

## 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.

**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.

**50101 Basic Science****(6 credits)*****Course Learning Outcomes***

1. To elucidate quantitative change by using mathematical basic knowledge.
2. To forecast causes and trends of phenomenal changes relating to matters and energy by using Physics knowledge.
3. To define atoms, molecules, and chemical reaction.

4. To explain biochemical processes in living organisms at molecular level.
5. To apply knowledge in biotechnology, genetic engineering, and nanotechnology in life.

***Course Description***

Mathematical and scientific knowledge for describing natural phenomena by mathematics application in order to explain the quantitative change and solve scientific problems; principles of physics for describing energy models and physical change; principles of chemistry relating to fundamental atomic and molecular knowledge affecting various changes including biochemistry which causes molecular level change of living organisms and living processes; biotechnology, genetic engineering, and nanotechnology in life.

**50102 Life Sciences**

**(6 credits)**

***Course Learning Outcomes***

1. Describe basic knowledge of structure and functions of various body systems, microbes and parasites that affect human health.
2. To analyze the functions of various body systems under normal conditions.
3. To apply knowledge to solve health problems in specified situations.

***Course Description***

Structural basis of the human body composing of macroscopic anatomy ( gross anatomy) and microscopic anatomy (histology); physiology and various body systems; co-ordination and responses of various body systems under normal conditions including properties and importance of microbes and parasites that affect human health.

**50103 Statistics and Research in Health Sciences**

**(6 credits)**

***Course Learning Outcomes***

1. To elucidate definition, concept, principles, and statistical analysis.
2. To be able to apply statistical knowledge in presenting data, estimation, and test of hypotheses, decision making, and research in health sciences.
3. To elucidate results of Thai and international health science research, as well as conduct basic research.

***Course Description***

General principles of statistics; basic mathematics; frequency distribution; measurement of central value, dispersion, probability, sampling techniques; test of hypotheses, correlation analysis; linear regression, vital statistics, and population indices; basic research principles and methodology; application of statistics and research in health sciences.

**52203 Environmental Health**

**(6 credits)**

***Course Learning Outcomes***

1. Describe the principles and methods of providing clean water and managing and controlling water pollution.
2. Describe principles and methods for managing and controlling air pollution and the nature of climate change.
3. Describe the principles and methods for managing noise pollution, vibration, and radiation.
4. Describe the principles and methods for managing solid waste, sewage, hazardous waste, infectious waste, and dangerous chemicals.

5. Describe the principles and methods for managing food sanitation, nuisance and health hazards at workplaces, and environmental health in emergencies.
6. Explain the concept of environmental health, health impact assessment, and the environmental health operations in Thailand.

***Course Description***

Concept of environmental health; provision of clean water and water pollution management and control; air pollution control and management and climate change; management of noise pollution, vibration and radiation; management of solid waste, sewage, hazardous waste, infectious waste, and dangerous chemicals; management of food sanitation, nuisance and health hazards at workplaces, and environmental health in emergencies; health impact assessment, and the environmental health operations in Thailand.

**52204 Law and Ethics of Public Health Professional**

**(6 credits)**

***Course Learning Outcomes***

1. To explain about professional standards, professional ethics professional and social responsibility.
2. To explain the law, act, royal act and ministerial regulations related to public health operations.

***Course Description***

Knowledge of professional standards, professional ethics, professional and social responsibilities, law, act, royal act, ministerial regulations related to public health operations and laws related to professional practice; the law on health care facilities, health protection, disease control and prevention, environmental health law, occupational and safety law, health consumer protection law, and community health professional law.

**52302 Epidemiology in Public Health**

**(6 credits)**

***Course Learning Outcomes***

1. To describe the key concepts in epidemiology and understand the natural history of disease and distribution in terms of person, place and time.
2. To analyze epidemiological data.
3. To diagnose public health problems.
4. To identify causes and determinants of diseases using epidemiological methods.
5. To explain methods of surveillance and epidemiological investigation.
6. To apply epidemiological principles for disease prevention and control; infectious diseases, non-infectious diseases, emerging and recurrent diseases, and occupational diseases including quality of life improvement at the family, community and organization levels.

***Course Description***

Concepts and principles of epidemiology in public health; the natural history of diseases according to society and ecology; the characteristics and distribution of diseases classified by person, place and time; epidemiological data analysis; methods of diagnosing health problems in the communities, hospitals and workplaces; study of the causes of disease and factors affecting disease occurrence; investigation and surveillance of diseases; epidemiology and prevention and control of infectious, non-infectious, occupational diseases, and emerging diseases and recurrent diseases, as well as application of epidemiological knowledge in enhancing quality of life.

**52305 Occupational Health and Safety****(6 credits)*****Course Learning Outcomes***

1. To explain the definition, significance and concepts of occupational health and safety, laws and standards for occupational health and safety management systems.
2. To explain the methods of awareness, evaluation and control of the working environment.
3. To explain toxicology and ergonomics in occupational health and safety.
4. To explain the cause and prevention of accident, the concept of fires, emergencies and hazards in construction, machinery and electricity.
5. To explain occupational disease, diagnosis principle, occupational health care and health and environmental surveillance.
6. To explain the identification of risk factors including assessment and control of occupational health and safety risks.
7. To explain the methods of health and environmental surveillance.
8. To explain the methods of risk assessment.
9. To explain the definition, the concept of occupational health services in the workplace and in the community, including danger, prevention and control of hazards in the agricultural sector and informal employment.

***Course Description***

Definitions, significance, components and concepts of occupational health and safety; awareness, evaluation and control of the working environment; toxicology and ergonomics; causes of accidents; losses from accidents; fire prevention; prevention of machine and electricity-related accidents; health and environmental surveillance; risk assessment; measures of occupational health and safety management system.

Definitions, significance, components and concepts of occupational health and safety; laws related to occupational health and safety; occupational health and safety management system standards; awareness, evaluation and control of the working environment; toxicology and ergonomics; causes of accidents; losses from accidents; occupational diseases; diagnosis and health care; accident and fire prevention; prevention of hazards in construction, machinery and electricity; health and environmental surveillance; identification of risk factors; risk assessment and control; occupational health services in the workplace and in the community; prevention and control of hazards in the agricultural sector and informal employment.

**52312 Family Health in Public Health Work****(6 credits)*****Course Learning Outcomes***

1. Describe the relationship between health of individuals, families, and communities, and factors influencing health, the health of children, adolescents, adults, and the elderly.
2. Explain and apply the theory of holistic health care for families and individuals of various ages in providing services in both agency and community settings.
3. Explain guidelines for providing health advice and counseling, planning and health services for families and individuals of various ages, health services at home, school, workplace and community.
4. Apply the principles of family health services for good health of individuals, families and communities.
5. Explain the referral system for treatment.
6. Describe the concepts of health development and the influence of social, economic, political, technological changes, policy and health laws, and the health needs of people on health development.

7. Analyze problems, obstacles and trends in the development of health and family health services for communities and the country.

***Course Description***

Basic concepts of the relationships between health of individuals, families and communities; factors influencing the health of children, adolescents, adults, and the elderly; application of the theory of holistic health care for families and individuals of various ages in providing services in both agency and community settings regarding health promotion, disease prevention, medical treatment, and rehabilitation; skills in health advice and counseling; planning for health services, family planning, families and individuals of various ages; health services at home, school, workplace and in communities; and trends in the development of health and family health services of communities and country.

**52313 Health Education and Health Promotion**

**(6 credits)**

***Course Learning Outcomes***

1. To explain basic concepts and theories of health behavior, health education and health promotion.
2. To describe the principles and guidelines for planning of operations, its work processes, and evaluation of health education and health promotion.
3. To describe the principles and guidelines for health education and health promotion for various groups of people.
4. To explain guidelines for creating participation and partnerships with various sectors in health education and health promotion to solve health problems.
5. To describe concepts and methods of quality improvement in health education and health behavior surveillance.
6. To describe the processes in communicating, health literacy and advocacy on health needs for community members and other professional personnel.
7. To describe the research process for the development of health education and health promotion.

***Course Description***

Basic concepts and theories of health behavior, health education and health promotion; principles and guidelines for planning of operations, its work processes, and evaluation of health education and health promotion, principles and guidelines for health education and health promotion for various groups of people in communities, schools, work places and health care facilities; guidelines for creating participation and partnerships with various sectors in health education and health promotion to solve health problems; concepts and methods of quality improvement in health education and health behavior surveillance; the processes in communicating, health literacy and advocacy on health needs for community members and other professional personnel; the research process for the development of health education and health promotion.

**52314 Prevention and Control of Disease in Public Health**

**(6 credits)**

***Course Learning Outcomes***

1. To have knowledge and understanding principles, concepts, theories, contents related to disease, the occurrence and progress of the disease including disease prevention and control.
2. To explain the cause of the disease, the occurrence and progress of the disease, disease prevention and control, public health diagnosis and treatment.

### ***Course Description***

Concept about disease prevention, disease surveillance, disease Immunization, general knowledge about communicable diseases and non-communicable diseases (NCDs), causes and pathogenesis of disease, prevention and control of communicable common diseases and NCDs in Thailand including contact diseases, respiratory infectious diseases, food and water borne diseases, vector-borne diseases, zoonotic diseases, Emerging Infectious Disease (EID), metabolic disease and diabetes, cardiovascular disease, cancer, NCDs, occupational diseases and air pollution, mental health problems and drug addiction, and genetic and congenital disorders, degenerative conditions in the elderly, accidents and injuries.

### **52315 Physical Assessment, Basic Medical Care, Rehabilitation and**

**(6 credits)**

#### **Referral System**

#### ***Course Learning Outcomes***

1. To gain knowledge and skill in conducting a comprehensive health history and performing an initial physical assessment.
2. To be able to perform a diagnosis and provide basic treatment within the scope of relevant laws.
3. To be able to assess health risks in patients and high-risk population.
4. To gain knowledge and skills in first aid and assisting patients in emergency.
5. To be able to give advice on medication uses.
6. To explain the principles of rehabilitation for patients and their families, including complication prevention and referral system.
7. To explain the principles of long-term care and palliative care.

#### ***Course Description***

Interview and record patient history; physical examinations; providing basic treatment; assessing health risks in patients and high-risk population; assisting patients in emergencies according to relevant laws; giving advice on medication uses; explaining the referral system; rehabilitation; complication prevention; long-term care and palliative care within the scope of relevant laws for health worker.

### **52316 Public Health Work in Community**

**(6 credits)**

#### ***Course Learning Outcomes***

1. To explain the principles of public health work in community for the development of public health work.
2. To explain how to promote community organization for health development.
3. To explain the principles of skill development of public health work for working in community.
4. To apply the principles of public health work in community with community health professional standards.

#### ***Course Description***

Concepts and principles of public health work in community participation and cooperation with governmental, private sectors and community; promotion of the role of community organizations in public health development; essential skills for community health work including leadership, engagement, preparation, data collection, community needs assessment and community analysis; application of appropriate technology in the community and human relations for sustainable public health development, community health development needs, and community health professional standards.

**52402 Professional Experience in Public Health****(6 credits)*****Course Learning Outcomes***

1. To apply knowledge to solve community health problems, focusing on research studies, disease prevention and health promotion processes.
2. To promote leadership, human relationships, decision-making capacity, teamwork, as well as morality, ethics and the ethics of public health professionals.
3. To understand and have awareness of public health professional ethics.

***Course Description***

Practical application of public health concepts, principles, and research results; the use of case studies and simulations for analyzing public health situations and problems in upgrading the health level of the population; integration of public health knowledge and experiences for the development of public health professions; professional ethics in public health; group dynamics activities to nurture ethics, morals and leadership in students.

**52405 Practicum in Community-based Public Health****(6 credits)*****Course Learning Outcomes***

1. To encourage in health promotion, disease prevention, basic medical care, rehabilitation, physical assessment and referral system by integrating with working properly.
2. To assess community health conditions by using Epidemiological principles, statistics and public Health research including sociology.
3. To work as a team and promote public participation in public health planning and improve the community health including health prevention and control, promotion of community health, occupational health and environmental health.
4. To Develop the health care projects or innovations which relevant to the context and situation of the community.

***Course Description***

Training about how to do Health promotion, Disease prevention, Basic Medical Care, Rehabilitation, Physical Assessment and Referral System to people, patients and families by integrating with work in health care facilities in the community. Working as a multidisciplinary team with people. Assessment of community health conditions using Epidemiological principles, Statistics and Public health research including sociology. Public health planning and improve the community health including Health prevention and control, Promotion of community health, occupational health and environmental health. Developing health care projects or innovations that are relevant to the context and situation of the community.

**52406 Health Administration and Health Informatics System****(6 credits)*****Course Learning Outcomes***

1. To be able to describe the meaning, importance, concepts, theories, principles, processes of public health administration, organization, planning, monitoring, control, supervision, evaluation and resource management in public health.
2. To gain Knowledge and apply concepts in public health planning to manage the work appropriately with changing situations.
3. To be able to describe the management of quality of services and the environment affecting health and public health administration in local communities and networks.



4. To be able to describe concepts, theories and analytical principles of health economics in the development of health service systems to meet the demand or supply of health care.
5. To apply principles of leadership and organizational development to develop public health agencies and health systems.
6. To describe the process of managing the health information system and apply information technology for health management and service.

***Course Description***

Theories, principles and processes of public health administration; organizational planning; human resource management; management of service quality and the environment affecting health; public health administration in the community, local, and network; health economics; finance and procurement management; monitoring, control, supervision and evaluation of public health performance; leadership; organizational development; management of health information systems Information; technology for health administration and health service.

**52408 Seminar for Developing Public Health Skills**

**(6 credits)**

***Course Learning Outcomes***

1. To be able to study, research and analyze the management model of public health issues.
2. To be able to analyze disease distribution and determinants of health, conduct surveillance and disease investigation.
3. To be able to analyze public health data regarding descriptive and inferential statistics and criticize the research for public health development.
4. To be able to analyze environmental health and occupational health and safety risks to assess and control the hazards of health threats.
5. To be able to analyze and suggest solutions for health management and health information.
6. To exchange and apply knowledge and skills in public health to develop public health work in preventing and controlling diseases and health hazards.

***Course Description***

Study, analyze and exchange public health issues; statistics; epidemiology; research in public health, occupational health and environmental health, public health law, the administration and evaluation of public health to prevent and control disease and health hazards.

**53202 Community Health**

**(6 credits)**

***Course Learning Outcomes***

1. To describe the philosophy and concepts of public health, evolution of Thai public health, national health development plan, health system, and health insurance.
2. To describe the principle and method of health promotion, disease preventions and control, basic medical care and rehabilitation of Individual, family and community.
3. To describe the concepts and methods of community health management, family health, community mental health, population and community health development, public health pharmacy, consumer protection, dental public health, nutrition in health, environmental health, occupational health and safety.

***Course Description***

Philosophy and concepts of health and public health, evolution of Thai public health, national health development plan, health system, and health insurance. Principle and method of health promotion, disease preventions and control, basic medical care and rehabilitation of Individual, family and community, community health management, family health, community mental health, population and community health development, public health pharmacy, consumer protection, dental public health, nutrition in health, environmental health, occupational health and safety of public health worker for health development and good quality of life for everyone.

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