

Department of Nutrition,
Food Studies & Public Health
COURSE BOOK
2008-2009

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***E33.0057 FOOD SERVICE COST CONTROLS**

45 hours: 3 points

Principles of cost control systems and managerial techniques for planning and controlling costs related to food, labor, plant, and property operations, maintenance, and other expenses in food service operations.

Objectives:

1. Describe basic accounting procedures and their application to food service management in selected types of operations.
2. Identify and apply internal cost controls, using manual and computer methods.
3. Write and maintain internal cost control and other business records and reports for managers and supervisors.
4. Demonstrate the use of cost control methods in work planning, management, and performance review through simulated documents.

**E33.0070 HEALTH AND SOCIETY:
AN INTRODUCTION TO PUBLIC HEALTH**

60 hours; 4 points

Provides an overview of public health with an emphasis on how biological, social, economic, and political factors work in concert to determine the health of populations around the world. It will discuss the determinants of population health, examine the origins and changing nature of public health problems over the past century, explore global inequalities in health, and probe controversial public health issues in a debate format. Emphasis will be placed on some of the ethical issues that have arisen from public health practice in both the US and abroad. At least one field trip to examine the role of the New York City Health Department is planned.

Objectives:

1. Define and describe the various dimensions of the field of Public Health
2. Help students develop a population perspective on health and disease
3. Define and describe the social determinants of health and explain how they differ from other (biological) determinants of health.
4. Encourage debates on individual versus societal rights related to the promotion of health and prevention of disease.

E33.0071 FOOD ISSUES OF CONTEMPORARY SOCIETIES

45 hours: 3 points.

Issues related to methods of food production, distribution, marketing, trade and politics, and the impact of these methods on food intake and the environment in contemporary societies.

Objectives:

1. Identify the principal problems related to food production and availability.
2. Describe the ways in which patterns of food production, distribution, and marketing affect food availability, food intake, and the environment.
3. Suggest methods that might be used by societies, governments, or individuals to address contemporary food issues.

E33.0085 INTRODUCTION TO FOODS AND FOOD SCIENCE

60 hours: 3 points

Fundamental concepts of basic foods, food use, and preparation are studied in the context of food science. Discussion also includes professional methods and skills in food preparation. Students must be signed up for the laboratory in conjunction with the lecture.

Objectives:

1. Identify the names and principal characteristics of the major classes of foods.
2. Identify and apply the scientific concepts involved in different stages of food preparation.
3. Demonstrate basic knowledge of culinary techniques. (E.1.3)†
4. Demonstrate the ability to apply food science knowledge to functions of ingredients in food. (E.3.5)
5. Demonstrate the ability to demonstrate basic food preparation and presentation skills. (E.3.6)
6. Demonstrate working knowledge of food safety and sanitation.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.0091 FOOD MANAGEMENT THEORY

45 hours: 3 points.

Organization and management of commercial and institutional food service facilities in hotel, restaurant, educational, and community program sites.

Objectives:

1. Describe basic techniques of negotiation. (A.1.1) †
2. Demonstrate working knowledge of quality improvement methods. (D.2.2)
3. Demonstrate the basic elements of strategic management. (G.1.2)
4. Demonstrate the basic elements of facility management. (G.1.3)
5. Demonstrate the basic elements of organizational change theory. (G.1.4)
6. Demonstrate the basic elements of risk management. (G.1.5)
7. Demonstrate working knowledge of management theories. (G.2.1)
8. Demonstrate working knowledge of human resource management, including labor relations. (G.2.2)
9. Demonstrate theoretical working knowledge of materials management. (G.2.3)
10. Demonstrate theoretical working knowledge of financial management, including accounting principles. (G.2.4)
11. Demonstrate theoretical working knowledge of quality improvement. (G.2.5)
12. Demonstrate working knowledge of systems theory. (G.2.7)
13. Demonstrate working knowledge of marketing theory and techniques. (G.2.8)

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

***E33.0092 FOOD MANAGEMENT THEORY II**

45 hours: 3 points.

Pre-requisites: E33.0085 Introduction to Foods and Food Science, E33.0091 Food Management Theory, E33.1052 Food Production and Management (may be taken concurrently).

Management applications and the use of marketing, accounting, and information systems within commercial and institutional food service systems and community food assistance programs.

Objectives:

1. Review and apply the planning, management, and evaluation processes for operations; total quality management and quality assurance; and standards, policies, and procedures for management of food and nutrition services.
2. Describe marketing, accounting, and information systems and their application to management of food and nutrition services.
3. Develop procedures for budgeting, measuring cost effectiveness, and decision-making within food and nutrition services.

E33.0119 NUTRITION AND HEALTH

45 hours: 3 points.

Introduction to nutrition science and its role in health and society: nutrient characteristics, requirements, and food sources; energy balance and weight control; dietary guides and food planning; and social and economic factors that affect food production and consumption.

Objectives:

1. Identify the principal food sources and principal functions of nutrients in the body.
2. Describe the amounts of essential nutrients required for normal growth and development, their translation into food guides, and the limitations of knowledge in this area.
3. Describe the principal biological, psychological, cultural, and socioeconomic factors that affect dietary intake.
4. Evaluate the accuracy and usefulness of nutrition information for the public.
5. Demonstrate working knowledge of the role of food in the promotion of a healthy lifestyle. (E.2.9)†
6. Demonstrate the ability to calculate and interpret nutrient composition of foods. (E.3.1)
7. Demonstrate basic knowledge of alternative nutrition and herbal therapies. (F.1.1)

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

***E33.0154 NUTRITION, FOOD, AND HEALTH**

30 hours: 2 points

Current issues related to the role of diet in health and society: nutrient requirements; effects of dietary deficiencies, excesses, and imbalances; impact of social and economic influences on food production, marketing, and consumption.

Objectives:

1. Identify the principal components of food and the ways they are digested, absorbed, transported, transformed, and used in the human body.
2. Describe the amounts of these food components that are required for human growth, development, and health, the experimental basis of Recommended Dietary Allowances for these components, and the limitations of current knowledge of human nutrient requirements.
3. Describe the principal biologic, behavioral, sociologic, economic, and political factors that affect dietary intake.
4. Describe the principal methods used to determine the nutrient composition of foods, and the limitations of these methods.
5. Describe the principal methods used to determine the dietary intake of individuals and populations, and define the limitations of these methods.
6. Determine the nutrient composition of a daily diet using food composition tables, and evaluate the information derived from this method.
7. Describe current dietary recommendations for health promotion and disease prevention, and evaluate the evidence on which they are based.
8. Evaluate the evidence that links dietary factors to selected health problems.
9. Identify current issues in nutrition, food, and health and explain why they are controversial.

***E33.1013 THE ROLE OF FOOD IN SOCIAL MOVEMENTS**

45 hours: 3 points

This course examines how food is used as a tool in social movements across cultures and time. Some of the themes of the course are food and revolutions, food as a form of social resistance, and food as an apparatus for governmental policies.

Objectives:

1. Students will learn that food's highly flexible meaning can be both a force for change as well as oppression.

**E33.1017 COMPUTERS IN NUTRITION AND FOOD SERVICE I:
INTRODUCTION**

15 hours: 1 point

Application and evaluation of basic computer tools and techniques for nutritional analysis and food service management. This course is offered on a pass/fail basis.

Objectives:

1. Demonstrate the ability to use current information technologies. (A.3.5)[†]
2. Solve routine problems typically encountered when using microcomputers in nutrition, food management, and food studies.
3. Describe the various kinds of software available for work in nutrition, food management, and food studies.
4. Demonstrate the use of basic word-processing and spreadsheet software for nutrition, food management, and food studies.

[†] Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

**E33.1018 COMPUTERS IN NUTRITION AND FOOD SERVICE II:
SOFTWARE APPLICATIONS**

15 hours: 1 point

Pre-requisite: E33.1017 Computers in Nutrition and Food Service I, or equivalent.

Application and evaluation of computer software tools for nutritional analysis and food service management. This course is offered on a pass/fail basis.

Objectives:

1. Demonstrate the ability to use current information technologies. (A.3.5)†
2. Describe and demonstrate use of networks and the Internet for obtaining information and resources on nutrition, food management, and food studies.
3. Demonstrate basic software for work in nutrition, food management, and food studies.
4. Describe and demonstrate basic software for analysis of dietary intake and management of food service operations.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

**E33.1019 COMPUTERS IN NUTRITION AND FOOD SERVICE III:
ADVANCED NUTRITION APPLICATIONS**

15 hours: 1 point

Pre-requisite: E33.1018 Computers in Nutrition and Food Service II, or equivalent.

Application and evaluation of advanced computer software tools for nutritional analysis and data management.

Objectives:

1. Describe professional methods for collecting and analyzing computerized data on dietary intake.
2. Describe the strengths and limitations of USDA and other commonly used nutrient databases for analysis of dietary intake.
3. Describe and demonstrate use of advanced computer software for analysis of dietary intake and management of nutrition systems.

***E33.1020 COMPUTERS IN NUTRITION AND FOOD SERVICE IV:
ADVANCED FOOD SERVICE APPLICATIONS**

15 hours: 1 point

Pre-requisite: E33.1018 Computers in Nutrition and Food Service III, or equivalent.

Application and evaluation of advanced computer software tools for nutritional analysis and data management.

Objectives:

1. Describe applications of computer technology in food management.
2. Determine appropriate methods for solving problems in food management using computer systems, software, and related technology.
3. Demonstrate the ability to compare, analyze, and evaluate computer software and hardware systems for use in management of food service systems.
4. Demonstrate use of software for management of food service systems.

E33.1023 FOOD MICROBIOLOGY AND SANITATION

45 hours: 3 points.

Food safety, processing, and regulatory issues related to the role of microorganisms in food processing and preservation. The use of Hazard Analysis Critical Control Points (HACCP) to prevent contamination of food, equipment, and personnel.

Objectives:

1. Demonstrate working knowledge of microbiology. (B.2.4)†
2. Demonstrate the ability to apply microbiological and chemical considerations to process controls. (B.3.3)
3. Demonstrate working knowledge of food safety and sanitation. (E.2.2)
4. Describe the basic microbiological, chemical, and particulate hazards that affect food handling.
5. Apply HACCP to menu planning; food purchasing, receiving, storage, preparation, and serving; and facilities cleaning and maintenance.
6. Apply federal, state, and local sanitation codes and regulations to food service operations.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1025 BEVERAGES

45 hours: 3 points

Introduction to basic principles and practical experience in development of beverage systems and menus. Considers pricing, equipment, legal, merchandising, and personnel policies.

Objectives:

1. Describe the principal alcoholic beverages consumed by human populations.
2. Describe the principal processes involved in manufacturing beer, wine, and spirits.
3. Identify and classify grape variety and vinification techniques in specified growing regions.
4. Implement internal controls and other financial control functions in beverage management.
5. Identify key legal requirements for beverage operations.
6. Apply techniques for safe and appropriate use of alcoholic beverages in food service operations.
7. Demonstrate basic principles and techniques of mixing alcoholic beverages.
8. Apply appropriate beverage selection and merchandising techniques to menu planning and marketing for maximum sales and profits.
9. Describe the process for planning and establishing a beverage management system within a food service operation.

**E33.1033 FOOD SYSTEMS I:
AGRICULTURE**

30 hours: 3 points

Pre-requisite: E33.0071 or E33.1210

Surveys issues surrounding food production from an agricultural perspective. Students will gain an understanding of how agricultural production shifted from a Jeffersonian ideal to an industrial and political practicality. Topics include the agrarian ideal of the yeoman farmer, the ascendancy of markets and agricultural commodification, the politicization of agriculture and the farm bill, and sustainable agricultural systems.

E33.1039 FOOD SERVICE SUPERVISION AND TRAINING

45 hours: 3 points.

Pre-requisites: management course and Junior standing.

Principles of training and supervision in food service management through lectures, demonstrations, and case studies.

Objectives:

1. Describe theories and labor laws related to human resource management.
2. Describe management techniques for preventing problems related to personnel.
3. Apply techniques for personnel management in work environments.
4. Apply management techniques for solving personnel problems in daily work situations.
5. Reinforce oral presentation skills.
6. Describe and apply leadership qualities that value diversity, engender creativity and innovation, promote product and service quality, and ensure financial profitability.

**E33.1048 FOOD MICROBIOLOGY AND SANITATION:
SAFETY CERTIFICATION**

15 hours: 1 point.

This course examines food service sanitation procedures: facilities, food handling, codes, and management responsibilities. It prepares students to take the National Restaurant Association's examination for food safety certification (ServSafe).

Objectives:

1. Demonstrate working knowledge of microbiology. (B.2.4)†
2. Demonstrate the ability to apply microbiological and chemical considerations to process controls. (B.3.3)
3. Demonstrate working knowledge of food safety and sanitation. (E.2.2)
4. Describe the basic microbiological hazards that affect food handling.
5. Describe appropriate methods for handling, storing, and preparing food in order to avoid or decrease microbial contamination.
6. List methods for designing and maintaining facilities and equipment free of microbial contamination.
7. Describe how appropriate food handling methods and personal hygiene prevent microbial hazards.
8. Describe codes and regulations required for food service sanitation.
9. Demonstrate procedures to avoid microbial contamination of food and equipment.
10. Identify HACCP (Hazard Analysis Critical Control Points) and the principal microbial, chemical, and particulate hazards that affect the food service industry.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1051 FOOD AND SOCIETY

30 hours: 2 points.

Explains the meanings and uses of food to individuals, groups, or societies as a whole. Examines how ethnicity, gender, socioeconomic status, and religion influence food choice and preference.

Objectives:

1. Identify the principal geographic, climate, and historical factors that influence the dietary patterns and use of specific foods among various societies, both today and in the past.
2. Identify cultural, social, and economic factors that influence food preferences and patterns.
3. Compare the ways in which current and historic dietary patterns have been affected by international, national, regional, and local food production and marketing.
4. Describe how individuals, groups, communities and societies identify themselves through food and foodways.

E33.1052 FOOD PRODUCTION AND MANAGEMENT

75 hours (25 hours lecture and 50 hours laboratory): 3 points.

Institutional and commercial food preparation and service: menu planning and pricing, recipe standardization, integrated with techniques, methods, principles, and standards of food purchasing, receiving, storage, and preparation, food procurement and merchandising, and staff supervision. Lecture and laboratory.

Objectives:

1. Demonstrate working knowledge of food delivery systems. (E.2.3)†
2. Demonstrate working knowledge of food and non-food procurement. (E.2.4)
3. Demonstrate working knowledge of food production systems. (E.2.7)
4. Demonstrate the ability to determine recipe/formula proportions and modifications for volume food production. (E.3.3)
5. Demonstrate ability to write specifications for food and food service equipment. (E.3.4)
6. Demonstrate working knowledge of information management. (G.2.6)
7. Demonstrate the ability to determine costs of services/operations. (G.3.1)
8. Demonstrate the ability to prepare a budget. (G.3.2)
9. Demonstrate the ability to interpret financial data. (G.3.3)
10. Demonstrate the ability to apply marketing principles. (G.3.4)
11. Determine recipe and formula proportions and modifications for menu planning.
12. Demonstrate appropriate techniques and methods of food preparation for groups of varying sizes.
13. Identify principal sources of information for menu planning and food procurement.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1054 FOOD FACILITY DESIGN AND EQUIPMENT

45 hours: 3 points.

Pre-requisites: E33.1052 Food Production and Management, E33.0091 Food Management Theory.

Food facility design, layout, and equipment selection, specification, and organization.

Objectives:

1. Describe functions such as drawing, programming, designing, and building, and concepts necessary to design facilities and select appropriate equipment for them.
2. Define the principal considerations involved in designing both the "front" and "back" of the house in food service facilities.
3. Indicate the principal considerations involved in equipment selection and layout in plans for new or renovated building sites.
4. Prepare a facility plan and equipment list with appropriate specifications.
5. Describe the principal considerations involved in dealing with suppliers, contractors, and consultants when designing food service facilities and selecting equipment.
6. Evaluate work performed by professionals involved in design and equipping of food service facilities.

E33.1056 INTERNSHIP IN FOOD STUDIES AND FOOD MANAGEMENT

45 hours per point plus hours arranged: 1-6 points

Pre-requisite: Junior status.

Practical work experience in food studies and food management supported by class work, discussion, and projects.

Objectives:

1. Apply classroom content to work experience.
2. Identify career options through professional seminars, work experience, and class discussions.
3. Develop professional skills through personal observations, work experience, and class assignments.
4. Identify resources and professional networks that support employment opportunities in the field of interest.

***E33.1063 CONTEMPORARY NUTRITION**

45 hours: 3 points.

Current issues in nutrition for non-majors: nutrient requirements, role of diet in health and disease, energy balance, and weight control. Skills needed to analyze personal diet and make healthy food choices.

Objectives:

1. Identify the major health functions and sources of key nutrients.
2. Recognize basic definitions of nutrition terms.
3. Evaluate the accuracy and usefulness of current information about nutrition and diet.
4. Adjust nutrient requirements and food choices for persons throughout the lifespan according to growth and developmental needs.
5. Apply principles of nutrition science to calculation of daily dietary intake.
6. Identify the biological, sociological, and psychological factors that affect dietary intake and nutritional status.
7. Identify sound criteria for achieving and maintaining desirable weight, and apply these principles to the evaluation of weight loss methods.
8. Identify the cultural meanings of food for individuals and societies.

E33.1064 NUTRITIONAL BIOCHEMISTRY

45 hours: 3 points.

Pre-requisite: E33.0119 Nutrition & Health, E33.1068 Nutrition-Focused Human Physiology, V25.0240 Organic Chemistry.

Co-requisite: E33.1269 Nutrition and The Life Cycle.

Study of the role of nutrients in the human body at the cellular level and in metabolism.

Objectives:

1. Demonstrate basic knowledge of biochemistry. (B.2.2)†
2. Demonstrate working knowledge of nutrient metabolism. (B.2.5)
3. Demonstrate working knowledge of nutrition and metabolism. (F.2.2)
4. Identify the structural and functional roles of major nutrient classes -- vitamins, minerals, proteins, fats, and carbohydrates -- in the human body.
5. Describe the principal mechanisms that regulate the metabolism of nutrients in the human body.
6. Describe the principal features of the metabolism of proteins, carbohydrates, fats, and cholesterol and the role of biochemical processes in chronic disease causation.
7. Identify the role of nutrients in nucleic acid structure and function in the human body.
8. Describe the role of nutrients in biosynthesis, secretion, and function of hormones in the human body, and in hormonal regulation of metabolism.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1068 NUTRITION-FOCUSED HUMAN PHYSIOLOGY

45 hours: 3 points.

Pre-requisite: E33.0119 Nutrition & Health

Co-requisite: None

This course is concerned with the basic concepts of structural and functional organization of the human body, the terminology involved in the areas of physiology and anatomy, and the understanding of the different anatomical and physiological systems that are more closely associated to the nutritional sciences.

Objectives:

1. Understand and explain the structural and functional organization of the human body.
2. List the functions of the different physiological systems covered in the course.
3. Integrate the functions of the different systems as they relate to human nutrition and metabolism.

***E33.1101 FOOD SERVICE ACCOUNTING MANAGEMENT**

45 hours: 3 points.

Pre-requisite: C10.0001 Fundamentals of Financial Accounting

Accounting procedures for the food service industry for control of revenues, expenses, assets, and liabilities, along with techniques for costing, budgeting, and pricing, with emphasis on their use in situation analysis and decision-making.

Objectives:

1. Describe accounting procedures required for decision-making and control in the food service industry.
2. Identify functions of the food service controller.
3. Describe accounting analysis and control in the food service industry.
4. Demonstrate techniques for financial control, costing, budgeting, and pricing.
5. Demonstrate use of the Uniform System of Accounts and other standard accounting systems for the food service industry.

***E33.1109 FOOD LAWS AND REGULATIONS**

45 hours: 3 points.

Pre-requisites: E33.0085 Introduction to Foods & Food Science I, E33.0091 Food Management Theory

Overview of legal issues affecting food service management: laws, contracts, taxes, and relations with administrative and regulatory agencies, both domestic and international.

Objectives:

1. Identify and describe regulations and administrative agencies that affect domestic and international operations.
2. Describe the effect of administrative processes of agencies at the local, state, and federal level.
3. Describe what constitutes a domestic and/or international contract.
4. Demonstrate ability to interpret and apply procedures by agencies to enforce laws and regulations for compliance.
5. Demonstrate through case studies and special projects the historical development of legislation and regulations affecting food service.
6. Apply and interpret rules, regulations, and laws to case study situations.
7. Apply case studies to ethical issues in a food service legal environment.

***E33.1110 FOOD MANAGEMENT ESSENTIALS I:
THEORY**

10 hours: 1 point

Survey of basic theoretical principles pertaining to food management. An accelerated course for students of food studies, nutrition, and related fields with limited previous managerial knowledge or experience.

Objectives:

1. Describe the planning, organizing, leading, and controlling of food operations.
2. Describe goal setting, planning, and strategy formulation for food industry operations.
3. Examine the interaction among individuals, groups, and organizations in food operations.

***E33.1111 FOOD MANAGEMENT ESSENTIALS II:
MARKETING AND SALES**

10 hours: 1 point

Pre-requisite: E33.1110 Food Management Essentials I: Theory

Survey of basic theoretical principles pertaining to marketing and sales. An accelerated course for students of food studies, nutrition, and related fields with limited previous managerial knowledge or experience.

Objectives:

1. Define the four components of marketing -- product, price, place, and promotions -- and their relevance to food products and services.
2. Define strategies involved in marketing food products and services.
3. Describe methods for evaluation of food marketing strategies.

***E33.1112 FOOD MANAGEMENT ESSENTIALS III:
FOOD INDUSTRY PERSONNEL MANAGEMENT**

10 hours: 1 point

Pre-requisite: E33.1110 Food Management Essentials I: Theory

Survey of basic theoretical principles pertaining to food industry personnel management. An accelerated course for students of food studies, nutrition, and related fields with limited previous managerial knowledge or experience.

Objectives:

1. Identify policies, procedures, skills, and methods required to recruit, train, manage, develop, and appraise food industry employees.
2. Identify the laws relevant to human resource practices.
3. Examine the relationship between line and personnel management.

***E33.1113 FOOD MANAGEMENT ESSENTIALS IV:
FINANCIAL ACCOUNTING**

10 hours: 1 point

Pre-requisite: E33.1110 Food Management Essentials I: Theory

Survey of basic theoretical principles pertaining to financial accounting for food operations. An accelerated course for students of food studies, nutrition, and related fields with limited previous managerial knowledge or experience.

Objectives:

1. Describe basic financial accounting models for the food industry, focusing on assets, liabilities, revenues, and expenses.
2. Demonstrate the three basic financial statements used in food industry operations: balance sheet, income statement, and statement of cash flow.
3. Demonstrate the use of the Uniform System of Accounts in food industry operations.
4. Demonstrate the techniques for financial cost control, costing, budgeting, and pricing for food industry operations, using ratio analysis.

E33.1117 CURRENT RESEARCH IN NUTRITION

30 hours: 2 points

Pre-requisite: Senior status

Undergraduate course in research methods and design for nutrition and dietetics majors that focuses on reading, interpreting and evaluating research in diet, genetics, and chronic disease.

Objectives:

1. Demonstrate basic knowledge of research methodologies. (D.1.1)†
2. Demonstrate basic knowledge of outcomes based research. (D.1.2)
3. Demonstrate basic knowledge of scientific method (D.1.3)
4. Demonstrate the ability to interpret current research. (D.3.1)
5. Demonstrate the ability to interpret basic statistics. (D.3.2)
6. Recognize the need for research in applied nutrition and dietetics.
7. Outline basic principles of research in nutrition and dietetics.
8. Describe the major components of a research project.
9. Identify investigative methods and ways to interpret and evaluate research studies.
10. Define procedures to collect data and analyze research results.
11. Practice selected research techniques.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1130 COMMUNICATIONS WORKSHOP IN FOODS AND NUTRITION

30 hours: 2 points.

Exposes students to the variety of ways food is written about across myriad media. Focus is placed on adapting the writer's voice to relevant fields while adhering to the stylistic conventions of a particular medium. Course limited to Juniors and Seniors.

Objectives:

1. Analyze messages communicated by marketing campaigns and media presentations.
2. Identify how the media and the public obtain information about food and nutrition topics.
3. Recognize the principles involved in making focused arguments and vivid presentations to achieve a desired impact on a target audience.
4. Demonstrate working knowledge of the principles of writing, revision, and editing as expressed in Strunk and White's Elements of Style.
5. Produce a communication product of professional quality in the medium of choice.
6. Demonstrate working knowledge of Powerpoint software through a class presentation.
7. Identify tactics and strategies to generate publicity for food and nutrition fields.
8. Learn about and produce a basic public relations plan, including a press kit, press release, brochure, and feature article.
9. Define and research a target audience.
10. Demonstrate working knowledge of Microsoft Publisher (or similar software) by using the software to produce brochure for press kit.

***E33.1134 ESSENTIALS OF CUISINE:
CHINESE**

15 hours per point: 1-3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to the art and science of cuisine in selected regions of China through lectures, demonstrations, hands-on preparation, and field trips.

Objectives:

1. Identify and classify the composition of food ingredients indigenous to selected regions of China.
2. Apply standard Chinese cooking techniques to food and meal preparation.
3. Identify characteristic components and methods of preparation of Chinese regional cuisines, and apply these methods in food and meal preparation.

***E33.1135 ESSENTIALS OF CUISINE:
INTERNATIONAL**

15 hours per point: 2-3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to the art and science of cuisine; characteristics of selected world cultures through lectures, demonstrations, hands-on preparation, and field trips.

Objectives:

1. Identify and classify the composition of food ingredients indigenous to selected world cultures.
2. Identify standard cooking techniques of these regions to food and meal preparation.
3. Identify characteristic components and methods of preparation of selected regional cuisines, and apply these methods in food and meal preparation.
4. Identify how cuisine evolves through outside factors including colonialism, geography, politics and economics.

***E33.1136 ESSENTIALS OF CUISINE:
GREEK**

15 hours per point: 1-3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to the art and science of cuisine in selected regions of Greece through lectures, demonstrations, hands-on preparation, and field trips.

Objectives:

1. Identify and classify the composition of food ingredients indigenous to selected regions of Greece.
2. Apply standard Greek cooking techniques to food and meal preparation.
3. Identify characteristic components and methods of preparation of Greek regional cuisines, and apply these methods in food and meal preparation.

***E33.1137 FOOD DEMONSTRATIONS**

15 hours per point: 1-3 points

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Principles and methods for planning, organizing, and demonstrating preparation of selected foods, meals, and cuisines -- especially those modified for nutritional or other purposes -- to small and large groups. May be repeated for up to 3 points.

Objectives:

1. Identify methods for organizing and conducting food demonstrations to groups.
2. Plan and conduct all elements of a food demonstration program: plan menu, select recipes, determine shopping list, and obtain equipment.
3. Identify communication methods appropriate for specific audiences for food demonstration programs.
4. Describe methods for including information about the food and nutrition context and purpose of demonstrated foods, meals, or cuisines.

***E33.1143 FOOD EVENTS:
PLANNING AND CATERING**

15 hours per point: 1-3 points

Organization of marketing, planning, pricing, purchasing, preparation, delivery, and service of foods and meals for specific purposes and occasions, at both on-premise and off-site locations.

Objectives:

1. Identify techniques and strategies needed to respond to client menu orders and requests.
2. Describe the principal components of menu plans and marketing strategies used in the catering industry.
3. Identify appropriate procedures for menu costing, food purchasing, staff scheduling, and food production, delivery, and service.
4. Describe the principal skills needed to manage and produce a catered event.

E33.1180 FOOD AND NUTRITION IN A GLOBAL SOCIETY

60 hours: 4 points.

Hours arranged for field trips will be added to class time in order to fulfill the 60 clock hours required for a 4-credit, 1000-level course.

This course, which fulfills the Integrated Liberal Arts requirement, unites the liberal arts experience with a specialization in food and nutrition. It contains three areas of focus: food and nutrition history; ethical issues in food and nutrition; and globalization as it relates to food and nutrition. Restricted to undergraduates with Senior status.

Objectives:

1. Introduce students to new areas of knowledge not covered in their current course of study, specifically food and nutrition history.
2. Provide opportunity to learn about and reflect upon major ethical issues in food, including those involving human labor, the globalization of the food supply, public health issues and agricultural concerns.
3. Employ emerging technologies, such as interactive media and the world wide web.
4. Develop practical initiatives promoting sustainable food behavior.

E33.1183 TECHNIQUES OF REGIONAL CUISINE

15 hours per point: 1-3 points

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to foods of various nationality groups and techniques used to prepare them through hands-on food preparation, demonstrations, lectures, and field trips.

Objectives:

1. Demonstrate advanced principles and techniques of professional food preparation using traditional components of regional cuisines.
2. Identify the principal elements of selected regional cuisines: Africa, Asia, Australia, Europe, North America, and South America.
3. Identify and compare principal flavor groupings and components of traditional cuisines.
4. Demonstrate the ability to adapt traditional recipes using non-traditional components.
5. Demonstrate and evaluate tools and equipment used in the preparation of traditional recipes.
6. Design regional menus to incorporate dishes from specific food categories designed to meet specific nutritional and ingredient requirements.

E33.1184 FOOD SCIENCE AND TECHNOLOGY

45 hours: 3 points.

Pre-requisites: E33.0085 Introduction to Foods and Food Science, V25.0002 Introduction to Modern Chemistry

Scientific and sensory principles of food evaluation: professional methods, quality assurance, and objective experiments in advanced food preparation. Lecture and laboratory.

Objectives:

1. Demonstrate a basic knowledge of food technology. (E.1.1)[†]
2. Demonstrate a basic knowledge of biotechnology. (E.1.2)
3. Demonstrate working knowledge of environmental issues related to food. (E.2.8)
4. Demonstrate working knowledge of food and nutrition laws/regulations/policies, particularly as they apply to food processing methods, food ingredients, packaging, and labeling. (E.2.11)
5. Demonstrate working knowledge of applied sensory evaluation of food. (E.2.13)
6. Describe HACCP procedures for the food processing industry.
7. Apply basic methods of food science and technology to examine and evaluate food ingredients.
8. Apply basic methods of food science and technology to create new or modify existing food products.

[†] Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1185 CLINICAL NUTRITION ASSESSMENT AND INTERVENTION

45 hours: 3 points.

Pre-requisites: E33.1260 Diet Assessment & Planning, E33.1068 Nutrition-Focused Human Physiology

Co-requisite: E33.1064 Nutritional Biochemistry, E33.1269 Nutrition and the Life Cycle

Advanced study of the effects of disease on nutrient and energy requirements and metabolism, assessment and treatment of disease-induced malnutrition, and nutritional support methods applied to case management. Emphasizes assessment of anthropometric and biochemical indicators, clinical symptoms, and development of individual care plans using the nutrition care process. For advanced undergraduates and graduate students requiring preparation for clinical courses.

Objectives:

1. Demonstrate the ability to demonstrate a variety of documentation methods. (A.3.3)†
2. Demonstrate working knowledge of pathophysiology related to nutrition care. (B.2.6)
3. Demonstrate working knowledge of fluid and electrolyte requirements. (B.2.7)
4. Demonstrate working knowledge of pharmacology: nutrient-nutrient and drug-nutrient interaction. (B.2.8)
5. Demonstrate the ability to interpret medical terminology and laboratory parameters relating to nutrition. (B.3.1 and B3.2)
6. Demonstrate basic knowledge of assessing health status. (F.1.2)
7. Demonstrate working knowledge of assessment and treatment of nutritional health risks. (F.2.3)
8. Demonstrate working knowledge of medical nutrition therapy, including alternative feeding modalities, chronic diseases, dental health, mental health, and eating disorders. (F.2.4)
9. Demonstrate working knowledge of strategies to assess need for adaptive feeding techniques and equipment. (F.2.5)
10. Demonstrate the ability to screen individuals for nutritional risk and collect pertinent information for comprehensive nutrition assessments. (F.3.2 and F.3.3)
11. Demonstrate use of nutrition care process for patient and client intervention.
12. Demonstrate the ability to calculate enteral and parenteral nutrition formulations. (F.3.6)
13. Demonstrate working knowledge of quality improvement. (G.2.5)
14. Demonstrate working knowledge of current reimbursement issues. (H.2.1)

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

***E33.1187 INTERNATIONAL NUTRITION**

15 hours per point: 1-3 points.

Introduction to world food problems and their nutritional, economic, and social effects, especially on women and children.

Objectives:

1. Identify environmental, social, behavioral and economic factors that affect the dietary intake and nutritional status of people of various countries, and compare the ways these factors operate in countries of varying income levels.
2. Define the causes and consequence of the “nutrition transition” that occurs when populations move from conditions of undernutrition to those of overnutrition.
3. Compare international and national food consumption, nutrient requirements, and dietary recommendations.
4. Analyze and evaluate food, nutrition, and other types of policy and program approaches to improve the food security and nutritional status of specific population groups. Examples: demographic, income and price, agricultural, fortification, health, educational, and marketing among others.
5. Identify, describe, and evaluate the work of governmental and non-governmental agencies and organizations concerned with international food and nutrition issues: food production, food security, food aid, nutrition education, and nutrition intervention.

***E33.1188 FOOD FINANCE**

45 hours: 3 points

Pre-requisite: A basic accounting course.

Introduction to financial planning and control, fund raising and investment in food and food service industries.

Objectives:

1. Describe the principal features of financial management of operations in food and food service industries.
2. Identify, select, and apply appropriate financial techniques for evaluating the financial worth of food and food service operations.
3. Identify and apply commonly used financial techniques, industry ratios, and standards to compare financial analyses of selected food business operations.
4. Interpret financial statements to identify the strengths and weaknesses of financial performance.

E33.1189 FOOD MARKETING

45 hours: 3 points.

Principles, functions, and tools of marketing and sales used by distributors, commercial and noncommercial operators, and vendors; investigation of current marketing issues.

Objectives:

1. Apply basic marketing concepts to the food service industry.
2. Describe the uses of marketing strategies in organizational communications, sales, and services.
3. Analyze and evaluate the uses of marketing strategies to assist organizations to meet their objectives as well as customers' needs.
4. Describe the ways that customers' needs, desires, and problems influence food service operations.
5. Define marketing concepts of segmentation, product differentiation, targeting, market positioning, communication mix, and channels of distribution, and demonstrate their application to the food service industry.
6. Develop a marketing plan for a specific food service organization based on readings, observations, and classroom discussion.

E33.1198 FIELDWORK

120 hours: 4 points.

Pre-requisites: E33.1260 Diet Assessment and Planning, E33.1185 Clinical Nutrition Assessment and Intervention, E33.1269 Nutrition and The Life Cycle, senior status. Application must be filed during the previous term.

Participation and experience in the professional field of major interest. For advanced undergraduates.

Objectives:

1. Participate in a supervised work experience that integrates theory and practice.
2. Write measurable goals and objectives.
3. Identify professional issues in nutrition and dietetics, and the profession's Standards of Practice and Code of Ethics.
4. Demonstrate responsible work habits and conduct a work self-appraisal.
5. Explore career options in the field of interest.

***E33.1200 FOOD PREPARATION TECHNIQUES:
PHOTOGRAPHY**

45 hours: 3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to methods involved in preparing food to be photographed for use in print and other media formats.

E33.1204 FOOD IN THE ARTS

30 hours: 2 points. (Repeatable up to 6 points.)

The ways in which writers, artists, musicians, and filmmakers have used food as a theme or symbol for reasons of aesthetic, social, cultural, or political commentary.

Objectives:

1. Identify some historical and contemporary uses of literature, arts, music, and film to communicate messages about food and food intake.
2. Describe and critically evaluate the ways in which writers, artists, musicians, and filmmakers have used food in their work.
3. Develop an art form that uses food to communicate a specific message.

Subtopics:

- Film
- Performance Art
- Art, Folk Art, Food & Feast
- Literature
- Fine Art
- Popular Culture

E33.1209 COMMUNITY NUTRITION

45 hours: 3 points.

Pre-requisite: E33.1260 Diet Assessment and Planning (may be taken concurrently)

Rationale for development of community nutrition programs and their design, implementation, and evaluation. Lectures and individual and group projects.

Objectives:

1. Demonstrate basic knowledge of media presentations. (A.1.3)†
2. Demonstrate working knowledge of interpersonal communication skills. (A.2.1)
3. Demonstrate working knowledge of educational theory and techniques. (A.2.4)
4. Demonstrate working knowledge of concepts of human and group dynamics. (A.2.5)
5. Demonstrate working knowledge of public speaking. (A.2.6)
6. Demonstrate working knowledge of educational materials development. (A.2.7)
7. Demonstrate the ability to present an educational session for a group. (A.3.1)
8. Demonstrate the ability to explain a public policy position regarding dietetics. (A.3.4)
9. Demonstrate the ability to work effectively as a team member. (A.3.6)
10. Describe the basic elements of public policy development. (C.1.1)
11. Demonstrate working knowledge of health behaviors and educational needs. (C.2.2)
12. Demonstrate working knowledge of economics and nutrition. (C.2.3)
13. Describe the basic elements of needs assessments. (D.1.2)
14. Demonstrate working knowledge of socio-cultural and ethnic food consumption issues and trends for various consumers. (E.2.1)
15. Demonstrate working knowledge of availability of nutrition programs in the community. (E.2.5)
16. Demonstrate working knowledge of formulation of local, state, and national food security policy. (E.2.6)
17. Demonstrate working knowledge of food and nutrition laws/regulations/policies. (E.2.11)
18. Demonstrate working knowledge of food availability and access for the individual, family, and community. (E.2.12)
19. Demonstrate working knowledge of health promotion and disease prevention theories and guidelines. (F.2.6)
20. Demonstrate working knowledge of the influence of socioeconomic, cultural, and psychological factors on nutrition behavior. (F.2.7)
21. Describe the basic elements of program planning, monitoring, and evaluation. (G.1.1)
22. Demonstrate working knowledge of diversity issues. (G.2.9)

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

***E33.1210 UNDERSTANDING FOOD HISTORY**

30 hours: 2 points.

Examination of food from historical & transnational perspectives. Topics considered are: the origins of agriculture, the phenomenon of famine, the co-evolution of world cuisines & civilizations, the international exchange & spread of foods & food technologies following 1492, issues of hunger & thirst, & the effects of the emergent global economy on food production, diets, & health.

Objectives:

E33.1217 ADVANCED FOODS

15 hours per point: 1-3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Principles and practice of identification, comparison, and evaluation of selected foods, ingredients, techniques, and equipment for recipe formulation, menu planning, or preparation, with an emphasis of modifications to meet specific nutritional or other requirements. Repeatable up to 3 points.

Objectives:

1. Demonstrate advanced principles and techniques of professional food preparation.
2. Identify and compare the uses of specific ingredients in recipe formulation.
3. Adjust recipes to modify nutrient and energy content and preparation methods, while maintaining product quality.
4. Design menus to incorporate dishes made from specific food categories designed to meet specific nutritional and ingredient requirements.
5. Demonstrate and evaluate tools and equipment required for professional food preparation and recipe and menu planning.

E33.1260 DIET ASSESSMENT AND PLANNING

45 hours: 3 points.

Pre-requisite: E33.0119 Nutrition and Health.

Co-requisite: E33.1068 Nutrition-Focused Human Physiology

Assessment of the food intake and needs of individuals of diverse ages and backgrounds. Taking into consideration the genetic, cultural, social, and economic factors that affect dietary choices, students develop dietary plans that meet current recommendations for a variety of health conditions using exchange systems, food composition data, menus, recipes, and product labels. (Note: knowledge and application of nutrition-related pathophysiology is covered in E33.1185 Clinical Nutrition Assessment and Intervention.)

Objectives:

1. Develop interviewing skills to gather information about food intake and eating patterns from individuals.
2. Use and evaluate standard methods for assessing food intake: 24-hour recall, food frequency, food record, and diet history.
3. Calculate diet composition and plan menus for specific health conditions using food composition tables, RDAs, DRIs, Dietary Guidelines, and a generic diet manual.
4. Demonstrate basic knowledge of lay and technical writing. (A.1.2)†
5. Demonstrate working knowledge of counseling theory and methods. (A.2.2)
6. Demonstrate working knowledge of interviewing techniques. (A.2.3)
7. Demonstrate the ability to counsel individuals on nutrition. (A.3.2)
8. Demonstrate working knowledge of promotion of pleasurable eating. (E.2.10)
9. Demonstrate the ability to translate nutritional needs into menus for individuals and groups. (E.3.2)
10. Demonstrate the ability to modify recipe/formula for individual or group dietary needs. (E.3.7)
11. Demonstrate the ability to calculate and/or define diets for common conditions, i.e., health conditions addressed by health promotion/disease prevention activities or chronic diseases of the general population, e.g., hypertension, obesity, diabetes, diverticular disease. (F.3.1)
12. Demonstrate the ability to measure, calculate, and interpret body composition data. (F.3.5)
13. Demonstrate basic knowledge about health care policy and administration. (H.1.1)
14. Demonstrate basic knowledge about health care delivery systems. (H.1.2)
15. Demonstrate working knowledge of ethics of care. (H.2.2)

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1269 NUTRITION AND THE LIFE CYCLE

45 hours: 3 points.

Pre-requisites: E33.0119 Nutrition and Health, E33.1068 Nutrition-Focused Human Physiology

Co-requisite:, E33.1260 Diet Assessment and Planning.

Analysis and application of the physiological, biological, and biochemical basis for differences in nutritional requirements throughout the principal stages of the life cycle--pregnancy, infancy, childhood, adolescence, adulthood, older adulthood--and the ways in which social and environmental factors influence nutritional status at each stage.

Objectives:

1. Identify the principal physiological, biological, biochemical, social, and environmental factors that influence nutritional status at each stage of the life cycle.
2. Describe and apply the principal dietary, laboratory, anthropometric, and clinical means for evaluating nutritional status at each stage of the life cycle.
3. Describe the composition of diets appropriate for meeting nutritional needs at each stage of the life cycle.
4. Demonstrate working knowledge of the influence of age, growth, and normal development on nutritional requirements. (F.2.1)[†]
5. Demonstrate the ability to determine nutrient requirements across the lifespan, i.e., infants through geriatrics and a diversity of people, culture, and religions. (F.3.4)

[†] Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.1271 FOOD PHOTOGRAPHY

15 hours: 1 point

Demonstration of techniques for photographing foods for use in print and other media formats.

Objectives:

1. Demonstrate key operating parts of a digital camera and related photographic equipment.
2. Demonstrate the use of digital camera equipment.
3. Review principles of physics and lens optics related to photography.
4. Demonstrate procedures for making photographic exposures.
5. Demonstrate darkroom and enlargement techniques.
6. Define basic elements and principles of art and relate them to food photography.
7. Analyze and critique food photography compositions based on written studies and personal views of aesthetics.

**E33.1301 HEALTH AND SOCIETY:
AN INTRODUCTION TO PUBLIC HEALTH**

(renumbered to E33.0070)

60 hours; 4 points

Provides an overview of public health with an emphasis on how biological, social, economic, and political factors work in concert to determine the health of populations around the world. It will discuss the determinants of population health, examine the origins and changing nature of public health problems over the past century, explore global inequalities in health, and probes controversial public health issues. Emphasis placed on ethical issues that have arisen from public health practice in both the US and abroad. At least one field trip to examine the role of the New York City Health Department is planned.

Objectives:

1. Define and describe the various dimensions of the field of Public Health
2. Help students develop a population perspective on health and disease
3. Define and describe the social determinants of health and explain how they differ from other (biological) determinants of health.
4. Encourage debates on individual versus societal rights related to the promotion of health and prevention of disease.

E33.1306 INTRODUCTION TO EPIDEMIOLOGY

60 hours; 4 points

Epidemiology is the study of the distribution and determinants of health and disease in different human populations and the application of methods to improve disease outcomes. As such, epidemiology is the basic science of public health. This course is designed to introduce students, at the undergraduate and graduate levels, to the background, basic principles and methods of public health epidemiology.

Topics covered include: types of research questions that can be addressed by epidemiologic methods; measures of disease frequency; measures of effect and association; epidemiologic study designs, both experimental and non-experimental; and an overview of analysis of epidemiologic studies. In addition, students will develop skills to read, interpret and evaluate health information from published epidemiological studies and mass media sources.

Objectives:

1. Explain why Epidemiology is central to the field of Public Health.
2. Help students develop a population perspective on health and disease.
3. Define and describe the social determinants of health and explain how they differ from other (biological) determinants of health.
4. Help students differentiate causality from association.

E33.1310 INTRODUCTION TO GLOBAL PUBLIC HEALTH

60 hours; 4 points

This course will examine public health issues from a global perspective. It will help you to explore the way the social environment influences the health of populations throughout the world. For example it will look at how gender, race and class influence the health status of populations. The threat of global epidemics will be examined as well as strategies to control the spread of disease. It will touch upon some of the current ethical public health dilemmas where the rights of individuals come into conflict with national or international public health.

Objectives:

1. Define and describe the various dimensions of the field of Global Public Health
2. Help students develop a population perspective on health and disease
3. Define and describe the social determinants of health and explain how they differ by culture and from other (biological) determinants of health.
4. Examine the global distribution of disease and ways to control the global spread of disease

E33.1315 INTRODUCTION TO PUBLIC HEALTH NUTRITION

60 hours; 4 points

This course introduces students to the concepts, principles, and scope of practice of public health nutrition. It emphasizes the major factors that distinguish public health nutrition from clinical nutrition: a focus on populations rather than individuals, and on environmental, social, and socioeconomic determinants of health rather than personal responsibility. It integrates basic information about food intake and nutrition into discussions of policies and programs designed to improve the dietary intake, physical activity level, and health status of populations, and for overcoming barriers to implementation of public health policies and programs.

Objectives:

1. Define public health nutrition
2. Describe basic principles of nutrition and health
3. Distinguish public health approaches to health promotion and disease prevention from educational approaches focused on individuals
4. Identify the principal “environmental”--cultural, social, economic--factors that influence the dietary intake and physical activity of individuals and groups
5. Identify the principal food safety problems in rich and poor countries and public health approaches to ensuring the safety of the food supply
6. Describe the causes and effects of inadequate and excessive intake of calories and nutrients among people in rich and poor countries
7. Describe public health policies and programs that address inadequate and excessive dietary intake, and identify barriers to their implementation and ways to overcome them.

E33.1321 PRINCIPLES OF HEALTH PROMOTION & EDUCATION

60 hours; 4 points

This course will introduce students to the theories of health behavior that guide many public health interventions. It will engage students in comparing and contrasting the assumptions of different theories in shaping health behavior, and the ways in which such theories are currently employed in public health interventions. Students will undertake a semester long project applying the skills gained in class to a public health problem they identify on the college campus.

1. To introduce students to a range of different theories regarding health behavior.
2. To consider the ways in which theories guide the creation of public health interventions.
3. To develop skills to analyze environments for public health interventions, using the college campus as an example.
4. To develop skills in applying theory to the design of health interventions in a college environment.

E33.1323 ENVIRONMENTAL HEALTH, SOCIAL MOVEMENTS & PUBLIC POLICY

60 hours; 4 points

This course will examine some of the key issues, achievements, shortfalls and principles of environmental health practice by examining a series of case studies. It will focus on the how environmental health issues are defined and approached by civic groups, governmental officials and researchers. It will highlight how environmental threats come to the attention of the public and weigh the options for addressing these threats. Finally, it will underscore the need for multi-disciplinary approaches in understanding these threats and crafting solutions. Case studies may change in different semesters.

Objectives:

1. Define and describe the field of environmental health.
2. Assist students to understand how the field of environmental health has emerged.
3. Introduce students to the different roles and responsibilities of government agencies in monitoring and addressing environmental health.
4. Consider aspects of environmental health issues both domestically and internationally.
5. Acquaint students with the origins of the field, and with some of the current issues facing it today.
6. Understand the relationship between social movements and efforts to address environmental health threats

**E33.1325 UNDERSTANDING SOCIAL CONTEXT AND RISK BEHAVIOR:
PUBLIC HEALTH APPROACHES**

60 hours; 4 points

This course will focus on the risks and consequences associated with legal and illegal drugs, and violence. It familiarizes students with the distribution of these conditions across the population and identifies addresses risk factors for the conditions. Students will be introduced evidence regarding the role of different social contexts on risk behavior, and the successes and challenges of various interventions that have addressed such issues. The course places these behaviors in a larger historical context, examining the social interpretations that have influenced how interventions were designed and targeted. Further, it makes use of different theoretical frameworks with which to understand these contexts and each contribute to the design, implementation and evaluation of such interventions.

Objectives:

1. Define and describe risk behaviors, and consider their distribution throughout the population.
2. Introduce students to the relationship between social context and risk behavior, paying particular attention to differences related to class, race, geographic area, and age group..
3. Explore the relationship between the social construction of these behaviors historically and the epidemiology of risk behavior..
4. Consider the evolution of interventions related to these issues, contrasting criminal justice, social sanction and public health approaches.
5. Assess the ways in which the consequences of these behaviors have different impacts for different social groups.

**E33.1327 PUBLIC HEALTH PROFESSION & PRACTICE:
PUBLIC HEALTH IN THE CITY**

60 hours; 4 points

Pre-requisite: E33.1306 Principles of Epidemiology, E33.xxxx Principles of Health Behavior and Education (course will be assigned a course number by end of 2008), or permission of the instructor.

This course will familiarize students with the practice of public health in New York City. Using the city as our laboratory, this course will introduce students to the different arenas in which public health professionals are working in the setting, examining the types of health issues they address, the types of roles for public health professionals, the settings in which they work, and some of the pressing public health issues in New York City today. Students will consider the strengths and limitations of the ways in which this delivery system affects public health practice.

Objectives:

1. Orient students to career paths in different fields in public health.
2. Acquaint students with the different types of roles public health professionals assume in different settings, and the skills they make use of in those settings.
3. Introduce students to the role of public health's professional organizations in promoting good public health practice, developing research agendas, disseminating information regarding public health issues, and educating policy makers.
4. Assist students in considering professional choices for employment and further study.

E33.1330 COMMUNITY PUBLIC HEALTH INTERNSHIP & SEMINAR

60 hours; 4 points

The internship is a culminating experience that broadens students' exposure to public health practice, facilitates valuable work experience, and increases students' knowledge of specific career opportunities. Placements are semester long (90 hours) and are meant to provide students with the opportunity to observe a public health professional in practice, complete a public health project that is mutually beneficial to the student and the organization, and synthesize knowledge and skills into public health practice. In addition, the experience allows a student to practice his/her public health competencies and prepares the student for employment in various public health organizations.

Objectives:

E33.1335 INTRODUCTION TO PUBLIC HEALTH RESEARCH

60 hours; 4 points

This course provides an introduction to two tools for data collection and analysis commonly used in public health research. The course is designed to be experiential, exposing students to tools and applications and engaging students in the study and practice of data collection and analysis. As such, students participate throughout the semester in research and study teams to develop and implement research projects. The course is divided into two units: and introduction to public health informatics, and an introduction to survey research.

Objectives:

1. Demonstrate familiarity with some of the basic principles of social science research, including reliability and validity.
2. Recognize some of the ways to apply research tools to addressing public health problems
3. Demonstrate a basic understanding of the uses and issues with regard to survey research and informatics, as applied to public health problems.
4. Gain experience in developing and implementing research projects using these tools.

**E33.2000 NUTRITION AND FOOD STUDIES, AND PUBLIC HEALTH:
NEW GRADUATE STUDENT SEMINAR**

3 hours: 0 points.

Introduction to academic and professional resources at New York University and to career opportunities in food studies and food management (section .01) or nutrition and dietetics (section .02). Class meets three or four times during the first semester of study.

Objectives:

1. Describe academic and professional requirements of the program.
2. Identify academic, professional, and personal resources available to support students in the department, school, university, and city.
3. Identify issues related to academic success in the program of study.
4. Identify career opportunities in the program area.
5. Meet faculty and students associated with the program of study.

***E33.2003 FOOD STUDIES AND FOOD MANAGEMENT INTERNSHIP**

45 hours per point: 1-6 points.

Pre-requisites: E33.1052 Food Production & Management; a management theory course

Practical work experience in food studies or food management tailored to the specific interests and career goals of each student. Work may be voluntary or paid, and is supported by in-class discussion, written projects, and presentations. Should be taken during the last year of study.

Objectives:

1. Identify career options in food studies and food management through work experience, professional meetings, and classwork.
2. Identify the wide range of career and professional opportunities and resources in food and food management available in New York City.
3. Improve skills in preparing resumes and interviewing for food studies or food management positions.
4. Apply management theories to work experience in food studies or food management. learned in the classroom to work experience.
5. Identify and apply appropriate attitudes and conduct as a food professional.
6. Develop skills in self-appraisal of professional interests, goals, and performance, in food studies or food management.
7. Develop short- and long-term goals for development of professional skills related to food careers.

***E33.2004 FOOD INDUSTRY PROJECT DEVELOPMENT**

30 hours: 3 points.

Pre-requisite: coursework in accounting, marketing, management theory.

Advanced course addressing market needs, research methods, trend projections, feasibility, evaluation strategies, capital budgets, and financing for development of food business projects.

Objectives:

1. Describe general and specific processes and skills required for planning, developing, and constructing new or renovated food business facilities.
2. Conduct a feasibility study for a food business that includes market and site evaluation.
3. Demonstrate concept development for various types of food operations.
4. Estimate the costs of projects, including code review, construction, feed, working capital, and feasibility evaluation.
5. Identify and compare financing alternatives for different types of food business sites and operations.
6. Compare financial outcome to industry ratios and standards.
7. Identify components and requirements of project planning teams.
8. Develop and present a food business project plan.

***E33.2006 ENTREPRENEURSHIP IN FOOD MANAGEMENT**

30 hours: 3 points.

Pre-requisite: coursework in accounting, marketing, and management theory

Development of new concepts in food business operations through planning, organization, implementation, and evaluation of independent and multi-unit operations: concept development, initiation, financing, site selection, franchising, and analysis and control of risk.

Objectives:

1. Describe general and specific processes needed to develop and open a new food business operation.
2. Identify steps needed to develop a new business concept, and evaluate its feasibility.
3. Apply financial principles for control and initiation of new food business concepts.
4. Describe methods for selecting new food business sites.
5. Describe steps required to develop new food franchise sites.
6. Identify desirable characteristics in potential managers and employees.
7. Describe the processes for expanding food businesses to multi-site operations.
8. Formulate the development of a new food business project, and write a plan that describes its operation from opening through the first year.
9. Write a business plan for submission for financial support of new food business project.

***E33.2010 SENSORY EVALUATION OF FOODS**

30 hours: 3 points.

Pre-requisites.: E33.1185 Clinical Nutrition Assessment & Intervention

Physiological, psychological and esthetic principles of evaluation of food, with emphasis on taste, olfaction, and tactile responses. Lectures and demonstrations of consumer testing methods.

Objectives:

1. Describe the ways in which all five senses--sight, touch, taste, smell, and hearing--are used in the evaluation of foods.
2. Describe the human (e.g., psychological, cultural) and food factors (e.g., texture, temperature, appearance) that affect food acceptance and preferences.
3. Describe and demonstrate standard methods used in test laboratories and consumer settings to evaluate the sensory qualities of foods.
4. Observe how standard methods of sensory evaluation are applied in food industry settings.
5. Review and evaluate current literature in sensory evaluation from professional publications such as *Chemical Senses*, *Appetite*, *Food Technology*, and the *Journal of Food Science*.

E33.2012 FOOD HISTORY

45 hours: 3 points

Examination of food and diets from historical and international perspectives. Considers the origins of foods, the co-evolution of world cuisines and civilizations, the international exchange and spread of foods and food technologies following the voyages of Columbus, and the effects of the emergent global economy on food production, diets, and health.

Objectives:

1. Describe methods and approaches to understanding food in historical perspective.
2. Describe the role of food intake, acquisition, storage, preparation, and distribution in human and cultural evolution.
3. Investigate the origins of major human foodstuffs and world cuisines.
4. Learn how ancient civilizations created and responded to hunger, famine, and malnutrition.
5. Describe the changes in world food consumption and production due to Columbus' voyage to the Americas.
6. Investigate the effects of the emerging world economic system on the production, sale, and intake of foods, using sugar as the sample.
7. Describe the links between the emerging fields of nutrition and public health, and the development of new methods of food preservation and transport, focusing on the U.S. in the 19th and early 20th centuries.
8. Describe the origins of contemporary food support programs, focusing on hunger and the Great Depression.
9. Describe the historical antecedents of contemporary links between the natural environment, cash cropping in the developing world, and the industrialized world's desire for meat, fruits, and vegetables.

***E33.2013 THE ROLE OF FOOD IN SOCIAL MOVEMENTS**

30 hours: 3 points

This course examines how food is used as a tool in social movements across cultures and time. Some of the themes of the course are food and revolutions, food as a form of social resistance, and food as an apparatus for governmental policies.

Objectives:

1. Students will learn that food's highly flexible meaning can be both a force for change as well as oppression.

E33.2015 FOOD POLICY

30 hours: 3 points.

Analysis of the economic and social causes and consequences of current trends in food production, marketing, and product development.

Objectives:

1. Recognize the actions taken by governments to ensure that their populations consume safe and adequate diets.
2. Identify the methods by which governments design and implement food and nutrition policies.
3. Identify key stakeholders in food and nutrition policy development, and the cost/benefit factors that influence their positions on various issues.
4. Identify the ways in which environmental, institutional, and socioeconomic factors promote or act as barriers to adequate dietary intake in individuals and populations.
5. Identify the ways in which environmental, institutional, and socioeconomic factors promote or inhibit design and implementation of food and nutrition policies.
6. Recognize the methods by which special interest groups affect the design and implementation of food and nutrition policies.

**E33.2016 FOOD MARKETS:
CONCEPTS AND CASES**

30 hours: 3 points

Explores the conceptual underpinnings of the distributive networks through which food travels from farm to table. Examines the relationships between markets, states, and society in their historical and contemporary forms. Employs case studies of how commodities travel through the food system at the local, national and international levels. Topics include: mass markets and niche markets; the culture of markets; reciprocity, exchange and redistribution; conventional and alternative supply chains.

Objectives:

1. Conceptualize markets in their historical and spatial specificity
2. Understand the nature of distributive networks
3. Comprehend the relationship between capitalist enterprise and markets
4. Conceptualize the relation among markets, states, and society
5. Demonstrate thier knowledge of specific food markets
6. Distinguish and differentiate between mass markets and niche markets
7. Understand supply chains and things that hamper and propel them

E33.2017 CONTEMPORARY ISSUES IN FOOD STUDIES

30 hours: 3 points

Survey and critical examination of the broad range of current economic, social, demographic, environmental, and ethical trends that affect food and food management. Examples: global labor markets, international agribusiness, food biotechnology, global marketing.

Objectives:

1. Identify the key economic, social, cultural, demographic, environmental, and ethical trends that currently affect food production, distribution, preparation, consumption, and management.
2. Evaluate the impact of these trends on specific segments of the food industry.
3. Describe the impact of global food markets on specific segments of the food industry in the U.S.
4. Identify, evaluate, and apply major sources of data for tracking trends in the food industry.
5. Apply data on the current status of the food industry to predict future trends.

***E33.2018 CURRENT TRENDS IN FOODS**

10-30 hours: 1-3 points.

Pre-requisites: E33.0085 Introduction to Foods and Food Science, E33.0091 Food Management Theory

Interaction between current trends in food production, marketing, and service, and traditional food consumption practices as observed in current cuisine through lectures, demonstrations, and field trips.

Objectives:

1. Identify major food trends in consumer-driven markets.
2. Identify food consumption traditions, patterns, and trends in the American diet.
3. Relate demographic trends to food consumption patterns.
4. Identify and evaluate historical, psychosocial, anthropologic, and economic factors that affect food consumption patterns and trends.
5. Describe the implications of food safety issues for food consumption patterns and trends.

E33.2019 COMPARATIVE CUISINES

30 hours: 3 points.

Examination of world cuisines and their influences on late 20th century North American foods, meals, and menus. Students will analyze these cuisines from the perspective of geography, climate, colonialism, economics, politics and culture, through readings, lectures, films, and in-class tastings.

Objectives:

1. Describe and compare the principal elements of world cuisines.
2. Examine the geographical, climatic, economic, political, historical, and cultural bases of the culinary traditions characteristic of major continents.
3. Identify the principal flavor groupings and components of traditional international cuisines.
4. Identify and evaluate the principal source materials for information about international cuisines, particularly those developed from the point of view of the population of origin.
5. Describe how traditional flavors and ingredients evolved in their countries of origin and migrated to North America.
6. Describe how food is marketed to consumers in countries throughout the world.
7. Identify and compare typical “street foods” used throughout the world.

E33.2021 FOOD WRITING

10 hours per point: 1-3 points.

Practical experience in writing reports, articles, pamphlets, and other informational materials in the student's primary area of interest in foods and nutrition, along with studies of classic readings in these fields.

Objectives:

1. Obtain practical skills in writing, editing, and proofreading.
2. Understand basic elements of good writing.
3. Understand the principal types of writing used in food and nutrition fields.
4. Learn how to analyze written material for grade level.
5. Identify sources for improving writing about foods and nutrition.

E33.2025 BEVERAGES

45 hours: 3 points

Introduction to basic principles and practical experience in development of beverage systems and menus. Considers pricing, equipment, legal, merchandising, and personnel policies.

Objectives:

1. Describe the principal alcoholic beverages consumed by human populations.
2. Describe the principal processes involved in manufacturing beer, wine, and spirits.
3. Identify and classify grape variety and vinification techniques in specified growing regions.
4. Implement internal controls and other financial control functions in beverage management.
5. Identify key legal requirements for beverage operations.
6. Apply techniques for safe and appropriate use of alcoholic beverages in food service operations.
7. Demonstrate basic principles and techniques of mixing alcoholic beverages.
8. Apply appropriate beverage selection and merchandising techniques to menu planning and marketing for maximum sales and profits.
9. Describe the process for planning and establishing a beverage management system within a food service operation.

**E33.2033 FOOD SYSTEMS I:
AGRICULTURE**

30 hours: 3 points

Pre-requisite: E33.0071 or E33.1210

Surveys issues surrounding food production from an agricultural perspective. Students will gain an understanding of how agricultural production shifted from a Jeffersonian ideal to an industrial and political practicality. Topics include the agrarian ideal of the yeoman farmer, the ascendancy of markets and agricultural commodification, the politicization of agriculture and the farm bill, and sustainable agricultural systems.

**E33.2034 FOOD SYSTEMS II:
PROCESSING AND INDUSTRIALIZATION**

30 hours: 3 points

Pre-requisite: E33:2033 - Food Systems I

Is a survey of issues surrounding food production from a processing perspective. Students will gain an understanding various forms of food processing and the issues that surround industrial food production.

***E33.2035 FOOD SERVICE SYSTEMS**

Examination of food service systems, with emphasis on site-specific and corporate functions and current trends in the industry.

Objectives:

1. Identify the principal components of food service operations.
2. Describe the duties, functions, and challenges related to developing and opening a food service establishment.
3. Identify current trends in technology, service, labor, products, amenities, facilities, and the environment that affect food service operations.
4. Develop a work plan, conduct field research, and report findings of a food service operations study.

E33.2036 WASTE, WATER AND THE URBAN ENVIRONMENT

30 hours: 3 points

Investigates the final stages of the food system, water and waste disposal, as it is manifested in the urban metropolis. This course also draws upon the historical underpinnings of the systems used to manage water and waste, but also the underlying issues of purity and contamination that these systems are also designed to address. Issues include water and waste in relation to changing landscapes and demographics, enmeshment in urban policymaking, and competing notions of environmentalism.

E33.2037 MEDICAL NUTRITION THERAPY

45 hours: 4 points.

Pre-requisite: Admission to Dietetic Internship

Study of the research basis of diet therapy for the principal nutrition-related disease conditions through analysis of case histories. The relationship of food and nutrition to medicine: physiological and clinical basis of disease processes, and medical, surgical, and diet therapies for acute and chronic disease conditions, through lectures, case discussions, assigned readings, programmed learning guides, and class presentations. Course is restricted to Dietetic Interns.

Objectives:

1. Determine nutrient and dietary needs for individuals based on the nutrition care process, disease condition, and medical or surgical treatment.
2. Identify nutrition treatment issues and management strategies associated with care of patients with selected acute and chronic disease conditions.
3. Demonstrate appropriate use of enteral nutrition support: solutions, formula design, monitoring, problem management, and transitional feedings.
4. Recognize clinical, laboratory, and anthropometric signs and symptoms of nutritional deficits.
5. Design meal patterns, menus, and diet counseling and other intervention plans for individuals with selected diseases or treatment regimens.
6. Demonstrate knowledge of dietetic practice standards, laws, and regulations.

E33.2038 STRATEGIC FOOD MARKETING

30 hours: 3 points

Pre-requisite: a course in marketing

Development of plans for marketing food and beverage products and services through evaluation of data on quality management, competition, advertising, and consumer and market research.

Objectives:

1. Describe basic principles, theories, and applications of successful strategic marketing in the food industry.
2. Describe the major issues affecting the sales and marketing of food products and services.
3. Identify the strengths and weaknesses of strategic marketing plans developed for successful and unsuccessful food products and services.
4. Design a strategic plan to market a food product, service operation, or company.
5. Identify and critically evaluate sources of data on which to base marketing plans.
6. Describe the principal issues related to the merchandising of food products and services.
7. Demonstrate ability to describe and analyze contemporary case studies in this area.

E33.2039 FOOD SERVICE SUPERVISION AND TRAINING

45 hours: 3 points.

Pre-requisites: Prior Management Course.

Principles of training and supervision in food service management through lectures, demonstrations, and case studies. Cross-listed with E33.1039.

Objectives:

1. Describe theories and labor laws related to human resource management.
2. Describe management techniques for preventing problems related to personnel.
3. Apply techniques for personnel management in work environments.
4. Apply management techniques for solving personnel problems in daily work situations.
5. Reinforce oral presentation skills.
6. Describe and apply leadership qualities that value diversity, engender creativity and innovation, promote product and service quality, and ensure financial profitability.

E33.2041 PEDIATRIC NUTRITION

30 hours: 3 points.

Pre-requisite: E33.1185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

Principles of nutrition applied to disorders of infants, children, and adolescents, with emphasis on current research; evaluation of needs and diet of healthy children.

Objectives:

1. Determine the nutritional needs of infants.
2. Identify and compare the principal food products designed to meet the nutritional needs of infants.
3. Describe dietary recommendations for the healthy child and adolescent.
4. Describe dietary recommendations for common disorders in children and adolescents.
5. Develop family education and treatment plans for specific diet-related disorders in childhood and adolescence.

E33.2042 MATERNAL AND CHILD NUTRITION

30 hours: 3 points

Pre-requisites: E33.0119 Nutrition and Health or E33.2213 Nutrition and Public Health; E33.2190 Research Methods

Principles and application of nutrition for healthy mothers, infants, children and adolescents with emphasis on current research related to normal growth and development.

Objectives:

1. Define nutrient needs during pregnancy and lactation.
2. Identify the principal methods for nutrition assessment during pregnancy and lactation.
3. Describe the principal benefits of breastfeeding and methods for encouraging and establishing breastfeeding among women of diverse cultural groups.
4. Describe infant feeding practices among diverse cultures and the cultural, social, and economic factors that influence them.
5. Identify and evaluate the costs and benefits of federal, state, and local programs that provide food assistance to women and children.
6. Define the nutritional needs of children and adolescents, and the social, cultural, and economic factors that affect their food choices and dietary intake.
7. Evaluate the quality of nutrition education materials developed for low-income mothers and their children.

E33.2043 CRITICAL CARE NUTRITION SUPPORT

30 hours: 3 points

Pre-requisite: Completion of Dietetic Internship

Principles and skills for parental and enteral nutrition (nutrition support) practice: indications, calculations, formulas and solutions, access, complications, and ethical considerations. Understanding of inflammatory metabolism and basic critical care monitoring and interventions.

Objectives:

1. Identify and apply principles and skills necessary for competent nutrition support practice.
2. Understand the indications, methods and ethical considerations that apply to nutrition support.
3. Understand the changes in metabolism during critical illness and the mechanisms that mediate these changes.
4. Understand basic critical care monitoring tools and interventions.
5. Understand the principles of nutrition support during critical illness.

***E33.2044 ENVIRONMENTAL EFFECTS ON FOOD AND NUTRITION**

30 hours: 3 points.

Pre-requisite: E33.1064 Nutritional Biochemistry, E33.1184 Food Science & Technology

Co-requisite: E33.2190 Research Methods

This course addresses the emerging field of "Econutrition:" the effects of food production, distribution, and marketing on nutrition and the environment, and vice versa. It deals with biological and environmental factors that affect the nutrient content, value, and safety of food in the human body: heat, light, irradiation, oxidation, bioavailability, biotechnology, and other such factors. It also considers effects of food processing, preservation, and fabrication.

Objectives:

1. Describe the effect of selected biological and environmental factors on the nutrient content of food.
2. Describe environmental conditions that maximize nutrient content and retention in food.
3. Evaluate the nutrient content of fabricated, fortified, processed, and preserved foods in terms of requirement standards.
4. Describe and evaluate consumer food safety issues related to environmental factors.
5. Describe and evaluate the effects of biotechnology on food safety and the nutrient value of foods.

E33.2045 SPORTS NUTRITION

30 hours: 3 points

Pre-requisite: E33.1064 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention, E33.2190 Research Methods

Evaluation and application of nutrition concepts related to the energy, fluid, and nutrient requirements of athletes and physically active individuals: diet-related physiology, trends in sports nutrition, special conditions affecting athletic performance, and techniques for counseling athletes.

Objectives:

1. Describe the basic principles of exercise physiology: muscle action, energy balance, body composition.
2. Describe the physiologic basis of the effects of exercise on the energy balance and body composition of healthy people.
3. Identify the effects of diets of varying nutritional composition on sports performance.
4. Identify nutritional factors that affect the performance of certain sports.
5. Describe physiological issues related to eating disorders in elite athletes.
6. Critically evaluate current research studies on nutrition and sports performance.
7. Critically evaluate claims of efficacy of common dietary ergogenic products.
8. Describe the principal methods used for nutritional counseling of athletes.
9. Apply information on nutrition and sports performance to the nutritional counseling of athletes.

E33.2061 RESEARCH APPLICATIONS

30 hours: 3 points.

Pre-requisite: Completion of 30 graduate points including E33.2190 Research Methods; one advanced research course; both nutrition science courses and one advanced clinical nutrition course.

Theoretical and applied aspects of research design, data analysis, and interpretation. Students conduct, analyze, and present an evaluative or applied research project in nutrition and food studies. Should be taken in the last year of study in the master's program.

Objectives:

1. Identify a researchable need or problem in nutrition, food studies, or food management.
2. Identify appropriate research methods to address that need or problem.
3. Use computer and library resources to complete a comprehensive literature search that reviews and synthesizes previous studies related to that need or problem.
4. Conduct a research study that addresses that need or problem.
5. Demonstrate the ability to analyze and interpret the results of that research.
6. Develop recommendations for future research or action based on that analysis
7. Report the study in both oral and written forms for presentation.

E33.2063 RESEARCH APPRENTICESHIP IN FOODS AND NUTRITION

45 hours per point: 1-6 points.

Pre-requisite: Permission of sponsoring professor; completion of 30 graduate points including E33.2190 Research Methods; an advanced research course; both nutritional sciences; advanced clinical nutrition course.

Practical aspects of research on topics related to nutrition, foods, or food service. Students assist a faculty member with an ongoing research project. Depending on the nature of the specified project and the time available for assistance, qualified students may participate in one or more components of the research: study design, bibliographic retrieval, data collection, data analysis, or writing for publication. Permission of sponsoring professor required.

Objectives:

1. Acquire and improve practical skills in research design, conduct, and analysis.
2. Apply theoretical aspects of study design and data collection and analysis to the actual practice of research.
3. Improve skills in information retrieval, synthesis, and analysis.
4. Improve skills in critically analyzing research methods and results.
5. Develop skills in oral and written discussion and presentation of research data.

***E33.2074 CURRENT RESEARCH IN CLINICAL NUTRITION**

30 hours: 3 points.

Pre-requisite: E33.2037 Medical Nutrition Therapy or E33.2211 Advanced Medical Nutrition Therapy.

Critical examination of recent research on the role of dietary factors in [health and] disease prevention and treatment. A seminar for advanced students of clinical nutrition.

Objectives:

1. Review current and historical research in specific topical areas of clinical nutrition.
2. Write a formal analytical review paper on a specific topic for submission to a journal in the field of interest.
3. Debate a controversial issue in the field to determine clinical practice strategies.
4. Integrate practice and research strategies through a case study presentation.

E33.2077 FIELD EXPERIENCE

45 hours per point: 1-6 points.

Not open to students planning or completing a Dietetic Internship.

Participation and experience in the professional field of major interest, and seminar discussion of professional career options and responsibilities. Application must be filed during the previous term.

Objectives:

1. Recognize appropriate professional attitudes, conduct, and relationships.
2. Develop an ability to self-appraise professional performance in order to improve and expand career opportunities.
3. Integrate professional theories with applications.
4. Recognize the full range of career opportunities in the field of interest.
5. Develop skills to achieve life-long education in the chosen professional career.

***E33.2101 MANAGERIAL ACCOUNTING FOR THE FOOD INDUSTRY**

30 hours: 3 points.

Pre-requisites: a course in accounting

Budget procedures and statistical methods for food business decision-making through a review of accounting systems and methods for financial analysis.

Objectives:

1. Prepare and analyze balance sheets, income statements, and statements of cash flow in food service operations.
2. Apply ratio and other analytic methods to balance sheets from the perspective of owners, creditors, and managers.
3. Apply cost analysis methods and computer techniques to determination of cash flow, operating leverage, yield management, mark-up, demand elasticities, and income taxes.
4. Apply internal control, capital budgeting, and lease accounting techniques in actual and simulated food business settings.
5. Apply cost considerations to decision-making in the food and food service industries.
6. Identify the use of net present value and the time value of money in making capital budget decisions.

***E33.2103 FOOD INDUSTRY LABOR RELATIONS AND LAW**

30 hours: 3 points

Pre-requisite: a course in food management theory

Legal and economic framework, labor legislation, and collective bargaining in food and food service operations.

Objectives:

1. Identify the basic legal considerations and practical problems that affect labor relations in the food service industry.
2. Discuss the principles, elements, and uses of collective bargaining processes in the food workplace, and the issues related to these processes.
3. Identify the most common legal challenges associated with personnel discipline, discharge, grievances, and arbitration in the food and food service industries.

***E33.2105 INTEGRATED FOOD MANAGEMENT SYSTEMS**

30 hours: 3 points.

Pre-requisite: Advanced status

Integration of principal management disciplines to develop successful business strategies in the food industry: human resources, organizational design, labor relations, industrial engineering, marketing, customer service, ethics. Should be taken during last year of study.

Objectives:

1. Identify the role of the various management disciplines in developing successful business strategies in the food industry.
2. Define the role of managers in integrating information and activities of the various management disciplines.
3. Apply management techniques derived from one management discipline to problems of whole organizations.
4. Analyze the role of factors that contribute to training and education in development of successful managers and leaders in the food industry.
5. Identify methods to achieve professional development in food management.
6. Develop and apply critical thinking skills in integrated management decisions.

***E33.2107 MANAGING FOOD INDUSTRY PERSONNEL**

30 hours: 3 points.

Pre-requisite: a course in management theory

Examination and analysis of the policies, procedures, and methods needed for effective management in the food and food service industries.

Objectives:

1. Identify policies, procedures and methods relevant to managing and developing human resources within food businesses.
2. Identify sources of information about personnel issues: case studies, articles, texts.
3. Use relevant research to analyze case studies of topics pertinent to human resources in the food and food service industries.
4. Identify and apply techniques that improve the motivation, productivity, and relations of food industry employees.
5. Demonstrate skills of recruiting, training, managing, developing, and appraising personnel in the food and food service industries.
6. Identify and evaluate key issues related to personnel management: workforce diversity, sexual harassment, drug and alcohol abuse, etc.

***E33.2109 FOOD MANAGEMENT LEGAL ENVIRONMENT**

30 hours: 3 points

Overview of legal issues affecting food and food service management: laws, contracts, taxes, and relations with administrative and regulatory agencies, both domestic and international.

Objectives:

1. Describe regulations and administrative agencies that affect domestic and international food and food service operations.
2. Apply and interpret rules, regulations, and laws to specific food industry cases.
3. Interpret and apply information about how agencies enforce compliance with laws and regulations.
4. Describe the basic elements of domestic and/or international contracts.
5. Identify the historical development of legislation and regulations affecting food service through case studies and special projects.
6. Identify ethical issues in the food and food service legal environment through case studies.
7. Describe how administrative processes at the local, state, and federal level affect the food and food service legal environment.
8. Describe the history of laws affecting labor relations, contract negotiations, and collective bargaining in the food and food service industries.
9. Identify current resources for obtaining information about laws and regulations affecting food and food management.

E33.2110 INTERNATIONAL FOOD REGULATION

30 hours: 3 points

Examines the international legal and regulatory systems that affect global food production and distribution. The course also explores some debates over food regulation and how different countries approach these controversies and the variety of policy outcomes that result from these debates.

E33.2117 CURRENT ISSUES IN NUTRITION

10-30 hours: 1-3 points.

Pre-requisites: by permission of course instructor, E33.2190 Research Methods

Critical analysis of recent research, trends, and public policy issues in selected areas of nutrition and health.
Subtopics:

- Introduction to Research (1)

**E33.2139 ADVANCED NUTRITION:
PROTEINS, FATS, AND CARBOHYDRATES**

30 hours: 3 points.

Pre-requisites: E33.1064 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

Biochemical, physiological, and clinical factors that affect the role of macronutrients in human health and disease, with an emphasis on critical analysis of recent research studies in this field. May also include topics such as cholesterol, fiber, non-nutritive sweeteners, and alcohol.

Objectives:

1. Compare current and past nutrition recommendations for proportions of carbohydrate, fat, and protein in the U.S. diet.
2. Identify the various types of carbohydrates, fats, and proteins in common foods and their roles in health and disease.
3. Describe key biochemical reactions related to macronutrient synthesis and degradation, physiologic function, and clinical consequences.
4. Critically assess current and proposed research related to macronutrients.

***E33.2140 NUTRITION EDUCATION**

30 hours: 3 points.

Pre-requisite: E33.1209 Community Nutrition

Co-requisite: E33.2190 Research Methods

Principles, methods, and materials for teaching nutrition to diverse groups in a variety of settings.

Objectives:

1. Examine theoretical frameworks for human behavior and apply them to strategies for nutrition education and counseling.
2. Design and evaluate nutrition education tools for use with specific target populations.
3. Plan, implement, and evaluate a nutrition education activity using appropriate materials, tools, and techniques.
4. Create and, when feasible, present nutrition messages for mass media.
5. Identify the roles of nutrition education professionals through interview and personal contact.
6. Evaluate current community nutrition education and counseling programs.
7. Examine political, legislative, and administrative views of nutrition education, and the ways such views influence dietary guidance policies for the general public.

**E33.2144 ADVANCED NUTRITION:
VITAMINS AND MINERALS**

30 hours: 3 points.

Pre-requisites: E33.1064 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

Biochemical, physiological, and clinical factors that affect the role of micronutrients in human health and disease, with an emphasis on critical analysis of recent research studies in this field. Includes the role of selected vitamins and minerals in cancer, coronary heart disease, HIV infection, bone loss, and other conditions of topical interest.

Objectives:

1. Compare current and past nutrition recommendations for proportions of vitamins and minerals in the U.S. diet.
2. Identify the roles of selected vitamins and minerals in specific disease conditions.
3. Describe key biochemical reactions related to micronutrient synthesis and degradation, physiologic function, and clinical consequences.
4. Critically assess current and proposed research related to micronutrients.

***E33.2145 CLINICAL NUTRITION SERVICES**

30 hours: 3 points.

Pre-requisite: Completion of Dietetic Internship

Comparison of programs, services, and systems designed for clinical practitioners who manage delivery of nutrition services in health care settings.

Objectives:

1. Write standards for clinical nutrition staff performance.
2. Identify legal and ethical issues in dietetics,
3. Assess needs for nutrition programs, positions, or services.
4. Write a proposal for a new program, position, or service.
5. Evaluate indicators or outcomes of nutrition care, and the cost effectiveness of nutrition services.
6. Develop basic budgets for programs, positions, or services.
7. Identify alternative organizational structures for nutrition care systems.
8. Apply techniques for interviewing, supervising, and training professional staff, and delegating tasks to them.

E33.2146 CLINICAL PRACTICE IN DIETETICS I

150 hours per point: 3 points.

Pre-requisites: Admission to NYU Dietetic Internship; permission of instructor.

Seminar and supervised experience in clinical dietetics through observation, practice, and research; food service systems, inpatient and ambulatory nutrition care, specialty practice settings.

Objectives:

1. Complete a series of planned, scheduled clinical rotations, progress reports and self-evaluations of performance on those rotations.
2. Apply the Code of Ethics and Standards of Practice of the American Dietetic Association/Commission on Dietetic Registration during clinical practice rotations.
3. Understand the principal political, legislative, and economic factors affecting dietetic practice.
4. Communicate dietetic research and nutrition intervention strategies through presentation of selected cases.
5. Develop and use effective communication skills in dietetics practice through use of videotape techniques.
6. Develop and evaluate nutrition education resources for professionals, paraprofessionals, and consumers.

E33.2147 CLINICAL PRACTICE IN DIETETICS II

150 hours per point: 3 points.

Pre-requisites: Admission to NYU Dietetic Internship; permission of instructor.

Seminar and supervised experience in clinical dietetics through observation, practice, and research; food service systems, inpatient and ambulatory nutrition care, specialty practice settings.

Objectives:

1. Complete a series of planned, scheduled clinical rotations, progress reports and self-evaluations of performance on those rotations.
2. Apply the Code of Ethics and Standards of Practice of the American Dietetic Association/Commission on Dietetic Registration during clinical practice rotations.
3. Understand the principal political, legislative, and economic factors affecting dietetic practice.
4. Communicate dietetic research and nutrition intervention strategies through presentation of selected cases.
5. Develop and use effective communication skills in dietetics practice through use of videotape techniques.
6. Develop and evaluate nutrition education resources for professionals, paraprofessionals, and consumers.

***E33.2173 INTEGRATED RECIPE ANALYSIS AND DEVELOPMENT**

45 hours: 3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Advanced application of principles and techniques of food preparation to development and reformulation of food recipes and products for media, publication, food service, and consumer markets.

Objectives:

1. Apply principles and advanced techniques of food preparation to recipe development.
2. Identify and evaluate new food products for nutritional value and marketability.
3. Evaluate recipes through application of basic methods of sensory evaluation.
4. Develop, write, and evaluate professional and consumer recipes for use by media and professional and consumer publications.
5. Identify sources of information about recipes and food formulas, and obtain such information from appropriate agencies and food companies.
6. Reformulate recipes to incorporate desired ingredients or nutrients while maintaining the integrity, quality, and nutritional value of the product.
7. Identify principles of recipe development for cookbooks, and evaluate key examples: classic, popular, food service, magazine, and food industry.

***E33.2178 NUTRITION ASSESSMENT METHODS**

30 hours: 3 points.

Pre-requisite: E33.2190 Research Methods

Theory and analysis of methods for nutritional status assessment in community, ambulatory, and acute- and long-term care settings. Special projects and conferences in hours to be arranged.

Objectives:

1. Review physical signs, symptoms, and indicators of nutritional risk in individuals and groups.
2. Describe methods for evaluation of nutrient intake and nutritional status.
3. Identify and compare strengths, limitations, validity, and reliability of dietary assessment methods for individuals and groups.
4. Identify and compare strengths, limitations, validity, and reliability of anthropometric assessment methods for individuals and groups.
5. Identify and compare strengths, limitations, validity, and reliability of biochemical assessment methods for individuals and groups.
6. Identify and compare strengths, limitations, validity, and reliability of clinical assessment methods for individuals and groups.
7. Develop a comprehensive nutrition assessment program for a defined population that includes monitoring and evaluation of nutrition services, quality improvement, and cost benefit and effectiveness.
8. Interpret and evaluate studies that examine nutrition intervention efficacy, effectiveness, and cost benefit.

E33.2183 TECHNIQUES OF REGIONAL CUISINE

15 hours per point: 1-3 points

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Introduction to the foods of various world regions and the techniques used to prepare them through hands-on food preparation, demonstrations, lectures, and field trips. Cross-listed with E33.1183.

Objectives:

1. Demonstrate advanced principles and techniques of professional food preparation using traditional components of regional cuisines.
2. Identify the principal elements of selected regional cuisines: Africa, Asia, Australia, Europe, North America, and South America.
3. Identify and compare principal flavor groupings and components of traditional cuisines.
4. Demonstrate the ability to adapt traditional recipes using non-traditional components.
5. Demonstrate and evaluate tools and equipment used in the preparation of traditional recipes.
6. Design regional menus to incorporate dishes from specific food categories designed to meet specific nutritional and ingredient requirements.

E33.2184 FOOD SCIENCE AND TECHNOLOGY

45 hours: 3 points.

Pre-requisites: E33.0085 Introduction to Foods and Food Science, V25.0002 Introduction to Modern Chemistry

Scientific and sensory principles of food evaluation: professional methods, quality assurance, and objective experiments in advanced food preparation. Lecture and laboratory. Cross-listed with E33.1184.

Objectives:

1. Demonstrate a basic knowledge of food technology. (E.1.1)[†]
2. Demonstrate a basic knowledge of biotechnology. (E.1.2)
3. Demonstrate working knowledge of environmental issues related to food. (E.2.8)
4. Demonstrate working knowledge of food and nutrition laws/regulations/policies, particularly as they apply to food processing methods, food ingredients, packaging, and labeling. (E.2.11)
5. Demonstrate working knowledge of applied sensory evaluation of food. (E.2.13)
6. Describe HACCP procedures for the food processing industry.
7. Apply basic methods of food science and technology to examine and evaluate food ingredients.
8. Apply basic methods of food science and technology to create new or modify existing food products.

[†] Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

E33.2190 RESEARCH METHODS (FOR NUTRITION PROGRAMS)

30 hours: 3 points.

Pre-requisite: Completion of all DPD courses except the following as co-requisites

Co-requisites: E33.1064 Nutritional Biochemistry, E33.1184 Food Science & Technology, E33.1185 Clinical Nutrition Assessment & Intervention

Introduction to the design, interpretation, and evaluation of research in nutrition and food studies. To be taken in the first semester of the master's program.

Objectives:

1. Demonstrate basic knowledge of research methodologies--basic, applied, behavioral, historic--in nutrition and food studies. (D1.1)†
2. Describe outcomes-based research. (D1.3)
3. Demonstrate working knowledge of the scientific method. (D2.1)
4. Demonstrate the ability to interpret current research. (D3.1)
5. Demonstrate the ability to interpret basic statistics. (D3.2)
6. Use basic computer and library retrieval methods for conducting a comprehensive literature search.
7. Organize and write a critical review of research studies on a selected topic in nutrition or food studies.

† Codes refer to American Dietetic Association foundation knowledge and skills for didactic component of entry-level dietitian education programs (Didactic Program in Dietetics-DPD).

**E33.2190 RESEARCH METHODS
(FOR FOOD STUDIES AND FOOD MANAGEMENT PROGRAMS)**

30 hours: 3 points.

Introduction to the design, interpretation, and evaluation of research in nutrition and food studies. To be taken in the first semester of the master's program.

Objectives:

1. Describe practical approaches to the conceptualization and design of research--basic, applied, behavioral, historic--in nutrition and food studies.
2. Describe the steps necessary for implementation of practical research projects in nutrition and food studies.
3. Interpret and critically evaluate scholarly research in nutrition and food studies.
4. Use basic computer and library retrieval methods for conducting a comprehensive literature search.
5. Organize and write a critical review of research studies on a selected topic in nutrition or food studies.

E33.2191 FOOD AND CULTURE

45 hours: 3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science.

Study of the complex interactions between food and culture, the effects of cultural factors on dietary practices, and the cross-cultural exchange of dietary practices, beliefs, and foods between the U.S. and countries throughout the world.

Objectives:

1. Identify the meaning of food among world cultures.
2. Identify the principal anthropological theories of food and culture.
3. Describe the principal elements of diets in selected world societies.
4. Trace the production and availability, and religious, cultural, and economic value of a specific food or food product over time.
5. Describe the ways in which economic, political, and social factors influence food choices.
6. Assess the food habits of a cultural group in its country of origin, the ways these habits have changed when the group moved to the U.S., and the economic, social, and health consequences of such changes.
7. Describe the impact of American food products and practices on the economies, cultures, and diets of international populations.

***E33.2192 NUTRITIONAL EPIDEMIOLOGY**

30 hours: 3 points

Pre-requisite: E33.0019 Nutrition and Health (or equivalent), E33.2190 Research Methods

Fundamentals of nutritional epidemiology focused on the collection, analysis, and interpretation of data on dietary intake and nutritional status of diverse population groups. The course emphasizes critical evaluation of dietary assessment methods and the results of research studies associating intake of foods and nutrients or food consumption patterns with the risk of cancer, coronary heart disease, and other chronic diseases.

Objectives:

1. Identify dietary intake methods (e.g., 24-hour recalls, food frequency questionnaires), software for dietary data collection, and food and nutrient databases used in nutritional epidemiology research.
2. Describe the range of measures of nutritional status (e.g., anthropometric, clinical, and biochemical markers) used in nutritional epidemiology research.
3. Demonstrate knowledge of the sources and limitations of dietary survey, food supply, and food composition data, and the relevance of such data to nutritional epidemiology research.
4. Compare and contrast methods for analyzing individual dietary components (e.g., nutrients, foods, other dietary constituents such as phytochemicals, dietary supplements) vs. “total diet” measures (e.g., dietary diversity/dietary quality scores) in nutritional epidemiology research.
5. Identify common study designs used in nutritional epidemiology studies.
6. Demonstrate knowledge of statistical methods used in nutritional epidemiology studies and statistical issues that affect the interpretation of dietary data (e.g., adjustment for total energy intake, measurement error, underreporting).
7. Demonstrate the ability to critically evaluate current findings from nutritional epidemiology studies on the role of dietary factors (e.g., nutrients, foods, dietary supplements, dietary patterns) and chronic diseases such as cancer, coronary heart disease, diabetes, hypertension, obesity, osteoporosis.

* Course not offered from Summer '08 to Spring '09

E33.2194 WEIGHT MANAGEMENT

30 hours: 3 points.

Pre-requisite: E33.1185 Clinical Nutrition Assessment, E33.1064 Nutritional Biochemistry

Co-requisite: E33.2190 Research Methods

Evaluation and application of theories of weight control and eating behavior to weight reduction and maintenance programs, with emphasis on development of scientifically based methods to promote appropriate body weight.

Objectives:

1. Compare theories of the etiology of fatness, energy balance and weight maintenance.
2. Analyze the psychological aspects of eating behavior in weight control and eating disorders.
3. Critically evaluate a variety of weight management approaches including modified eating behavior and manipulation of nutrient intake.
4. Determine the role of "Ideal Body Weight" and "Perceived Body Size" in weight control and food use behavior.
5. Develop and use a food behavior management program.
6. Employ scientifically based criteria to evaluate public information, diet products, and dieting programs for weight control.
7. Develop an position paper on a weight control issue, using supporting evidence from related literature.

E33.2196 NUTRITION-FOCUSED PHYSICAL ASSESSMENT

30 hours: 2 points.

Pre-requisite: Admission to a Dietetic Internship

Emphasis on broadening knowledge and skills in physical assessment applied to the nutrition evaluation of individuals. For graduate students in the dietetic internship program and registered dietitians.

Objectives:

1. Employ basic physical assessment skills in the nutrition evaluation of patients, including identifying normal ranges of pulse, temperature, respiration, and blood pressure; measuring blood pressure, pulse, and temperature; measuring height, weight, and skinfold; identifying signs of malnutrition; identifying edema, ascites; assessing skin turgor; assessing dentition and ability to chew and swallow.
2. Assess nutrition status of individual patients/clients with complex medical conditions, including physical signs and symptoms of malnutrition and hydration status.
3. Describe universal precautions and infection control guidelines and the role of the dietitian in the infection control process.
4. Apply and interpret results of blood glucose monitoring, cholesterol screening, and urine testing.
5. Determine the appropriate use of nasogastric tube feeding and identify the benefits and disadvantages of nasogastric tube feeding in selected cases.

E33.2198 NUTRITION COUNSELING THEORY AND PRACTICE

10 hours per point: 1 or 3 points.

Pre-requisite: E33.185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

This course focuses on the ways basic counseling skills can increase the efficacy of nutrition care in short- and long-term health care settings. Students will be introduced to basic counseling theories and their application through lectures, classroom discussion, role play, weekly logs, process recordings, and supervision.

Objectives:

1. Identify and integrate basic theoretical principles of counseling as applied to medical nutrition therapy and nutrition advising of individuals.
2. Describe the principal differences between nutrition education and nutrition counseling in health care settings.
3. Identify and practice skills needed to assess clients' readiness for dietary change.
4. Describe how multicultural issues affect nutrition counseling practice; describe ways to improve the efficacy of counseling when working with clients of different cultural backgrounds.
5. Describe how self-awareness can improve nutrition counseling practice.
6. Identify and practice the elements of effective listening skills.
7. Describe ethical, legal, and other professional issues involved in nutrition counseling.

E33.2204 FOOD IN THE ARTS

30 hours: 2 points. (Repeatable up to 6 points.)

The ways in which writers, artists, musicians, and filmmakers have used food as a theme or symbol for reasons of aesthetic, social, cultural, or political commentary.

Objectives:

1. Identify some historical and contemporary uses of literature, arts, music, and film to communicate messages about food and food intake.
2. Describe and critically evaluate the ways in which writers, artists, musicians, and filmmakers have used food in their work.
3. Develop an art form that uses food to communicate a specific message.

Subtopics:

- Film
- Performance Art
- Art, Folk Art, Food & Feast
- Literature
- Fine Art
- Popular Culture

E33.2207 SEMINAR IN ADVANCED NUTRITION

10-60 hours: 1-6 points

Pre-requisite: E33.2190 Research Methods

Selected topics in advanced nutrition, investigated through analysis of current data.

Objectives vary according to subject matter.

***E33.2208 INTERNATIONAL STUDY IN FOODS AND NUTRITION**

10 hours per point: 1-6 points.

Pre-requisite: Graduate status

Investigations of food and nutrition policies and practices in selected countries through field trips, site visits, interviews, lectures, seminars, and demonstrations.

Objectives:

1. Identify the ways foods are produced, marketed, and consumed in a specific country (or countries) as compared to the U.S.
2. Contrast current food intake patterns in a specific country with those in the U.S. and evaluate the extent to which they meet dietary recommendations for health promotion and disease prevention.
3. Contrast social, cultural, and environmental influences on food acquisition, storage, and preparation, economic availability, and psychological uses of food in a specific country with those in the U.S.
4. Assess differences in qualifications, approaches, and effectiveness of food and nutrition professionals in specific countries with those of the U.S.
5. Evaluate public policies related to food, nutrition, and health in a specific country as compared to the U.S. Summer session: Food & Nutrition: Florence & Tuscany (6 points)

E33.2210 COMPLEMENTARY AND ALTERNATIVE NUTRITION THERAPIES

30 hours: 3 points.

Pre-requisites: E33.1069 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

Review and analysis of the cultural context, rationale for, and applications of complementary and alternative nutrition therapies for acute and chronic conditions, with an emphasis on critical evaluation of scientific and other evidence for clinical efficacy and resources.

Objectives:

1. Identify and categorize the nutritional products and modalities (approaches) used in complementary and alternative therapies.
2. Describe and critically evaluate the various lines of scientific and other evidence related to the rationale, use, and efficacy of complementary and alternative nutritional therapies.
3. Describe the principal scientific, nutritional, societal, and commercial issues related to complementary and alternative nutritional therapies.
4. Describe the rationale for recommended uses of complementary and alternative nutritional therapies (e.g., products, doses) for specific conditions.
4. Develop and apply a framework to analyze and evaluate the clinical efficacy of complementary and alternative nutritional therapies in the context of nutrition and metabolism.
6. Develop and apply an analytical framework to critically evaluate the reliability of resources in this field.

***E33.2211 ADVANCED MEDICAL NUTRITION THERAPY**

45 hours: 4 points.

Pre-requisite: E33.2037 Medical Nutrition Therapy

Advanced study of diet therapy methods for the principal nutrition-related disease conditions.

Objectives:

1. Determine nutrient and dietary needs for individuals based on their current nutritional status, disease condition, and medical or surgical treatment.
2. Identify nutrition treatment issues and management strategies associated with care of patients with selected acute and chronic disease conditions.
3. Demonstrate appropriate use of parenteral and enteral nutrition support: solutions, formula design, monitoring, problem management, and transitional feedings.
4. Recognize clinical, laboratory, and anthropometric signs and symptoms of nutritional deficits.
5. Design meal patterns, menus, and diet counseling and other intervention plans for individuals with selected diseases or treatment regimens.

E33.2213 NUTRITION IN PUBLIC HEALTH

30 hours: 3 points.

Pre-requisite: E33.2190 Research Methods

Introduction to the concepts, principles, and scope of practice of public health nutrition. The course emphasizes the distinction between population-based and individual-based approaches to prevention and alleviation of diet-related conditions, and the societal, economic, environmental, and institutional barriers to improving the nutritional status and health of diverse population groups.

Objectives:

1. Define the scope of practice of public health nutrition.
2. Distinguish population-based public health approaches to nutrition intervention from methods that focus on changing the behavior of individuals.
3. Identify the principal biological, behavioral, cultural, socioeconomic, and nutritional determinants of diet-related disease risks among diverse population groups.
4. Describe how poverty and its consequences affect food intake, nutritional status, and the effectiveness of nutrition interventions.
5. Describe how race, class, and gender affect food security, nutritional status, and the effectiveness of nutrition intervention programs.
6. Identify the principal food safety problems in industrialized and developing countries and public health approaches to ensuring the safety of the food supply.
7. Describe the principal policies and programs that address food insecurity, hunger, and nutritional deficiencies among diverse population groups.
8. Identify the causes of the “nutrition transition” in developing countries where health problems of overnutrition increasingly coexist with problems of undernutrition.
9. Define public health policy, needs, goals, and approaches to nutritional intervention in diverse populations, barriers to implementation of such policies, and methods of evaluation for their effectiveness.

E33.2215 NUTRITION IN FOOD STUDIES

30 hours: 3 points.

An accelerated survey of basic principles of nutrition applied to food studies: nutrient functions, nutritional requirements, food composition, menu planning and assessment, food safety, dietary patterns, diet and health issues, dietary recommendations, food products for nutritional purposes. For students with no previous training in nutrition or health.

Objectives:

1. Identify the major health functions and food sources of key ingredients.
2. Recognize basic definitions of nutrition terms.
3. Describe the principal features of energy balance, and of digestion, absorption, and metabolism of essential ingredients.
4. Identify the most commonly used methods for evaluating the energy and nutrient content of diets, and comparing that content to national standards of dietary adequacy and quality.
5. Evaluate the accuracy and effectiveness of current information about diet and nutrition and its impact on the food industry.
6. Apply principles of nutrition to calculation of the nutrient content of diets and menus.
7. Identify the biological, cultural, psychosocial, and economic factors that determine food choices.
8. Describe the leading diet-related causes of death and disability among groups of various nationalities, income levels, and cultural backgrounds.
9. Identify and critically evaluate the principal government policies that affect food availability, food production, and food choices.
10. Describe dietary patterns that best meet nutritional recommendations for health promotion and disease prevention.
11. Identify current issues that affect food choices and nutrient intake: portions size, food products, advertising, dietary supplements, organic agriculture, food bioengineering.
12. Identify and critically evaluate nutrition books, journals, newsletters, and other sources of information for the further study of nutrition.

E33.2216 ADVANCED FOODS

15 hours per point: 1-3 points.

Pre-requisite: E33.0085 Introduction to Foods and Food Science

Principles and practice of identification, comparison, and evaluation of selected foods, ingredients, techniques, and equipment for recipe formulation, menu planning, or preparation, with an emphasis of modifications to meet specific nutritional or other requirements. Repeatable up to 3 points.

Objectives:

1. Demonstrate advanced principles and techniques of professional food preparation.
2. Identify and compare the uses of specific ingredients in recipe formulation.
3. Adjust recipes to modify nutrient and energy content and preparation methods, while maintaining product quality.
4. Design menus to incorporate dishes made from specific food categories designed to meet specific nutritional and ingredient requirements.
5. Demonstrate and evaluate tools and equipment required for professional food preparation and recipe and menu planning.

***E33.2217 FOOD FUNDAMENTALS**

30 hours: 3 points.

Pre-requisites: E33.0085 Introduction to Foods and Food Science (may be taken concurrently), E33.1052 Food Production and Management (may be taken concurrently)

Identification and evaluation of food resources: sources, varieties, and qualities of the most commonly consumed foods, beverages, and ingredients.

Objectives:

1. Review and categorize the groups of foods, beverages, and ingredients that are most commonly consumed.
2. Describe and apply the current gastronomic principles for classifying foods and food ingredients.
3. Identify the principal qualities of foods, beverages, and ingredients that make them desirable and appropriate for consumption. Describe and apply the basics of food/beverage purchasing and food fabrication.
4. Describe and critically evaluate the principal sources of foods, beverages, and ingredients in modern society.
5. As appropriate, identify and critically evaluate current issues affecting foods, beverages, and ingredients.

E33.2220 NUTRITION AND AGING

30 hours: 3 points.

Pre-requisites: E33.1064 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention, E33.1209 Community Nutrition.

Co-requisite: E33.2190 Research Methods

Analysis of research, programs, and services related to the interaction between nutrition and aging, with emphasis on the role of nutrition in comprehensive geriatric care.

Objectives:

1. Understand fundamental issues in nutrition and gerontology: changing demographics, major nutritional problems, impact of nutritional status on health, and key physiologic, behavioral, and socioeconomic factors that affect nutritional status in older adults.
2. Describe current policies and programs that address the nutritional problems of older adults.
3. Characterize the major national state and local programs that provide nutritional services to older Americans.
4. Evaluate current policies and programs that address the nutritional needs of older adults.
5. Critically assess current professional and popular dietary advice to older adults.
6. Evaluate current research on key aspects of nutrition and gerontology.

E33.2222 NUTRITIONAL ASPECTS OF EATING DISORDERS

30 hours: 3 points

Pre-requisites: E33.1069 Nutritional Biochemistry, E33.1185 Clinical Nutrition Assessment & Intervention

Co-requisite: E33.2190 Research Methods

Definition, diagnosis, assessment, and determinants of eating disorders from the nutritionist's perspective, with an emphasis on team approaches to treatment.

Objectives:

1. Define eating disorders from a nutritionist's perspective.
2. Identify the principal components of an eating disorder diagnosis.
3. Identify nutritional and other causes of eating disorders.
4. Describe the nutritional consequences of eating disorders.
5. Describe the most common treatment approaches to eating disorders.
6. Describe the role of nutritionists in eating disorder treatment teams.

E33.2225 FIELD TRIPS IN FOODS

15 hours: 1 point.

Field trips to New York City's varied ethnic neighborhoods to investigate the range of foods available in wholesale, retail, and street markets, with emphasis on cultural, economic, and seasonal factors that affect supply, demand, and consumption trends.

Objectives vary according to subject matter.

***E33.2235 ADVANCED INTERNSHIP IN NUTRITION AND FOOD STUDIES**

10 hours: 1 point.

Pre-requisite: at least 15 points of master's-level work

This course provides structured, supervised opportunities for developing advanced professional skills in planning, implementing, and evaluating education or management projects--in special situations such as university health services, private food service operations, school classrooms, and community agencies. By advisement only.

Objectives:

1. Apply information learned in didactic courses to professional practice situations.
2. Develop, implement, and evaluate an educational, managerial, or other project in the practice situation.
3. Take responsibility for applying information gained from supervision to enhance performance in the practice situation.

**E33.2244.001 ADVANCED TOPICS IN FOOD STUDIES:
FINE ART**

30 hours: 3 points

Food in Western Art explores the intersection of food and art, focusing on images of foodstuffs, meals, and banquets throughout Western history. By examining rituals, (both real and imagined), the marketplace, food preparation, and eating in a variety of settings, students will analyze the cultural contexts and prevailing ideas in painting and sculpture in selected cultures and time periods. Through the analysis images from slide lectures, museum visits, and multidisciplinary readings the class will provide an understanding the shifting meanings and portrayals of food over time.

Objectives vary according to subject matter.

E33.2271 FOOD PHOTOGRAPHY

15 hours: 1 point

Demonstration of techniques for photographing foods for use in print and other media formats. Cross-listed with E33.1271.

Objectives:

1. Demonstrate key operating parts of a digital camera and related photographic equipment.
2. Demonstrate the use of digital camera equipment.
3. Review principles of physics and lens optics related to photography.
4. Demonstrate procedures for making photographic exposures.
5. Demonstrate darkroom and enlargement techniques.
6. Define basic elements and principles of art and relate them to food photography.
7. Analyze and critique food photography compositions based on written studies and personal views of aesthetics.

E33.2306 EPIDEMIOLOGY

30 hours: 3 points

Pre-requisite: E10.2995 Biostatistics I

Introduces students to the field of public health epidemiology, emphasizing the sociocultural factors associated with the distribution and etiology of health and disease. Methodological skills including the calculation of rates, analysis of vital statistics, and programming data using a basic statistical package are covered.

Objectives:

1. Define the content, uses, and significance of epidemiology as a means of public health investigation.
2. Describe epidemiological approaches to defining and measuring health problems in defined populations.
3. Describe the strengths and limitations of epidemiological study designs.
4. Explain the contributions of epidemiological approaches to disease prevention, health promotion, and health policy.
5. Describe the role of epidemiological approaches in evaluating the effectiveness and efficiency of health care and preventive health services.
6. Identify methods for describing disease rates and other vital statistics.
7. Describe methods for critical analysis of the results of epidemiological research.
8. Identify and evaluate methods for performing epidemiological research.

E33.2314 INTERNATIONAL HEALTH AND ECONOMIC DEVELOPMENT

30 hours: 3 points

An introduction to the issues of health and health care on a global basis. The course focuses on the nature and scope of major worldwide health problems and the study of different national and international approaches to their solution.

Objectives:

1. Describe the relationship of economic development to disease causation and public health.
2. Identify general and specific policies and programs developed by various countries to prevent disease and promote health.
3. Describe the principal international organizations involved in health policy and the delivery of health services.
4. Explain how culture and religion influence health policies and programs.
5. Acquire the necessary knowledge to articulate global health concerns and policies that can address these concerns.

E33.2315 PUBLIC HEALTH THROUGH FILM & FICTION

30 hours: 3 points

This course will examine an array of public health issues through the lens of film and fiction in the belief that narrative works provide dramatic insight into the multifaceted nature of public health problems, the complex circumstances giving rise to them, and the factors influencing responses. We will focus on several areas having significant impact on the health of international populations in the 21st century. These include militarism, gender inequality, economic conditions, drug trafficking, occupation, and pandemic disease. We will examine the interrelatedness of these problems, the diverse geographic regions affected by them, their local and global manifestations, and the manner in which they are affected by broader economic and political circumstances.

Objectives:

1. Identify key factors influencing the definition of various public health problems, their causes and societal responses.
2. Appreciate the personal as well as the social dimension of contemporary public health issues.
3. Understand and elucidate the complex dynamic between local conditions, broader economic and political circumstances and public health.

**E33.2316.099 COMMUNITY HEALTH:
A SOCIETY IN TRANSITION – CAPE TOWN, SOUTH AFRICA**

30 hours: 3 points

To enable participants:

1. To acquire a better understanding of some of the priority areas in reproductive health in South Africa
2. To examine the changes that are occurring in implementing reproductive health service delivery in South Africa
3. To explore what barriers exist to effecting changes in reproductive health policy and delivery

The objectives will be achieved by focusing on the following content areas:

1. Reproductive health – an international perspective and past and present trends in South Africa
2. Gender-based violence
3. Infertility
4. Fertility and Contraception
5. Maternal Health
6. Terminator of Pregnancy
7. Cervical and Breast Cancer
8. Sexually Transmitted Diseases and HIV

E33.2318 ASSESSING COMMUNITY HEALTH NEEDS

30 hours: 3 points

Pre-requisites: E33.2306 Epidemiology, E10.2996 Biostatistics II, E33.2361 Research Methods

Definition and description of health problems of specific immigrant communities in New York City using census data and other sources of objective information. Through field observations, students determine the ways in which health providers, community leaders, and community residents view health problems, and compare these views with more objective data as a means to develop health intervention strategies.

Objectives:

1. Identify standard methods for assessing the health needs of specific target communities.
2. Identify standard methods and application skills necessary for describing a geographically defined community in socioeconomic and demographic terms, using a variety of data sources.
3. Describe the use of computer programs such as INFOSHARE, census data, and other resources for describing the health status of specific communities.
4. Describe methods for conducting qualitative research on community health needs such as questionnaires, interviews, observations, and focus groups.
5. Identify methods for describing a community's health resources, most pressing health-related problems, and recommendations for programs to address health needs, and effective ways to present that information.

**E33.2319 WRITING GRANTS AND FUNDING PROPOSALS
FOR HEALTH-RELATED PROGRAMS**

30 hours: 3 points

A “hands-on” approach to grant writing including development of skills in locating potential funding sources and the use of appropriate grant-writing style and technique. Students are guided through the development of a grant proposal, from locating sources of funds; through development of program objectives, background, and methods; to the peer review process.

Objectives:

1. To familiarize students with different opportunities for grant funding.
2. To familiarize students with the different components of a grant proposal.
3. Experience the process of writing a proposal.
4. To familiarize students with the criteria upon which grants submitted for funding are evaluated.

E33.2322 HISTORY AND PRINCIPLES OF PUBLIC HEALTH

30 hours: 3 points

Examination of the mission of public health from a historical perspective. Past and current public health issues, policies, and practices are critically analyzed.

Objectives:

1. Describe basic landmarks in the history of public health in the United States and selected countries.
2. Describe historical trends in demographic patterns and other factors that influence public health.
3. Describe the influence of economic, social and cultural factors on disease incidence, definition of public health problems, and societal responses to those problems.
4. Describe the interaction between biology and social values in formulation of ideas about disease causation, prevention and treatment, as well as views of social responsibility in matters of public health.
5. Identify the impact of new models of disease (example: germ theory) on public health activities.
6. Explain the historical basis of current inequalities in health with regard to race and income and of the factors that contributed to those inequalities.

E33.2335 ADVOCATING FOR COMMUNITY HEALTH

30 hours: 3 points

Examines models and principles of community development, social planning, social action, and public advocacy for health, and concepts and theories related to planned change.

Objectives:

1. Understand the legal context for health care policy, analysis and decision-making.
2. Realize the historical, complex and often discriminatory relationship between individual behavior and public health initiatives, and the relation to sociological and economic agendas.
3. Gain a basic knowledge of community health care, the health care safety net, health insurance and access.
4. Understand concepts, theories and models of health empowerment, behavioral change and the relation to community and health organization development.
5. Distinguish models of policy development and their implications for effective health advocacy.
6. Provide basic understanding of legislative processes, political agendas and imperatives, and how policy can be created through other than legislative means.
7. Develop advocacy skills, including collaboration, consensus building, using media, and writing effective policy and advocacy communications.

E33.2349 PROGRAM PLANNING AND EVALUATION

30 hours: 3 points

Pre-requisites: E33.2318 Assessing Community Health Needs, E33.2355 Social and Behavioral Determinants of Public Health

Research methods for identification of population-based needs for public health intervention, development of programs to meet those needs, and evaluation of the effectiveness of the intervention. Application of research methods to proposal writing, budget planning, project management, and program evaluation.

Objectives:

Describe the basic elements of program planning in public health: needs assessment, goals, objectives, activities, timeline, budget, evaluation.

1. Identify the principal barriers to successful implementation of program plans.
2. Identify the principal methods for overcoming barriers to program implementation.
3. Describe the principal methods for evaluation of public health program plans.
4. Describe methods for demonstrating the ability to develop, implement, and constructively evaluate public health program plans.

E33.2355 SOCIAL AND BEHAVIORAL DETERMINANTS OF HEALTH

30 hours: 3 points

A study of the social, psychological, and cultural determinants of health behavior and consideration of their meaning for public health professionals in domestic and international community settings. The course addresses conditions and phenomena that affect people's understanding, acceptance, and use of health information and, therefore, the design, implementation, and evaluation of community health interventions.

Objectives:

1. Explain the role of social, behavioral and cultural theories and models in health promotion program planning.
2. Describe the key components of "core" models and theories of behavior change and describe their applications. Examples of such models and theories include the Health Belief Model, Theory of Reasoned Action, Social Cognitive Theory, Organizational Change, and Diffusion of Innovation.
3. Describe the theoretical foundation necessary for designing needs assessment activities and instruments necessary for planning effective health interventions.

E33.2356 ENVIRONMENTAL HEALTH PROBLEMS

30 hours: 3 points

This course is an introduction to environmental health issues. The course will help students gain a better understanding of the environmental factors and issues that affect human health. Topics covered include population growth and urbanization, human ecology, pesticide use, noise pollution, air pollution, water pollution, waste generation and management, global climate change, and others.

Objectives:

1. Describe the relationship of environmental factors to health status.
2. Identify the role and effectiveness of environmental regulations.
3. Describe policy and programmatic methods to reduce risks posed by environmental hazards.

E33.2360 INTERNSHIP AND SEMINAR IN PUBLIC HEALTH

180 hours: 3 points

Supervised field experience providing an opportunity to apply health skills in community health settings. Locations may include government agencies, hospitals, professional associations, voluntary health agencies, businesses, industries, and international agencies. Placement selection may focus on special topics such as infectious or chronic disease prevention, substance abuse, family planning, and food, environment, and health systems. Should be taken in the last year of graduate work. Registration requires permission from instructor.

Objectives:

1. Identify methods for describing and analyzing the structure and governance of public health organizations.
2. Identify and apply methods used by organizations to improve the health of their target populations.
3. Describe factors that lead to the effectiveness and stability of national and international public health organizations.
4. Determine requirements of information, personnel, time, and equipment needed to implement programs that address public health needs.

E33.2361 RESEARCH METHODS IN PUBLIC HEALTH

30 hours: 3 points

Pre-requisite: E10.2995 Biostatistics I

Review of research and original writings related to public health. Application of research methodology to problems in public health.

Objectives:

1. Identify the types of research questions and designs appropriate for studies in public health.
2. Describe the various types of qualitative and quantitative methods used in social research.
3. Describe the design of standard tools for applying qualitative and quantitative research methods, such as structured questionnaires, unstructured interviews, focus groups, and open-ended interviews.
4. Identify alternative methods of analysis for various types of data.
5. Evaluate the strengths and limitations of methods used in specific research projects.
6. Describe methods for designing research projects related to specific public health problems.

E33.2365 PROFESSIONAL WRITING IN PUBLIC HEALTH

30 hours: 3 points

Develops writing to audiences, including the general public, legislators, government officials, academics and healthcare providers. Students will explore a variety of writing forms commonly used in the practice of public health. They will develop and enhance their writing skills in order to communicate written public health messages effectively with a given audience.

Objectives:

1. Obtain practical skills in writing, editing, and proofreading public health documents.
2. Understand basic elements of good writing in the field of public health.
3. Understand the principal types of writing used in public health.
4. Learn how-to tailor ones' writing in public health for different targeted audiences.
5. Learn how-to analyze material written in the field of public health.
6. Identify sources for improving writing for public health.

E33.2374 PERSPECTIVES ON REPRODUCTIVE HEALTH CARE

30 hours: 3 points

At the end of this course, students will be able to:

1. Define healthy sexuality and describe its relationship to reproductive health care
2. Demonstrate knowledge and understanding of the critical issues related to reproductive health care in the United States
3. Exhibit health education skills associated with reproductive health care
4. Describe the impact of U.S. public policies on the provision of reproductive health care

E33.2383 INTERNATIONAL POPULATION AND FAMILY HEALTH

30 hours: 3 points

A cross-cultural framework is used to compare the health status of populations and families and factors that affect their health in societal subgroups (for example, urban, rural, poor, women and children, and the elderly). The course emphasizes the effects of secular changes in women's roles and status and other societal, economic, and environmental trends on population and family health.

Objectives:

1. Identify general and specific ways in which gender affects health status in international settings.
2. Describe the effects of factors such as age, urbanization, education, income, culture, and religion affect family health.
3. Identify secular changes in women's roles and status that affect family health.
4. Describe societal, economic, and environmental trends in international family health.

**E33.2405 HEALTH COMMUNICATIONS:
THEORY AND PRACTICE**

30 hours: 3 points

Identification, development, and evaluation of methods for encouraging communities to participate in public health interventions with emphasis on the theoretical basis for communication strategies, and on the design, implementation, and evaluation of health communications programs. Case studies draw on examples from television, radio, print, drama, and other communications media.

Objectives:

1. Define communication theories and methods for behavior change (behavior and social science theories, marketing/social marketing models, mass communication theories and other models)
2. Define key communication areas as well as methods for conducting outreach campaigns designed to improve the health of specific target populations
3. Describe standard techniques used in health communication planning for specific target audiences: research, planning, pre-testing, production/implementation, launch and evaluation
4. Describe the strengths, limitations and criteria for use of a range of health communication channels and areas: radio, print, television, Internet, interactive computer programming, drama, interpersonal communications vehicles, community-based events, and others
5. Define methods used to develop and evaluate health communication materials and activities as well as to measure program outcomes

E33.2410 COMMUNITY BASED HEALTH INTERVENTIONS

30 hours: 3 points

Identification and evaluation of programs designed to reduce health risks among individuals and communities, with a focus on factors influencing the design of interventions, choice of methods, ways to assess the magnitude of change effected by the intervention, and ethical issues raised by the interventions.

Objectives:

1. Describe example of local, national, and international interventions designed to address current public health problems.
2. Identify basic principles that underlie the choice of health interventions, and evaluate their strengths and limitations.
3. Analyze and evaluate the choice of program design and target population, and the effectiveness of specific health interventions.
4. Describe the principal organizational and political barriers to the design and evaluation of health related interventions.
5. Identify the principal ethical issues involved in health-related interventions.

E33.3098 DOCTORAL SEMINAR

10 hours per point: 1-6 points.

Critical examination of research proposal, methods, data collection and analysis, and other issues related to development and completion of the doctoral dissertation and requirements.

Ground Rules:

All doctoral students must attend the seminar every semester for the entire period of doctoral study. Registration for the course is not required in any semester in which a student is enrolled in at least 3 points. Registration is required in every semester in which a student is enrolled in less than 3 credits. Registration for the seminar substitutes for Doctoral Advisement Fee. Credits for the seminar do not count toward the degree. The course is graded pass/fail.

Requirements for a passing grade (and for continuation toward the degree):

1. Presentation of a report on progress.
2. Attendance (unless other arrangements are made in advance).
3. Evidence of satisfactory progress toward the degree.

Objectives:

1. Identify, discuss, and critically evaluate current issues related to research in nutrition, food management / food studies, and public health.
2. Establish individual goals for progress toward completion of the doctoral dissertation, and develop plans to support those goals.
3. Identify and discuss academic areas of common interest among students in nutrition, food management / food studies, and public health.
4. Identify and address problems related to policies and procedures involved in doctoral study, proposal development, and dissertation completion.
5. Promote critical discussion of qualitative and quantitative research issues among doctoral students and faculty.

DOCTORAL SEMINAR DATES FOR 2008:

September 12th, October 10th, November 14th, December 5th.

Maintenance of Matriculation

Undergraduate Students must complete at least 3 points each year or pay a maintenance fee of \$300 plus registration and services fees for the academic year. All course requirements must be completed within ten years from the date of matriculation. Continuous maintenance is required. Contact Undergraduate Advisement, Pless Hall, 2nd Floor, 212-998-5053, for additional information.

Masters degree and Six-year certificate candidates must complete at least 3 points each year or pay a maintenance fee of \$300 plus registration and services fees for the academic year. All points must be completed within six years from the date of matriculation. Contact Registration Services, Pless Hall, 2nd Floor, 212-998-5054/5055, for additional information.

Doctoral candidates must maintain continuous matriculation by registering for E10.3400, Doctoral Advisement or their departmental equivalent (1 point) during any semester in which they are not registered for coursework (exclusive of summers). Doctoral student are required to complete the degree within 10 years of the date of matriculation. Information may also be obtained from Graduate Studies, Pless Hall, 2nd Floor, 212-998-5044 for additional information.

Please note that Maintenance of Matriculation may be waived for one out of two semester swithin an academic year as long as the student is registered for maintenance or a 3-point course in the preceding or following semester. If preceding (Fall) then the fees are transferred to the upcoming semester (Spring) once registration has been completed. A waiver means that the student will not be required to pay the \$300 school fee, but must pay the University registration and service fees.

Registration procedures for maintenance of matriculation are the same as any credit-bearing course.

Students must be clared and approved for Maintenance of Matriculation by the advsiro as follows:

- E4747.01 Masters and Sixth year Certificate Students
- E4747.02 Undergraduate Students

There is a maximum of 2 semesters of maintenance of matriculation.

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