and (4) give the strengths and criticisms of each theory.

- Human Ecological Theory or Developmental Contextual Theory
  - Students should be able to (1) provide a brief overview of the theory, (2) explain the assumptions of the theory, (3) compare and contrast the HET theory with other human/health-related behavior theories (Core Competency 2), and (4) give the strengths and criticisms of each theory.
- Behavior Modification Theory\*\* (ND students only)
- Cognitive-behavioral Theory\*\* (ND students only)
- Stages of Change Theory (ND students only)

\*\* Based on American Dietetic Association's Evidence Analysis Project (EAP) 2007-2009

#### **Core Competency 3: Application of Research Methods, Design, and Statistics to a Nutrition and Dietetic or Food Science Issue**

Students should be able to synthesize scholarly literature on a topic of interest. The student should be able to explain:

- The general findings of research on the topic,
- The limitations of previous research on the topic, and
- Suggestions for future research on the topic.

Students should be able to design a research study that investigates the relationship between a Nutrition, Dietetics and Food Science nutrition-related issue and prevention or treatment protocol. The student should be able to explain the following:

- Sampling frame of the study,
- Generalizability of the sample to the population,
- Research design,
- Data collection procedures and measurement,
- Threats to internal and external validity, and
- Strengths and limitations of the design.

#### **Core Competency 4: Evaluation of a Nutrition, Dietetics and Food Science-based Education Program Design.**

Students should be able to design an evaluation of a program established to address a Nutrition, Dietetics and Food Science-related issue (E.g. Obesity Prevention Education Program for Families; Food Safety). The students should be able to distinguish between formative and outcome evaluation efforts. For outcome evaluation, the students should be able to elaborate on the following components:

- Link the outcome variables to the specified program goals,
- Identify the sampling frame,
- Recruitment of the sample,

- Generalizability of the sample to the population,
- Best research design,
- Types of evaluation procedures,
- Who will do the evaluation, and
- Threats to internal/external validity.

#### **Core Competency 5: (Only for ND students) Perform the Nutrition Care Process**

Students should be able to:

- Use standardized language for individuals, groups and populations of differing age and health status, in a variety of settings
- Assess the nutritional status of individuals, groups, and populations where nutrition care is or can be delivered.
- Diagnose nutrition problems and create problem, etiology, signs and symptoms (PES) statements.
- Plan and implement nutrition interventions to include prioritizing the nutrition diagnosis, formulating a nutrition prescription, establishing goals and selecting and managing intervention.

#### **Core Competency 6: (Only for FS students)**

Students should be able to:

- Be able to apply and incorporate the principles of food science in practical-real world problems and situations.
- Be familiar with the major food components and their chemical reactions and interactions with other food and non-food components.
- Be able to apply statistical principles to food science applications.
- Be aware of current topics of importance to the food industry.

#### **Core Competency 7: Emerging Issues in Nutrition, Dietetics and Food Science**

Students should be able to discuss current trends and emerging issues in Nutrition, Dietetics and Food Science. Also, they should be able to (a) discuss the current research involving the issue/topic and how it relates to Nutrition, Dietetics and Food Science today, (b) explain any changes foreseen in the future and how will impact the field of Nutrition, Dietetics and Food Science of tomorrow, and (c) discuss how the research will contribute to our overall knowledge of Nutrition, Dietetics and Food Science.

#### **Success skills, based on IFT recommended competencies:**

- Communication skills (i.e., oral and written communication, listening, interviewing, etc.)
  - Demonstrate the use of oral and written communication skills. This includes such skills as writing technical reports, letters and memos; communicating technical information to a nontechnical audience; and making formal and informal presentations.
- Critical thinking/problem solving skills (i.e., creativity, common sense, resourcefulness, scientific reasoning, analytical thinking, etc.)
  - Define a problem, identify potential causes and possible solutions, and make thoughtful recommendations.
  - Apply critical thinking skills to new situations.
- Professionalism skills (i.e., ethics, integrity, respect for diversity)
  - Commit to the highest standards of professional integrity and ethical values.
  - Work and/or interact with individuals from diverse cultures.