

COURSE DETAILS

10103 Life Skills

(6 credits)

Course Learning Outcomes

1. To gain skills in communication, acquiring common knowledge, and using technology in everyday life.
2. To gain skills in thinking, analyzing and problem-solving in various situations.
3. To develop oneself in the areas of morality, ethics and human relations.

Course Description

To gain necessary life skills in society such as a hunger for knowledge, how to gain knowledge and continuously seek further self-development; be able to use technology efficiently; apply reasoning, analytical thinking, problem-solving, and negotiation skills; learn the principles of self-management, emotional control, and stress management; to develop oneself to have morality, ethics, proper human relationships, manners and etiquette.

10111 English for Communication

(6 credits)

Course Learning Outcomes

1. To be able to use English as a means for communication.
2. To study structures, vocabulary and important English idioms.
3. To equip students with skills in listening, speaking, reading and writing in English for accuracy and appropriateness in various situations

Course Description

Structure, vocabulary and English idioms used in listening, speaking, reading and writing English for communication.

10121 Human Civilization

(6 credits)

Course Learning Outcomes

1. To have knowledge on Eastern and Western civilization in terms of politics, economy, and society.
2. To understand human civilization in the past which is fundamental of the current civilization.
3. To realize and appreciate the values of human civilization.

Course Description

Knowledge on Eastern and Western civilization human has created in terms of politics, economy, society, wisdom, arts, as well as science and technology.

10131 Human Society

(6 credits)

Course Learning Outcomes

1. To understand the existence of human community and society.
2. To understand the political, legal, economic and social mechanisms affecting an organization of human society.
3. To promote the responsibility to the society and nation.

Course Description

Basic characteristics of being human; cohesion into communities and societies; human distribution and settlements; the components of society; human behavior in society; political, legal, economic and social mechanisms affecting the organization of human society; social problems and methods to solve them; promotion of a good society.

10141 Science, Technology and Environment for Life**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge about the concepts, rules and development of science and technology, and how they influence of thought and human livelihood.
2. To gain knowledge about the evolution of living things and human beings.
3. To understand the relationship between humans, the environment, and the effects of science and technology on the environment.
4. To gain knowledge of the applications of science, technology, and mathematics in daily life.
5. To enhance scientific thinking and awareness of the need for environmental preservation.

Course Description

Concepts, theories, critical thinking, rules and development of science and technology; natural history concerning human beings; the parts of the human body; humans and the environment; hygiene and nutrition; the application of science, technology, and mathematics in everyday life.

10151 Thai Studies**(6 credits)*****Course Learning Outcomes***

1. To learn about Thailand's history, society, language and culture.
2. To be able to apply the course knowledge to daily life.
3. To understand and take pride in what it means to be Thai.

Course Description

Knowledge about Thai in terms of history, settlement, politics, economy, culture, religion and ritual, language and literature, arts and culture.

10152 Thailand and the World Community**(6 credits)*****Course Learning Outcomes***

1. To be able to gain knowledge on situations, trends and characteristics of economic, social and political relations and changes in the world community which affect Thailand.
2. To gain knowledge on the status of Thailand in the world community.
3. To be able to analyze the problem as a result of globalization in various aspects including political, economical, social and culture and impact on moral and ethic.

Course Description

Status of Thailand in social world; dynamic of social changes which affecting Thailand; problems and causes of problems arising as a result of globalization which cause the awareness, knowledge and understanding of the situation; be able to analyze the cause of problem and the impact of Thai society in various aspect including political, economic, social, moral and ethical.

10161 Thai for Communication**(6 credits)*****Course Learning Outcomes***

1. To be able to use Thai language as a tool for communication.
2. To improve language skill for communicate effectively and creatively.
3. To be able to use language in daily life and to pursuit of knowledge.

Course Description

Significance of language, idea and communication; the art of using word, sentence, idiom, phrase; development of listening, speaking, reading and writing skills to communicate effectively and creatively; using Thai language in daily life to pursuit of knowledge and transfer knowledge.

10162 Chinese for Communication**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge about Standard Chinese phonology, Mandarin phonetic alphabet (Hanyu Pinyin), and be able to write and pronounce the alphabet correctly.
2. To gain knowledge about Chinese characters--as basic words or assembled ones--and sentence structure and grammar for general communication, including practice with writing Chinese characters.
3. To be able to use Chinese in everyday life.

Course Description

Standard Chinese phonology, Hanyu Pinyin transcription, basic words, and dialogues for everyday use, structural grammar, and learn and practice writing of 550 Chinese characters.

10164 Social and Culture in the ASEAN Community**(6 credits)*****Course Learning Outcomes***

1. To be able to understand ASEAN background and history.
2. To be able to understand the purpose of the integration of ASEAN member states.
3. To be able to understand social and cultural condition of ASEAN member states.
4. To be able to understand the role and relationship of ASEAN and other nations.

Course Description

ASEAN background and history; the integration of ASEAN member states; social and cultural condition of ASEAN member states; the role and relationship of ASEAN and other nations.

71101 Fundamental Sciences for Food and Nutrition**(6 credits)*****Course Learning Outcomes***

1. To gain understanding of basic chemistry for food and nutrition.
2. To gain understanding of basic biology and microbiology for food and nutrition.
3. To gain understanding of basic physics for food and nutrition.
4. To gain understanding of basic applied science for food and nutrition.

Course Description

Fundamental of chemistry, biology, and physics for food science and nutrition, atoms and molecules, classification of matters, state of matter, solution preparation, acid-base, hydrocarbon, chemical reaction, changes in food, biomolecules and metabolism, cells biology and genetics, microbiology, biotechnology and genetic engineering, occupational health and basic ergonomics, basic knowledge of equipments for food and nutrition.

71200 Human Being and Ecosystems**(6 credits)*****Course Learning Outcomes***

1. To acquire the fundamental knowledge in human ecosystem.
2. To understand the connection between the human being and ecosystem.
3. To establish the awareness for the responsibility and value of interaction between humans and ecosystem.

Course Description

Concepts of the human ecosystem and interaction between humans and the ecosystem in the level of family, community, society, country, and world that involve in health, hygiene, economy, education, and resource management in the ecosystem. This course also studies in the mechanism of ecosystem equilibrium and the establishment of awareness and responsibility for the preservation of the human ecology to create the value of human being and Thai identity.

71202 Human Nutrition**(6 credits)****Course Learning Outcomes**

1. To acquire knowledge related to food substances, balance of energy and nutrition and way of living.
2. To acquire knowledge related to science, and principles of guidance on nutrition for families.
3. To acquire knowledge and understanding of nutrition's significance for life in each age including evaluation of nutrition condition.
4. To acquire ability for the practical application of nutrition knowledge to daily life.

Course Description

Knowledge of nutrition and health fundamentals, need for energy and food substances in the human life cycle, food substances, energy balance and way of living, safety of food and food selection according to nutrition principles, understanding of needs and food substance throughout the life cycle, knowledge of nutrition science for families and principles of nutrition guidance, nutrition for each age of life and for special individuals i.e. athletes, pregnant women and evaluation of individual nutrition condition.

71203 Basic Food Science and Technology**(6 credits)****Course Learning Outcomes**

1. To gain knowledge and understanding of the importance of food science and technology towards the quality food production.
2. To gain knowledge and understanding of raw materials including the changes that affect food quality, food preservation and processing technology, and food products.
3. To gain knowledge and understanding of novel foods and functional foods.
4. To gain knowledge and understanding of principles of food packing, food packaging materials, and food sanitation.

Course Description

The importance of food science and technology, knowledge of food raw materials, physical, chemical and microbiological changes affecting food quality, food deterioration, food preservation and processing technology, food additives, novel foods, functional foods, food packing, food packaging and labelling, and sanitation in industrial food plants.

71204 Nutrition Education and Communication**(6 credits)****Course Learning Outcomes**

1. To gain knowledge of nutrition education and communication principles.
2. To gain knowledge and understand mechanisms of education and communications for behavioral changes in food and nutrition.

Course Description

Principles of social nutrition education and communication for behavioral change, education of food and nutrition in food chain, influence of current media in food consumption behavior, knowledge and understanding of food consumption behavior analysis; principles, types, and approaches in effective education and communication for desired behavioral change; media context, targeting media group, creating appropriate media, components of communication related to understanding, attractiveness, recognition, and behavioral change, food and nutrition counseling, building education and communication team

71205 Food Chemistry and Microbiology**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding roles of nutrients and other essential biomolecules in human metabolism.
2. To gain knowledge and understanding important nutrient structures and properties in foods.
3. To gain knowledge and understanding food roles in biochemical abnormalities in the human body, and food toxins.
4. To gain knowledge and understanding chemical changes in food production and storage.
5. To gain knowledge and understanding the role of microorganisms in food, deterioration, and utilization in food production.
6. To gain knowledge and understanding principles of food analysis by using chemical, microbiological and physical techniques.

Course Description

Important role of carbohydrates, proteins, lipids, vitamins, minerals, and water in human health and food composition; other important biomolecules in food biochemistry such as hormones and phytochemicals; food toxins; eating food on physical abnormalities; chemical changes in food during production and preservation; harms and benefits of microorganisms such as bacteria, molds, and yeasts; analysis of food quality relying on chemical, micrological and physical principles.

71206 Consumer Behavior and Protection in Food and Nutrition**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding of food consumption behavior.
2. To gain knowledge and understanding of factors influencing food consumption behavior.
3. To gain knowledge and understanding in the food consumption behavior analysis and find out the way to improve consumers' food behavior.
4. To gain knowledge necessary for the production and consumption of healthy food.
5. To gain knowledge and understanding food laws, food labels, consumer protection and the rights and duties of consumers.

Course Description

Principles and theories of health behaviors, knowledge, attitudes and food consumption behaviors for good health. Consumer behavior and analysis, factors influencing consumption behavior of individuals, community, and society. Guidelines for healthy food production and consumption. Consumer power, right, law, rule, regulation, food-related regulation, food label and consumer protection. Role and duty of government/ nongovernment in consumer protection and communication to change consumption behavior.

71207 Principle and Applications of Nutrition Assessment Methodology**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding of basic nutrition assessment.
2. To gain knowledge and understanding of principles of community nutrition assessment.
3. To gain knowledge and understanding of principles of nutrition assessment for patients.
4. To enable students to assess nutritional status.

Course Description

Roles and importance of nutrition assessment process, anthropometry, biochemical assessment, clinical assessment, dietary assessment, community nutrition assessment, application of nutrition assessment in different age and health status for surveillance, protection, and treatment.

71311 Food Production and Processing Technologies**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge of food processing and preservation.
2. To gain knowledge and understanding food quality control system for food production and distribution.
3. To gain knowledge and understanding of tools, equipments, machines and packages used in food preservation and processing.
4. To gain knowledge and understanding of green technology in food processing
5. To gain knowledge and understanding of food production planning

Course Description

Food production planning and management: raw material supply, food production, food storage, food packaging, transportation; resource management, food quality control, food traceability.

Raw material preparation for food process, instruments and technology in food preservation and processing for community and industrial levels, innovation for food processing, effects of processing methods on food product quality, utilizing food waste from production, and green technology in food production.

71312 Basic Statistics and Applications in Food and Nutrition**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge of principle of statistics for food and nutrition research.
2. To gain knowledge of basic mathematics used for statistics.
3. To gain knowledge and understanding of descriptive statistics.
4. To gain knowledge and understanding of inferential statistics.
5. To be able to explain how to present statistical and significance data.
6. To be able to interpret statistical results in food and nutrition research

Course Description

Basic statistics in food and nutrition research, basic mathematics for statistics, descriptive statistics, inferential statistics, statistical analysis for food and nutrition research, statistics for food product development research, statistical and significance data presentation, statistical result interpretation for food and nutrition research.

71313 Food Hygiene and Safety Management**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding of food sanitation importance and food safety situation.
2. To gain knowledge and understand food hazards, food contamination and effects on health.
3. To gain knowledge and understanding of food safety standards throughout the food chain.
4. To be able to apply food sanitation in food industry and service.

Course Description

Importance of food sanitation, food safety situation in Thailand and international, food hazards, causes of food contamination, contaminated food that causes illness, risk management related in food system, food safety standards on food supply chain (applications of quality management system for food safety and food management throughout food supply chain) , good agricultural practices, good hygiene practices, good manufacturing practices, Hazard Analysis Critical Control Points in food manufacturing and food service industry.

71314 Food Product Development**(6 credits)*****Course Learning Outcomes***

1. To gain and understanding research, information development, and concept in product development processes, including principles of food marketing for product development.
2. To gain and understanding research and product development processes.
3. To gain and understanding processes of product testing and evaluation.
4. To gain and understanding food law and regulation for food claim and customer protection.

Course Description

Concept and important of food product development; new product idea creating and screening; guideline on product development for value-added products, customer behaviors, development of food formula and processes for new product; selection of packaging materials; statistics in product development; shelf-life evaluation under actual storage conditions before releasing a product to market; product testing in market; intellectual properties, food label design, creating new value-added products associated with culture meanings.

71315 Food and Nutritional Management in the Elderly**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding of aging concepts and theories, as well as the performance of body systems related to nutrition in elderly.
2. To gain knowledge and understanding about the nutrient needs and nutritional intake of the elderly.
3. To be able to apply knowledge for screening, evaluating, and diagnosing malnutrition status in the elderly.
4. To gain knowledge and understanding about the principles of food, nutrition, and exercise advice for the elderly with normal health conditions and illnesses.
5. To be able to apply knowledge of food and nutrition management for the holistic care of the elderly.

Course Description

Concepts, theories of aging, and body system efficiency about food, nutrition, malnutrition, and changes affecting the elderly population. Study of the nutrition and health mechanisms in the elderly. Screening, assessment, and diagnosis of malnutrition in the elderly. Food exchanges and meal planning for the elderly. Nutrition therapy and health promotion for holistic care of the elderly Anti-aging medicine with diet, nutrition, and exercise in the elderly. Effective nutrition education and counseling strategies for reaching older adults. Preparation and sustainable management of elderly life stability.

71316 Physiology and Nutritional Biochemistry**(6 credits)*****Course Learning Outcomes***

1. To understand structure and properties of macronutrients and micronutrients.
2. To understand metabolism of each nutrient in human body.
3. To understand the roles of human organ systems in maintaining metabolic balance.
4. To understand the functions of hormones and nutrients in human metabolism.
5. To understand physiological disorders that relate to nutrients metabolism.
6. To be able to interpret biochemical data for an identification of physiological disorders.

Course Description

Basic knowledge in structure and properties of nutrients, metabolic pathway of each nutrient, factors that affect digestion, absorption and utilization of nutrients, the effects of nutrients on human physiology and metabolism, functions of hormones in nutrients metabolism, the effects of physiological disorders on controlling and utilization of nutrients and biomolecules in human body, the principle of interpreting biochemical data to indicate physiological disorders.

71317 Nutrition and Exercise for Health and Weight Control**(6 credits)*****Course Learning Outcomes***

1. To be able to explain the concept of balanced diet for healthy life.
2. To understand the principle of diet planning that is suitable for each level of physical activity.
3. To understand and be able to apply the knowledge of nutrition in weight management.
4. To understand and be able to apply the knowledge of nutrition in daily exercise.

Course Description

Concepts and principles of nutrition in an aspect of health, diet planning, food products and types of processing for healthy diet, applying nutrition knowledge for weight management and daily exercise in people with different age group and health status.

71411 Food and Nutrition Therapy**(6 credits)*****Course Learning Outcomes***

1. To develop competence in understanding and applying knowledge of nutrition therapy for patients and people with specific medical conditions.
2. To develop competence in understanding the change in nutritional needs due to disease-related physiological change.
3. To develop competence in understanding nutrition assessment, nutrition counseling, nutrition intervention, and nutrition monitoring.

Course Description

General nutrition concepts in nutrition therapy, food exchange, and diet-related diseases; the change in nutritional needs due to disease-related physiological change; the relationship between nutrition and diseases; dietary management for prevention or delay progression of chronic diseases; nutrition therapy in infectious diseases, surgical patients and other malnourished conditions; nutrition care process.

71414 Food Quality Control and Assurance**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge and understanding of quality control and assurance principles.
2. To gain knowledge and understanding of quality control methods by chemical, physical, microbiological, and senses techniques.
3. To gain knowledge and understanding of food law that manufacturer must abide by and protect the consumers.
4. To gain knowledge and understanding of food standards for quality assurance.
5. To gain knowledge and understanding of quality management system and integrated standards in food industry.

Course Description

Quality control and assurance principles, quality control by using statistical principles, control plan, sampling plan, quality testing and assessment by using chemical, physical, microbiological, and senses technique.

Importance of food standards, setting domestic and international food standards, quality management system standards, environmental management system standards, integrated standard concept in domestic and export food industry.

71415 Food Service Management in Institutions**(6 credits)*****Course Learning Outcomes***

1. To gain knowledge on basic business administration in food services.
2. To be able to manage food services in schools, hospitals, and hotels.
3. To be able to operate small and medium restaurants of different types.

Course Description

Basic principles of different food services operations, quality control in food service for standard test and assessment.

71416 Professional Experience in Food, Nutrition, and Applications**(6 credits)*****Course Learning Outcomes***

1. To integrate the concept of food production and process development, food management, food quality control, food product development, food sanitation, and food safety throughout the food supply chain and food services.
2. To integrate the knowledge of nutritional assessment, nutritional surveillance, menu planning based on nutritional principles, dietary management for prevention and therapy, communication aiming at desirable nutritional behaviors for communities and society, and health promotion and prevention for enhancing food security and nutrition.
3. To enhance morality and ethics in operations and food and nutrition operations.

Course Description

Integration of the concepts in food production and process development, food management, food quality control, food product development, food sanitation, and food safety throughout the food supply chain and food services.

Integration of the knowledge in nutritional assessment, nutritional surveillance, menu planning with a nutrition guidance application, dietary management for prevention and therapy, and information and communication technology for desirable nutritional behaviors of communities and society. Applying morals and ethics in the food business and nutrition operations, applying food laws and economic principles to consumer protection. Understanding key success factors in a food and nutrition career.

71417 Principles of Food and Restaurant Business Managements

(6 credits)

Course Learning Outcomes

1. To gain knowledge and understanding type and characteristics of food and restaurant business.
2. To gain knowledge and understanding food and restaurant business systems and business process including raw material management, storage, food production or preparation, and costs calculation.
3. To gain knowledge and understanding principles of promotion in marketing and advertiment for food and restaurant business.
4. To gain knowledge and understanding principles and application of information technology for food and restaurant business management and development.

Course Description

Concepts for business plan and management of food and restaurant business; scope of business that refers to raw material management, food storage, food preparation and production regulated under food standards and international food management principles, and costs calculation; guideline for improving business; principle of marketing, promotion and advertiment, principle of information technology for food and restaurant business; use of computer and software for food and nutrition management; data utilization for business decisions about food and restaurant business.

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