COURSE DETEAL

Master' Degree

50703 Statistics and Research in Health Management *Objectives*

(6 credits)

- 1. To analyze and criticize research in health management.
- 2. To develop the research proposal based on the correct research methodology.
- 3. To explain the research ethics, and research ethics.

Course Description

Concepts of statistics and research in health management for public health and hospital managements; researcher ethics; research types; research methodology; literature review in research; research design; research proposal provision; population and sample determination; research tools; quality investigation of research tool; research data collection and processing; analysis of research data by descriptive statistics and inferential statistics, both parametric and non-parametric; content analysis method; writing of research report; research dissemination; research analysis and criticism, and application of research and statistics in both public health administration and hospital managements.

50704 Applied Epidemiology and Development of Health and Environment (6 credits) *Objectives*

- 1. To explain the concepts, theories and principles of epidemiology.
- 2. To explain the differences in different epidemiological methods.
- 3. To explain reasons for choosing statistics for epidemiology.
- 4. To apply knowledge and skills in epidemiology in health and environmental development.

Course Description

Issues and trends of epidemiology in risk status, illness, and health behaviors; health promotion and disease prevention; health determinants of the population based on life cycle; studies of descriptive, analytical, field epidemiology; epidemiological statistics for application in clinical, hospital, social, and environmental epidemiology studies through computing technology and information system in epidemiological work; epidemiological competency development for health and public health personnel; epidemiological work communication in health and environment development; and utilization of epidemiological research for decision-making in health and environment management.

50706 Seminar Issues and Trends in Leadership and Health Management (6 credits) *Objectives*

- 1. To learn and exchange knowledge of health management and leader's issues and trend.
- 2. To research, share experiences, issues and trends from research situations, case study in articles, and suggestion in health management.
- 3. To be team work in knowledge analysis, exchange knowledge in health management issues and trends from case studies or research and propose guidelines for health management.

Study, analyze, exchange, and seminar on leadership issues and trends of health management and health systems in population health conditions. Situation epidemiology of new diseases, recurrent diseases, behavior, environmental conditions, assessment health conditions, health systems, health policy formulation, health system, health systems operation, health systems project, evaluation health management based on research evidence health systems management, health research, health personnel development, health information system, and participation of health care stakeholders. And problems and international health management

50794 Thesis (Public Health)

Objectives

- 1. To be able to select research problems for a thesis.
- 2. To be able to survey and analyze literature related to the thesis.
- 3. To be able to design research for the thesis.
- 4. To gain knowledge and skill in writing and presenting the thesis proposal.
- 5. To be able to develop quantitative research tools.
- 6. To be able to develop qualitative research tools.
- 7. To be able to collect, analyze, and present data for the thesis.
- 8. To be able to present and defend the thesis examination.
- 9. To be able to write the complete thesis report.
- 10. To be able to write the research report for publication.

Course Description

Selection of the research problem; survey and analysis of relevant literature; research design; writing and presenting a thesis proposal; tool development for thesis research, both quantitative and qualitative research; data collection; thesis data presentation; thesis presentation and examination defending; writing the complete thesis report; writing the research report for publication.

50795 Independent Study (Public Health)

(6 credits)

Objectives

- 1. To choose the type of independent study in public health administration or hospital administration in accordance with the issues of interest.
- To review literature and apply concepts, theories, and research results from various sources which define it's as a conceptual framework, independent study methodology for public health administration or hospital administration regards to research ethics.
- 3. To be able to create independent study projects for public health administration or hospital administration.
- 4. To conduct systematic research Write a study report and present independent study results.

Course Description

Study of concepts and independent study process; selection for analysis or research on health and hospital management, synthesis of theories and research results; writing of academic textbooks or books; construction of innovations in management for health system development; writing of independent study outline; presentation of independent study outline, review of literature relating to independent study; data collection, analysis, synthesis, and conclusion, writing, and presentation of independent study report.

(12 credits)

50796 Graduate Professional Experience in Health Management (6 credits) **Objectives**

- 1. To improve personality and self-development for preparing to be a leader in health management.
- 2. To apply concepts, theories of organizational behavior management in economics and strategic planning to analyze and solve case studies by given.
- 3. To develop skills in teamwork and motivation to perform work intellectually which can realize value of leaders who have morals, ethics, and practice in professional ethics as management leaders in health management.
- 4. To exchange knowledge and experience in health management from side seeing in the country and oversea.
- 5. To enhance one's morality and ethics. And professional ethics.

Course Description

Health principles, health management, leadership, negotiation skills method of applying concepts management theories, organizational behavior, economics, strategic planning, analyze both internal and external the health department. Solving public health problems to achieve organizational goals, including important features of leaders of health organizations. Regarding morality ethics, practice according to professional ethics, and personality including increase health management experience through around the country and international context.

50797 Independent Study (Industrial Environment Management) (6 credits) **Objectives**

- 1. To acquire skills in applying concepts, theories, and methodologies studied from various courses for study and analysis.
- 2. To study industrial environment management problems in topics important for development of industrial environment management work, and/or any topics that students have special interest.

Course Description

Problem selections for studying, analysis or research; studied proposal writing; studied proposal presentation; literature review and/or relevant tentative topics for studying, analysis or research; result collection of studying, analysis or research; report presentation of studying, analysis or research.

50798 Thesis (Industrial Environment Management) **Objectives**

(12 credits)

- 1. To be able to select research problems for a thesis
- 2. To be able to survey and analyze literature related to the thesis.
- 3. To be able to design research for the thesis.
- To gain knowledge and skill in writing and presenting the thesis proposal. 4.
- 5. To be able to develop quantitative research tools.
- 6. To be able to develop qualitative research tools.
- 7. To be able to collect, analyze, and present data for the thesis.
- 8. To be able to present and defend the thesis examination.
- 9. To be able to write the complete thesis report.
- 10. To be able to write the research report for publication.

Selection of problems for research thesis; survey and analysis of literature review; research design; writing and submitting thesis proposal; development of tools for research thesis of both quantitative and qualitative research; data collection; submission of thesis data; presentation and defense in thesis examination; writing a complete thesis report; writing a research report for publication.

50799Graduate Professional Experience in Industrial Environment(6 credits)Management

Objectives

- 1. To develop professional academic leadership in industrial environment management.
- 2. To promote human relationship and skills in teamwork.
- 3. To enhance self-moral, ethics, and professional ethics.
- 4. To present concrete industrial environment management guidelines.

Course Description

Knowledge and experiences exchange using seminar, discussion or other suitable means; selfdevelopment to improve personality for professional academic leadership in industrial environment management; human relationship promotion; skills in teamwork; skill development for effectively problem solving in industrial environment management; enhancing appropriately self-moral, ethics, and professional ethics among academicians in industrial environment management.

53708 Strategic Management in Health Development (6 credits) *Objectives*

- 1. To apply principles and strategic management processes in health development.
- 2. To organization, analysis, and formulate strategies for health development.
- 3. To describe implementation strategies and methods for monitoring and evaluating health development strategies.

Course Description

Concepts and principles of strategic management in health development, strategic leadership; components of health strategic management; process of health strategic planning; strategic analysis, determination and selection of strategies in health development; transfer of strategy into action and organization management for health development; factors affecting transfer of health strategy into action, change and development of health strategies; strategic control in health development; tools for strategic evaluation; evaluation of strategic results, strategic management for specific issue; and future trends of strategic management in health development in order to perform health development efficiently under globalization.

53710 Management for Health System Development (6 credits) *Objectives*

- 1. To Apply public health management concepts and principles change management, and data management, news, and Information technology to develop the organization's capacity and develop personnel capability.
- 2. To analyze the components of the health system Health insurance system And relationships with social, economic, cultural and political systems that affect the development of public health.

- 3. To decide on the management of public health resources together with the use of measures, legal, professional ethics, and participation of network partners every sector in the development of health systems and health service systems.
- 4. To apply concepts principles of public health policy, planning, operation, control and supervision And evaluation Plans and public health programs efficiently.

Public health management concepts, and principles change management, comparative public health Information, and Information technology Management In order to develop the organization's capability and develop the personnel capability, analyze the components of the health system Health insurance system that are related to the social, economic, cultural and political systems that can affect the development of public health, decide on the management of public health resources in conjunction with the use of legal measures professional ethics, and the participation of all network partners In the development of health systems and health service systems, and apply concepts, principles, planning, operations, control, supervision, and evaluation public health plans and projects which will affect the development of good public health.

53711 Health Economics and Financial Analysis (6 credits) *Objectives*

- 1. To gain knowledge relating to concepts and theories of health economics.
- 2. To be able to apply health economics concepts and theories in value evaluation of the investment in project provision and health insurance.
- 3. To be able to criticize performances of national, international, and future health economics.
- 4. To be able to analyze public health finance and financial management for efficient investment and health system management effectiveness.

Course Description

Application of health economics concepts in economic evaluation of the investment, project and health insurance provision for health management in personal, community, government, and private sectors; experiences from application of health economics concepts in European, Asian, and American countries; efficient management of health service units at various levels of government and private sectors based on appropriateness of urban and rural communities; public health finance; and efficient management of financial resource.

58708 Strategic Management in Hospital Administration (6 credits) *Objectives*

- 1. To apply principles and process of strategic management in hospital management.
- 2. To demonstrate skills in analysis and determination of strategies in hospital management.
- 3. To be able to select knowledge relating to various appropriately strategic management in hospital management.

Course Description

Concepts, principles, and process of strategic management in hospital management; components of strategic management, process of strategic planning, strategic analysis, determination and selection of strategies in hospital management, transfer of strategies into action and organizational structure management for hospital management; factors affecting transfer of hospital management strategies into action, change and strategic development in hospital management; strategic control in hospital management; strategic evaluation; strategy of value creation in consumers' view; management of marketing strategy; strategies for enhancing learning and

58710 Management for Quality Development in Hospital (6 credits) Objectives

- 1. To apply concepts and principles of management, change management, and management for development of organizational competency towards hospital management.
- 2. To analyze consumer behaviors, value creation for using in hospital management, apply principle of customer relationship towards management and service provision with quality, safety, and fairness of both care recipients and providers.
- 3. To apply management tools of health system and quality management in hospital and community towards hospital management.
- 4. To apply the principles of good governance and laws related to hospital administration, and providing health services based on professional ethics.

Course Description

Concepts and principles of hospital management, change management, consumer behaviors, value creation, and principles of customer relationship management; management for development of organizational competency; process concept, development and use of tools for controlling hospital quality; management of health service system in hospital and community; information and computer technology management; management of logistics system in hospital; management of pharmaceutical and medical supplies; management of nutritional work in hospital; environmental and safety management in hospital; laws relating to hospital management and service provision. Principles of good governance and related laws to manage and provide health services based on professional ethics.

58711 Health Economics and Resources Management for Hospital (6 credits) Administrators *Objectives*

- To gain knowledge relating to principles of health economics, micro-economics, and demandsupply nature in health service market.
- 2. To apply knowledge of health economics in hospital management.
- To explain principles and processes of resource management financial management knowledge budget for accounting, supplies and medical supplies supervision; and internal audits in hospital management.
- 4. To apply principles and process of resource management in hospital management.

Course Description

Concepts and principles of health economics, micro-economics, demand-supply, and nature of demand-supply in health service market, public finance, cost analysis and economic evaluation relating to hospital management; concepts, principles, and process of resource management in hospital management; human resource management and organizational behaviors; enhancement and development of desirable organizational behaviors; role, leadership, and ethics of hospital administrators; finance management, budget, and accounting; materials and medical equipment management; controlling, monitoring, and internal auditing, and application of concepts and principles of economics and resource management in hospital management and development.

- 1. To elucidate standards on environment management system.
- 2. To elucidate standards on corporate social responsibility.
- 3. To elucidate environmental health risk assessment and management.
- 4. To elucidate environmental health impact analysis.

Standards on environment management system; corporate social responsibility; environmental health risk assessment and management; fundamental knowledge and laws regarding environment impact analysis, and health impact assessment; system and techniques for analysis of environment impact and environmental health impact assessment; participatory process of stakeholders; inspection process of operations based on measures on environment and health of projects in construction and on-going phase; and assessment of management results in projects based on reports on environmental impact analysis and health impact assessment.

59714 Industrial Water Quality and Wastewater Control and Management (6 credits) *Objectives*

- 1. To elucidate principles of water quality and wastewater management, prevention of water pollution, and clean technology.
- 2. To elucidate laws and standards regarding industrial water and wastewater management and control.
- 3. To elucidate management of industrial water used activities.
- 4. To elucidate wastewater management and control of wastewater from industrial activities.
- 5. To elucidate mathematics model in water pollution management and control.

Course Description

Principles of industrial water quality and wastewater management; prevention of water pollution and clean technology; laws and relevant standards; water resource, quantity and quality of water used; water treatment process; water distribution system in industrial plants; wastewater source, quantity, and characteristics; wastewater sampling and analysis; wastewater collection systems; treatment and disposal of industrial wastewater and sludge; mathematics model in water pollution management and control.

59715 Industrial Air Pollution Control and Management (6 credits) *Objectives*

- 1. To elucidate principles and concepts in management and control of air pollution.
- 2. To elucidate relevant laws and standards in management and control of air pollution.
- 3. To elucidate sample collection, analysis, quality control, and report system of air monitoring, investigation, and quality assessment from stack, workplace, and ambient air quality.
- 4. To elucidate principle of application of meteorological knowledge and mathematical model in order to manage air pollution.
- 5. To elucidate principles of system design, control, correction, and maintenance of ventilation, treatment, and odor removal systems, as well as air pollution treatment system.

Principles and concepts in industrial management and control of air pollution; types and impact of air pollution; relevant laws and standards in management and control of air pollution; air quality monitoring, investigation, and assessment from stack, workplace, and ambient air; application of meteorological knowledge and mathematical model in order to manage and control of air pollution; system design, control, correction, and maintenance of ventilation, treatment and r removal systems, and air pollution treatment system.

- 59716 Industrial Solid and Hazardous Waste Management (6 credits) *Objectives*
 - 1. To elucidate sources, types, characteristics of industrial wastes, and health and environmental impacts.
 - 2. To elucidate principles of industrial waste classification for administration and industrial waste collection, and transport systems.
 - 3. To elucidate principles and selective consideration of proper treatment and disposal of industrial wastes.
 - 4. To elucidate use of clean technology in order to manage industrial wastes and laws relating to industrial waste management.
 - 5. To elucidate risk assessment, impact monitoring and inspection, and administration of industrial waste management system.

Course Description

Sources and characteristics of industrial wastes; health and environmental impact of industrial wastes; industrial waste classification for administration, collection, transport, treatment, and disposal; waste reduction; application of clean technology in industrial waste management, risk assessment, monitoring and inspection, administration of industrial wastes; and relevant laws.

59717 Research Methodology and Statistics for Industrial Environment (6 credits) *Objectives*

- 1. To elucidate research planning and application of research methodology in industrial environmental works.
- 2. To provide research proposals in industrial environmental works.
- 3. To select statistical methods in industrial environmental works.
- 4. To present research results on industrial environment.

Course Description

Research principles; research process; research design; randomization and research sampling collection; research planning; general statistical knowledge, probability and sample randomization; hypothesis testing; multiple correlation and regression equation; analytical statistics; selection of statistics for data analysis; ethics and professional ethics in research conduction; provision of research proposals and reports on industrial environment; and research result presentation.

59718 Industrial Noise and Vibration Control and Management (6 credits) *Objectives*

- 1. To elucidate fundamental Physics knowledge of noise and vibration.
- 2. To elucidate situation of noise and vibration pollution.
- 3. To elucidate laws and standards relating to noise and vibration pollution.
- 4. To elucidate measurement and assessment of noise and vibration.

- 5. To elucidate principle of control and prevention of noise and vibration.
- 6. To elucidate design of control and prevention system of noise and vibration as well as inspection and correction methods.

Fundamental Physics knowledge of noise and vibration; situation of noise and vibration pollution; laws and standards relating to noise and vibration pollution; measurement and assessment of noise and vibration; principles of control and prevention of noise and vibration; design of control and prevention system of noise and vibration as well as inspection and correction methods, mathematical models in management and control of noise and vibration pollution.

