

Food Science and Dietetics

ACADEMIC SKILLS

AA SPEAKING AND LISTENING

AA1 Utilize effective verbal and non-verbal communication skills

AA2 Participate in conversation, discussion and group presentations

AA3 Communicate and follow directions/procedures

AA4 Utilize speaking and listening skills to communicate effectively with customers and co-workers

AB READING AND WRITING

AB1 Locate and interpret written information

AB2 Read and interpret workplace documents, e.g., reports, manuals, schematics, flowcharts, tables, graphs

AB3 Identify relevant details, facts and specifications

AB4 Record information accurately and completely

AB5 Demonstrate competence in organizing, writing and editing using correct vocabulary, spelling, grammar and punctuation

AB6 Demonstrate the ability to write clearly and concisely using industry-specific terminology

AC CRITICAL THINKING AND PROBLEM SOLVING

AC1 Utilize critical-thinking skills to determine best options/outcomes, e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning

AC2 Utilize innovation and problem-solving skills to arrive at the best solution for the current situation

AC3 Implement effective decision-making skills

AD MATHEMATICS

AD1 Perform basic and higher-level math operations, e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios, numbering systems

AD2 Solve problems using measurement skills, e.g., distance, weight, area, volume

AD3 Make reasonable estimates

AD4 Use tables, graphs, diagrams and charts to obtain or convey information

AD5 Use reasoning and problem-solving skills in mathematics

AE FINANCIAL LITERACY

AE1 Locate, evaluate and apply personal financial information

AE2 Identify the components of a budget and how one is created

AE3 Set personal financial goals and develop a plan for achieving them

AE4 Describe types of financial service providers and considerations in selecting a provider

AE5 Demonstrate ability to meet financial obligations

AF INTERNET USE AND SECURITY

AF1 Recognize the potential risks associated with internet and social media use

AF2 Identify and apply internet security practices, e.g., password security, login, logout, log off, lock computer

AF3 Practice safe, legal and responsible use of technology in the workplace

AG INFORMATION TECHNOLOGY

AG1 Use technology appropriately to enhance professional presentations

AG2 Demonstrate effective, appropriate and ethical use of social media

AG3 Identify ways social media can be used as marketing, advertising and data gathering tools

AH TELECOMMUNICATIONS

AH1 Select and utilize the appropriate environment, devices, services and applications to complete workplace tasks

AH2 Demonstrate appropriate etiquette when using telecommunications, e.g., cell phone, e-mail, messaging services, online meetings, conference calls

EMPLOYABILITY SKILLS

EA POSITIVE WORK ETHIC

EA1 Explain the importance of pride and confidence about work and learning new tasks

EA2 Demonstrate consistent and punctual attendance

EA3 Demonstrate initiative in assuming tasks

EA4 Exhibit dependability in the workplace

EA5 Take and provide direction in the workplace

EA6 Accept responsibility for personal decisions and actions

EB INTEGRITY

EB1 Abide by workplace policies and procedures, e.g., safety, internet and cell phone use, code of conduct

EB2 Demonstrate honesty and reliability

EB3 Demonstrate ethical characteristics and behaviors

EB4 Maintain confidentiality and integrity of company information

EB5 Support the mission and vision of the company

EC SELF-REPRESENTATION

EC1 Demonstrate appropriate dress and hygiene in the workplace

EC2 Use language and manners suitable for the workplace

EC3 Demonstrate polite and respectful behavior toward others

ED TIME, TASK AND RESOURCE MANAGEMENT

ED1 Plan and follow a work schedule

ED2 Complete work tasks successfully with minimal supervision

ED3 Work successfully within budgetary constraints

ED4 Demonstrate ability to stay on task to produce high-quality deliverables on time

EE DIVERSITY AWARENESS

EE1 Define and differentiate diversity, equity, inclusion, discrimination and harassment

EE2 Work effectively with all customers and co-workers

EE3 Explain the benefits of diversity within the workplace

EE4 Explain the importance of respect for the feelings, values and beliefs of others

EE5 Identify strategies to bridge cultural/generational differences and use differing perspectives to increase the overall quality of work

EE6 Illustrate techniques for eliminating bias and stereotyping in the workplace

EE7 Identify ways tasks can be structured to accommodate the diverse needs of workers

EE8 Recognize the challenges and advantages of a global workforce

EF TEAMWORK

EF1 Recognize the characteristics of a team environment and conventional workplace

EF2 Demonstrate effective team skills, e.g., setting goals, listening, following directions, questioning, dividing work, conflict resolution, meeting facilitation, and evaluate their importance in the workplace

EG CREATIVITY AND RESOURCEFULNESS

EG1 Explain the importance of contributing and conveying new ideas in the workplace

EG2 Describe the importance of posing questions when developing ideas

EG3 Explain the value of varying ideas and opinions

EG4 Locate and verify information during the creative process

EH CONFLICT RESOLUTION

EH1 Identify conflict resolution skills to enhance productivity and improve workplace relationships

EH2 Implement conflict resolution strategies and problem-solving skills

EH3 Explain the use of documentation and its role as a component of conflict resolution

EI CUSTOMER/CLIENT SERVICE

EI1 Recognize the importance of and demonstrate how to properly greet/approach customers and clients

EI2 Identify and address needs of customers/clients

EI3 Provide helpful, courteous and knowledgeable service

EI4 Identify appropriate channels of communication with customers/clients, e.g., online, phone call, face-to-face

EI5 Identify techniques to seek and use customer/client feedback to improve company services

EI6 Explain the relationship between customer/client satisfaction and company success

EJ ORGANIZATIONS, SYSTEMS AND CLIMATES

EJ1 Define profit and identify factors affecting the profitability of a business

EJ2 Identify "big picture" issues in conducting business, e.g., forecasting, global market, risk management

EJ3 Identify roles in fulfilling the mission of the workplace

EJ4 Identify the rights of workers, e.g., adult and child labor laws, and other equal employment opportunity laws

EJ5 Recognize the chain of command, organizational flow chart system and hierarchy of management within an organization

EK JOB ACQUISITION AND ADVANCEMENT

EK1 Recognize the importance of maintaining a job and pursuing a career

EK2 Define jobs associated with a specific career path or profession

EK3 Identify and seek various work experience opportunities, e.g., volunteerism, internships, co-op, part-time/full-time employment

EK4 Prepare a resume, cover letter and job application

EK5 Prepare for and participate in a job interview, e.g., research company, highlight personal strengths, prepare questions, conduct a mock interview, dress appropriately

EK6 Explain the components of a successful job interview

EK7 Identify key factors to evaluate employment offers, e.g., salary, benefits packages

EK8 Explain the proper procedure for leaving a job

EL LIFELONG LEARNING

EL1 Acquire current and emerging industry-related information

EL2 Demonstrate commitment to learning as a life-long process and recognize learning opportunities

EL3 Identify various self-improvement opportunities

EL4 Explain the importance of adaptability in career planning and self-management, e.g., diverse portfolio, credentials, professional development

EL5 Employ leadership skills to achieve workplace objectives, e.g., personal vision, adaptability, change, shared vision

EL6 Recognize the importance of job performance evaluation and coaching as it relates to career advancement

EL7 Accept and provide constructive criticism

EL8 Describe the impact of the global economy on jobs and careers

EM JOB SPECIFIC TECHNOLOGIES

EM1 Identify the value of new technologies and their impact on driving continuous change and the need for lifelong learning

EM2 Research and identify emerging technologies for specific careers

EM3 Select appropriate technological resources to accomplish work

EN HEALTH AND SAFETY

EN1 Identify and assume responsibility for the safety of self and others

EN2 Follow safety guidelines in the workplace, e.g., OSHA, CDC

EN3 Explain the impact of personal health and wellness on job performance

OCCUPATIONAL SKILLS

OA CAREER PATHS WITHIN FOOD SCIENCE, FOOD TECHNOLOGY, DIETETICS, NUTRITION AND MEDICAL/HEALTHCARE OCCUPATIONS

OA1 Explain the roles and functions of individuals engaged in food science, food technology, dietetics, nutrition and medical/healthcare careers

OA2 Analyze opportunities for employment and entrepreneurial endeavors

OA3 Summarize education and training requirements and opportunities for career paths in food science, food technology, dietetics, nutrition and medical/healthcare careers including advanced professional education

OA4 Analyze the connection between food science, dietetics, nutrition and medical/healthcare occupations and local, state, national and global economies

OA5 Create an employment portfolio to communicate food science, food technology, dietetics, nutrition and medical/healthcare careers knowledge and skills

OA6 Analyze the role of professional organizations in food science, food technology, dietetics, nutrition and medical/healthcare careers

OB FOOD SAFETY AND SANITATION

OB1 Analyze factors that contribute to food borne illness

OB2 Analyze food service management safety and sanitation programs

OB3 Implement industry standards for documenting, investigating and reporting foodborne illnesses

OB4 Use the Hazard Analysis Critical Control Point (HACCP) during all food handling processes, i.e., the flow of food, to minimize the risks of food borne illness

OB5 Demonstrate practices and procedures that assure personal and workplace health and hygiene

OB6 Demonstrate standard procedures for receiving, storage and preparation of raw and prepared foods

OB7 Classify cleaning and sanitizing materials and their correct use

OB8 Use Occupational Safety and Health Administration's (OSHA), Right to Know Law and Safety Data Sheets (SDS) and explain their requirements in handling hazardous materials

OB9 Demonstrate waste disposal and recycling methods

OB10 Identify government agencies and laws, e.g., FDA, FAO, USDA, WHO, FSIS, NIFA, CDC, Delaney Clause, Labeling and Education Act of 1990, Federal Meat Inspection Act of 1906, GRAS List, that regulate the safety of the food supply

OC FOOD PREPARATION AND NUTRITION PRINCIPLES TO SUPPORT HEALTHY INDIVIDUALS AND COMMUNITIES

OC1 Recognize nutrient requirements across the life span, addressing the diversity of people, culture and religions

OC2 Interpret nutritional data

OC3 Apply principles of food production to maximize nutrient retention in menus

OC4 Assess the influence of cultural, socioeconomic and psychological factors on food and nutrition and behavior

OC5 Evaluate recipe/formula proportions and modifications for food production

OC6 Prepare a variety of foods to promote a healthy lifestyle, using relevant food preparation methods, techniques and skills

OC7 Plan menus, applying the dietary guidelines to meet various nutrient needs

OD BASIC CONCEPTS OF THE NUTRITION CARE PLAN FOR DIVERSE POPULATIONS

OD1 Describe nutritional needs of individuals

OD2 Identify the need for professional, e.g., RD, MD, PT, NPA, PA, nutrition care in chronic disease dietary management

OD3 Describe chronic disease and its relation to nutrition

OD4 Explore modified diets based on nutritional needs and health conditions

OD5 Utilize appropriate nutrition guidelines, e.g., USDA, FDA, Dietary Guidelines, to promote wellness and disease prevention

OE PRODUCT DEVELOPMENT, QUALITY ASSESSMENT AND CONSUMER MARKETING

OE1 Explore various factors that affect food preferences in the marketing of food to a variety of populations

OE2 Identify consumer trends that lead to food/beverage product development and marketing decisions

OE3 Prepare food for quality presentation and assessment

OE4 Maintain test kitchen/laboratory and related equipment and supplies

OE5 Implement procedures that support sustainable food systems, e.g., Farm-to-Table, local foods, impacts on local economy

OE6 Conduct sensory evaluations of food products

OE7 Explore current technologies for assuring the safety of food products

OF FOOD PREPARATION AND MANAGEMENT PRINCIPLES AND PRACTICES

OF1 Build menus to customer/client food preferences and available resources

OF2 Implement management principles for food preparation and production

OF3 Apply standards for food quality

OF4 Create and prepare standardized recipes

OF5 Apply standards for food quality for diverse customer populations, e.g., cultural, religious, medical, food allergies, individual preferences

OF6 Evaluate new food and equipment products utilizing most current guidelines and innovations in technology

OF7 Implement cost control procedures, e.g., measurement, portion control, conversions, food cost analysis and control, menu terminology, menu pricing, for menu planning

OF8 Establish par levels for the purchase of supplies based on an organization's needs

OF9 Utilize food safety criteria, e.g., time, temperature, date markings, cross-contamination, hand washing, personal hygiene, for safe food preparation

OG PRINCIPLES OF FOOD CHEMISTRY

OG1 Explain the nutritional composition, e.g., protein, carbohydrate, fat, vitamin, minerals, water, of food

OG2 Analyze the effects of temperature on chemical and physical reactions in foods

OG3 Explain the effects of acids and bases in food

OG4 Identify how the composition of simple and complex carbohydrates affects food preparation procedures

OG5 Identify how the composition of protein affects food preparation procedures

OG6 Identify how the composition of fat affects food preparation procedures

OG 7 Identify how the composition of vitamins and minerals affect food preparation procedures

OG8 Explain the use of microbes and enzymes in food products