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Faculty of Humanities

Fundamental English 1

Communication in English for everyday interactions. Basic listening, speaking, reading and writing skills in various social and cultural contexts for life-long learning.

Critical Reading and Effective Writing

English language skills for critical reading from different sources and media and effective writing on topics of students' interests.

Oral Expression 1

Practice in guided conversation with emphasis on pronunciation, intonation, and basic conversational patterns.

Introduction to Language

Introduction to the study of language, analysis of the structure of language: sounds, words, sentences and meaning.

English Phonetics

A study of speech sounds, emphasizing English pronunciation and sound systems. Practical work in speech-sound production, perception and transcription.

English Language and Cultures

Basic concepts of multi cultures, varieties of English and the interconnections between English as a world language and multi cultures in different geo-socio contexts. Explanation of change of English language and multi cultures with awareness of possible cultural conflicts.

English for Hospitality Services

Integrated language skills: speaking, listening, reading and writing in the context of hospitality services.

Oral Expression 2

ENG: Practice in oral public presentation including skits, plays, short speeches, and interviews.

Reading and Writing 1

Practice in reading skills, with an emphasis on critical reading; note-taking from a variety of academic and non-academic texts and listening materials; development of writing skills to express ideas and feelings clearly and logically in response to reading and listening input.

German Conversation

Conversations in German in various situations and on the topics related to everyday life. German tradition and culture.

Information Literacy and Information Presentation

The definition and the importance of information and information literacy, information needs and information seeking, information sources and information services, information resources and organization, information searching, information evaluation, information presentation, citation and bibliography writing.

Reasoning

Elements of reasoning. Procedures and areas of reasoning. Argumentation in daily life.

Philosophy of Sufficiency Economy

Definition, concept and principle of philosophy of sufficiency economy. Livelihood according to philosophy of sufficiency economy. Application of the principle philosophy of sufficiency economy.

Psychology and Daily Life

Psychology and daily life. Individual factors. Interpersonal factors. Social factors.

Beginning Hindi 1

History of the Hindi language, reading and writing Devanagari scripts. Preliminary Hindi grammar. Translating simple sentences from Hindi to Thai and from Thai to Hindi.

Beginning Hindi 2

Conjugation of verbs in present, past and future sentences. Using of the verbs in presumptive, imperative and subjunctive sentences. Using of the special verbs. Translating sentences from Hindi to Thai and from Thai to Hindi.

Hindi Conversation 1

Listening and pronouncing Hindi vowels and consonants, basic sentences, conversation in daily life, introducing oneself and telling short stories in Hindi.

Hindi Conversation 2

Hindi conversation in particular and various situations, speaking on formal occasions and narrating Hindi stories with own words.

Hindi for Tourism

History and importance of the main tourist attractions of India, usage of Hindi in various situations.

Basic Japanese 1

Japanese pronunciation, Japanese characters: Hiragana, Katakana, Kanji. Japanese basic grammar and sentence patterns. Reading and writing of 400 words of Japanese vocabularies and 50 Kanji characters. Listening, speaking, reading and writing simple Japanese in daily life.

Fundamental Burmese 2

Using Burmese in daily life communication. Reading for comprehension. Writing sentences and short paragraphs.

Spanish 1

Spanish spelling and pronunciation. Basic Spanish vocabulary, grammar and sentence patterns using communicative approach with integrated skills of listening, speaking, reading and writing words, phrases and simple sentences. Greetings and introduction. Asking for and giving simple information.

Spanish 3

Spanish vocabulary, grammar and sentence patterns using the communicative approach, with integrated skills of listening, speaking, reading and writing short sentences in various situations.

Spanish Society and Culture

This course provides students with the Spanish language in the areas of geography, history politics, economy, education, and cultures.

Thai in Everyday Life 1

Basic Thai for everyday communication in various situations, introduction to Thai culture and manners, focus on listening, speaking, reading and writing Thai alphabet, words, phrases, and short messages.

Basic Thai for Foreigners 1

Vocabulary, expression and conversation in Thai on topics of greeting, self-introduction, saying goodbye, family, everyday objects, number and time indicating, activities, conditions, shapes, and characteristics.

Basic Thai for Foreigners 2

Vocabulary, expression and conversation in Thai on topics of recreation, entertainment, tradition, art and culture, economy, society, science, technology and current situation in Thailand.

Basic Listening and Speaking in Thai

Characteristics of Thai sounds. Listening in order to identify Thai sounds. Principles of listening in order to identify keywords in conversation and narration from Thai native speakers. Conversation and narration in daily life.

Intermediate Listening in Thai

Grasping and summarizing main ideas from listening to media on topics of recreation, entertainment, tradition, art and culture, economy, society, science and technology.

Intermediate Speaking in Thai

Expressing ones' opinions through speaking, making discussion, and interviewing on topics of recreation, entertainment, tradition, art and culture, economy, society, science, and technology.

Basic Reading and Writing in Thai

Reading aloud; tone assignment; writing consonants, vowels, tones, words, phrases and basic sentences.

Intermediate Reading in Thai

Basic principles of reading. Reading notices and advertisements, short conversations, short news, stories from experiences and short tales.

Intermediate Writing in Thai

Principles of writing; writing complex sentences; writing medium-sized texts about experiences, using a diary, answering questions, and expressing opinions.

Listening and Speaking Thai 1

Listening and speaking Thai focusing on listening comprehension, grasping main ideas, expressing opinions, practice listening to conversation, lectures, various media, responding and simple discussion.

Thai for Business 1

General characteristics of business language. Vocabulary, expressions and conversations about retail and wholesale business, tourism, hotel industry, finance and banking, insurance, real estate, contacting business organization, job application and job interview.

Advanced Writing in Thai

Basic knowledge of writing government official documents. Principles of government official language usage. Art of writing government official documents. Writing for communication in government official documents context, meeting report, official report, project and public relation writing.

Advanced Speaking in Thai 2

Factors making public speaking interesting. Guideline for speaking competence development. Speaking skill development in form of recommendation, speaking in special occasions, discussion, persuasion, public speech, interview and debate.

Characteristics of Thai Language for Foreigners

General knowledge of Thai and Tai languages. Characteristics of Thai sounds, voice organs, pronunciation, pronunciation of consonants, vowels and tones. Characteristics of Thai words, morphemes, and word formation. Characteristics of Thai sentences including components, structures, structural changes and types of sentences.

Thai for Teaching Foreigners 1

Basic concepts of first language, second language, and foreign languages; characteristics of Thai as a foreign language (TFL); theories of language acquisition; language interference; types of foreign language learners and teachers; and problems of TFL learners.

Introduction to Literary Studies for Foreigners

Definitions, categorization and components of literature; relationship between literature and other disciplines.

Translation 1

Basic translation theories; translation process; tools and technology for translation; analysis, interpretation and tool application for translation; translation techniques; Thai translation in different levels; word, phrase, sentence, text, short essay and medium length essay; problems found in translation and solution.

Thai Culture in Thai Language

Approaches of relationship between language and culture. Words reflecting Thai culture. Origins, structures, contents, meanings, and relationship between Thai expressions and Thai ways of life.

Thai Masterpiece Literature for Foreigners

Definition, scope, and convention of Thai masterpiece literature; forms, contents, ideas, values and attributes of selected Thai masterpiece literature: Ramakian, Phra Aphaimani and Khun Chang Khun Phaen; and relationship between the Thai masterpiece literature and important places in Thailand.

Independent Study in Thai as a Foreign Language

Topic selection; forms of independent studies; document research; data collection; data analysis and/or synthesis; study report writing; presentation; and evaluation.

Usage of the Thai Language

A study of the usage of the Thai Language and practice in writing.

Learning through Activities

Knowledge of activity development, planning, preparing the administrative process, organizing the activity and solving problems, presenting the outcome, and evaluating. Grading will be given on satisfactory or unsatisfactory basis.

Faculty of Education

Swimming for Life and Exercise

The principles of exercise for health by Swimming. Warm up and cool down. Principles of breathing and movement under water. Using body physically to swim in each style. Helping others from dangers in swimming. Swimming for health and participation in competition at different levels. Benefits and etiquette for players and spectators.

Rhythmic Activities for Life and Exercise

The principles of exercise for health through Rhythmic Activity. Body movements in different styles. Body movements with rhythm and music. Folk dances and social dances. Social manners and social dances etiquette. Analysis of social dances types. Participating in and organizing social dance parties.

Badminton for Life and Exercise

The principles of exercise for health by playing Badminton. Warm up and cool down. How to hold the racquet and body movements to hit the shuttlecock. Rules and scoring in Badminton. Playing Badminton in different styles. Analysis of Badminton matches and participation in Badminton competition at different levels. Benefits and etiquette for players and spectators.

Faculty of Fine Arts

Man and Art

Relation between man and art; origin of art; structures of art; influence, roles and responsibilities between man and art; value of art in social context.

<u>Faculty of Political Sciences and Public</u> <u>Administration</u>

Introduction to Political Science

The study about state including the study of government, public administration, and the crucial factors relating to power of state, state formation and power distribution theories. Fundamental knowledge about political process and system; interaction among political actors which are political institutions and organizations; comparative political concepts; ideologies, and political systems. The study of the history of Thai politics; introduction to international relations; and important issues in politics from past to present, of which affect political behavior and political development at both local and national level today and in the future.

Basic Good Governance in Administration

Meaning and concepts of good governance. The problem and the ethics development in government units. Good governance components and indicators of government units. Student morality and ethics. Case studies of good governance in government units. Student presentations.

Faculty of Social Sciences

The World of Social Science

Introduction to social science. Foundations in education and academia. Philosophy, knowledge, and wisdom. Epistemology and ontology. Social science disciplines. Integrative and holistic approaches in social science. Shared and distinct concepts and approaches. Introduction to theory and methods in social science research. Field research and ethics. Library science and online research. Social science referencing and research writing. Selected social science research areas; health, human rights, migration, culture, ethnicity, gender, religion, conflicts, peace, social, cultural, and environmental justice, food security, climate change, technology and social impacts. Contemporary issues. Future directions in social science studies.

Contemporary Theories in Social Sciences

State of contemporary social science knowledge, Structural-Functional theories, Marxism, Structuralism, Post-Structuralism, Structure and Agency, Contemporary Social Sciences Modernism and Post-modernism, Neo-liberalism, Post-colonialism, Environmentalism, Feminism, Political Ecology, Contemporary Social Theories and Thai Society.

Refugees and Displacement

Causes and effects of refugees and displacement. Global and local contexts of displacement. Systems and social science perspective of understanding the connecting intersections affecting refugee populations. Social and economic processes of displacement. International NGO and national government responses to refugee situations. Case studies of refugees in Europe, Africa, Asia, the Americas, and the Middle East. Reframing of refugee movement and displacement.

Religions and Social Changes

Introduction to a study of belief and religion, Cosmology and cultural and ritual practices in Southeast Asia, Buddhism, Islam, Christianity, Confucianism in Southeast Asia, Religion, politics and legitimacy, Gender and religion in Southeast Asia, Religion, development and the challenges of modernity, Popular religion, religious syncretism, Spirit medium, cult and cultural crisis, Religious conflict and reconciliation.

Research Methods in Social Sciences

Meaning, significance and process of research, social inquiry and empirical research, social reality and how to explain and/or understand it, formulating research problem and research questions, research design and research tools, survey research, developing questionnaires, quantitative data analysis, ethnographic research, fieldwork and data collection, interpretation and research writing.

Migration and Human Mobility in ASEAN

History of human migration. Theories and concepts of migration. Migration in global level. Migration in ASEAN countries. Globalization, poverty and migration. State and transnational migration. Labour mobility. New patterns of migration: lifestyle migration, retirement migration. Transnational marriage and transnational family. Migration and gender. Migration and health problems. Transnational communities of migrants. Human trafficking. Refugees and stateless people. Policies about refugees and migrants.

Transnationalism and Social Issues

Theoretical transformation from nation-state to transnationalism, Transnationalism in globalization contexts, transnationalism; state, capital and transnational corporations in Neoliberalism, crime, terrorism and international security, terrorism and transnational social movements, transnationalism from below, displacement and transnational migration: diaspora, labor, environmental issue and transnationalism, health and Medicine and transnationalism, new media technologies; transnational culture, communities, ethnicity, gender.

Informal and Illicit Economy

Concepts and theories of informal and illicit economy. Related laws of informal and illicit economy. Meanings of informal and illicit economy. Contemporary issues of informal economy and their relationships with formal economy. Contemporary issues of illicit economy such as human trafficking, trafficking in narcotic drugs and prohibited substances, armed trade, sex trade, trade in protected or endangered species, trade in human organs and digital black market. Labour force in informal and illicit economy. Related state policies. Social, economic, and political impacts of informal and illicit economy. Gender perspectives. Advanced technology and its facilitation to informal and illicit economy.

Economic Development and Spatial Integration

Regional development context: conflict and development path, the "flying geese" economic theory, application and critiques, regional development in the context of post-cold war, the post-socialist reform, forces of neo-liberalism and globalization in regional

changes, market economy and spatial integration, free trade agreement and its impacts at national and local level, case studies of economic and spatial integration, local social movement towards economic and spatial integration.

Resource Management and Development

Introduction to theories and concept in resource management, economic development policy and instrument in resource management, rural livelihoods and resource management, local knowledge in resource management, green revolution and modernity, debates on common property, community-based resource management, local institutions and gender in resource management, global discourse on environment conservation, social justice and access to resources, ethno-environmental movement, Industrialization, environmental and health problems, local mitigation and adaptation to climate change.

Gender and Development

Basic perspectives and concepts of gender and development, perspectives and concepts in feminism, gender and sexuality in societies, gender and economic issues; work, power and globalization, gender versus culture and beliefs, gender versus family and health, gender and education, gender and resource management, gender versus consumerism and modernity, gender and social movement: transgender, third-sex, homosexual, gender and policy recommendations in Southeast Asia.

Environment and Social Movements in Southeast Asia

First and Third World environmental movements, development, environmental degradation and environmentalism and also social bases of environmental movements, environment, societies and nations in Southeast Asia, local politics of environment, this course includes the social activism on urban development, energy, industry and environment, social activism on rural development, watershed management and environment, and also social activism on agriculture and biodiversity.

Geography of Settlement

The population distribution, development of patterns of settlement, effect of the physical and cultural environments to the settlement pattern; the development of the settlement in Thailand.

Energy, Environment and Society

Evolution of energy uses of human society. Energy and industrial revolution, world energy crisis by focusing on energy use patterns and impacts on environment, world commercial

energy supply and energy global warming and climate change, an alternative energy, energy policy, energy crisis, and environment and social solution.

Digital Image Processing

Basic digital image processing techniques in remote sensing. Elements of image processing systems. Various techniques in image processing and image pattern recognition and interpretation. Application of remote sensing data in a geographical context.

Geography of Migration

Theories and basic concepts of migration. Migration patterns. Factors related to migration. Boundaries and modern nation-state. Patterns and routes of migration. Migration processes. Cultural adaptation and multi-cultural society. Socioeconomic roles of migrants. Problems and policies related to migration.

Economic Geography

Development, definition and the importance of economic geography. Primary economic activities, secondary economic activities and tertiary economic activities. Globalization and economic development.

Fundamental Digital Photogrammetry

Development of fundamental photogrammetry. Aerial camera and its geometry. Types and classifications of aerial photograph. Vertical photograph. Stereoscopic viewing and stereoscopic parallax. Aerial triangulation and aerial photo control point. Digital terrain model and orthophoto mapping. Unmanned Aerial Vehicle photogrammetry.

Human Geography

Basic concepts in human geography. Population distribution and changes. Spatial analysis of settlement pattern. Spatial analysis of cultural characteristics. Spatial analysis of economic patterns. Spatial analysis of political system. Summary: analysis of problems in resources used by human that affected by cultural characteristics.

Independent Study

Independent study on particular topic approved by the advisor and the committee.

Spatial Data Infrastructure

Spatial Data Infrastructure; principles, operated problem, agency, initiatives to development, Spatial Data Infrastructure, National Spatial Data Infrastructure, use and situation of various countries.

Geodesy and Geoinformatics

Overview of Geodesy and Geoinformatics, fundamentals of surveying, geometric geodesy, physical geodesy and Geoinformatics.

Cooperative Education in Social Sciences

Working at the organization of a public or private sectors as a temporary member staff not less than 16 weeks and to be evaluated by an advisor and trainer assigned by the work place and university.

Human Geography

Basic concepts in human geography. Population distribution and changes. Spatial analysis of settlement pattern. Spatial analysis of cultural characteristics. Spatial analysis of economic patterns. Spatial analysis of political system. Summary: analysis of problems in resources used by human that affected by cultural characteristics.

Fundamental Digital Photogrammetry

Development of fundamental photogrammetry. Aerial camera and its geometry. Types and classifications of aerial photograph. Vertical photograph. Stereoscopic viewing and stereoscopic parallax. Aerial triangulation and aerial photo control point. Digital terrain model and orthophoto mapping. Unmanned Aerial Vehicle photogrammetry.

Economic Geography

Development, definition and the importance of economic geography. Primary economic activities, secondary economic activities and tertiary economic activities. Globalization and economic development.

Digital Image Processing

Basic digital image processing techniques in remote sensing. Elements of image processing systems. Various techniques in image processing and image pattern recognition and interpretation. Application of remote sensing data in a geographical context.

Energy, Environment and Society

Evolution of energy uses of human society. Energy and industrial revolution, world energy crisis by focusing on energy use patterns and impacts on environment, world commercial energy supply and energy global warming and climate change, an alternative energy, energy policy, energy crisis, and environment and social solution.

Geography of Settlement

The population distribution, development of patterns of settlement, effect of the physical and cultural environments to the settlement pattern; the development of the settlement in Thailand.

Environment and Social Movements in Southeast Asia

First and Third World environmental movements, development, environmental degradation and environmentalism and also social bases of environmental movements, environment, societies and nations in Southeast Asia, local politics of environment, this course includes the social activism on urban development, energy, industry and environment, social activism on rural development, watershed management and environment, and also social activism on agriculture and biodiversity.

Spatial Analysis and Geographic Information Systems Modeling

Spatial analysis concepts and related theories. Vector-based and raster-based analytical tools and techniques. Applications of geo-spatial statistics in 2-dimension Geographic Information Systems (GIS) modeling. Visualization of 3-dimension GIS and virtual GIS modeling.

Space, Society and Development

Spatial interaction, relationship of social divisions and space, relationship of space and identity, relationship of spatial patterns and social structure, the production of space, boundaries, peripheries, geography of exclusion and resistance, spatial division of labor, gender and ethnicity, and human territoriality.

ENVIRONMENTALISM AND PUBLIC POLICIES

Geography and study of socio-environmental relations, technocentrism and ecocentrism: classification of environmental ideologies, neo-malthusianism and debates on population and environment, gender and environment, deep ecology, social ecology and bioregionalism, religions and environment, local ecological knowledge, contestation of environmental discourses in formulation process of public policies related to environment

POLITICAL ECOLOGY

An analysis of the problems of natural resource and environmental degradation in the context of the political economic configuration. This study combines political economy with ecology, especially in terms of competing control over uses, conservation, and ownership of natural resources and the environment. Conflicting roles of the state, market economy, and civil institutions in natural resource management will be reexamined through current

problems in developing countries. Property rights in natural resources in various levels of social setting are also the focal point of investigation. The contested point of view and discourse on society-environment interrelationships will be brought into discussion and for rebuttal

CONCEPTS AND THEORIES OF ETHNICITY, NATION, NATIONALISM AND GLOBALIZATION

Contemporary issues on ethnicity, ethnic studies in Thailand and the region, the politics of ethnic classification, theories and approaches on studying ethnicity and development, ethnic boundary and identity, ethnicity, nation-state, and nationalism, concept of space and ethnicity, ethnicity in development procedures, natural resources conflict and management, religion and ethnic conflict, ethnicity in urban city, globalization, tourism, and commoditization, citizenship and human rights of ethnic groups. Indigenous movement

Local Wisdom and Sustainable Development

Meaning of local knowledge systems and the importance of local knowledge in development and the approaches to study local knowledge, local knowledge, ecological system, and cosmology, local knowledge and scientific knowledge, local knowledge and political ecology perspective, revitalization of local wisdom in the modern society, practices of local community on resource management, health care, and cultural conservation: experiences of local wisdom leaders, local wisdom in the globalization context, local wisdom, capitalist and market, Intellectual property and community rights, local wisdom and social enterprise, networks and ethnic movement in the Greater Mekong Subregion for protection the ecosystem and local wisdom

Modern World in Everyday Life

Globalization and change in economy, society, politics, and culture, ethnic conflicts, human security, risk society, consumer culture, modern medias and changing everyday life in the modern worlds.

Fundamentals in Sociology and Anthropology

Basic sociological and anthropological concepts which are used to understand and explain social phenomena. The course aims to provide systematic and analytic understanding of society, namely, different degrees of linkage between the individual and social forces from the micro level up to the global level. The students are expected to comprehend social and cultural changes in contemporary Thailand within the context of globalization.

Lanna Society and Culture

Historical background of Lanna. The formation and the end of Lanna states. House, village and principality in Lanna. Temples and Buddhism in Lanna. Rituals and belief in Lanna. Ethnic groups in Lanna. Muslim and Christian in Lanna. Language, music and arts in Lanna. Customary events in Lanna. Mueang or Tai Yuan people. Lanna and changes in globalized era. Lanna and neighbors in Mekong region.

Family and Change

Sociological study and analysis of family in modern society. Structure, relationship, roles, patterns, differences, influence of economics, social and political changes, including loves, marriage, family and work, parenthood and taking care of family members, family violence, gender diversity and family policies.

Cultural Politics and Resistance

Traditional ideas on power and politics (Marxism, Weberian, political sociology). Western Marxism (Gramsci). British New-Left (E.P. Thompson). Structuralism (Foucault). Identity and politics (gender, sexuality, New ethnicity). Anthropology and everyday resistance (Scott). Cultural politics and resistance. Contentious politics and new social movements (Ttilly, Tarrow, McAdam). Postcolonial studies and subaltern resistance (Guha). Post-marxism and identity politics (Laclau and Mouffe). Problems of cultural politics and resistance. E.P. Thompsonian's critiques on contentious politics. Chibber's critiques on postcolonial studies. Zizek' critiques on Laclau's identity politics.

SELECTED TOPICS IN SOCIOLOGY AND ANTHROPOLOGY

study of selected topics in sociology and anthropology such as development, religion, Chinese influence in Mekong region, youth culture, rural studies, urban ethnicity, economic culture, media industries and culture or other social issues relevant to students' research topics, and according to academic and contemporary social situations

DEVELOPMENT THEORIES

This course will study and compare the development of, and debates on, the theories and concepts relating to development studies. The focus will be on the fundamental premises and approaches for the analysis of the ecological and social systems with an attempt to integrate both natural science and social science dimensions. The discussion will be made through concrete action programs on sustainable development with both state and local participation, such as community forestry, watershed management, agroecosystem, agroforestry, and indigenous health system

REGIONALIZATION IN DEVELOPMENT PROCESS

Regionalization in development process in the Mekong Sub-region. An analysis of the history of notions relating to Mekong as a region, changes resulted from development process, market intervention, globalization, and the change of states from post-colonial to post-socialist eras. A study of the emerging notions of economic regionalism and the Mekong Sub-region and the impacts on agrarian transformation, social differentiation, conflict in resource management, environmental politics, change in gender roles, and the development of social movement in the region

Knowledge, Rights and Globalisation

Natural landscape, cultural landscape and global sense of place. Scientific knowledge versus local Knowledge: definitions and debates. Knowledge, power and development. Local rights and property regimes. Gender, rights and knowledge. Local rights, conflicts and social movement. Socio-ecological system development and conservation. Knowledge space and sustainable development. Co-management: state versus local resource control. Multi-scalar resource governance. Intellectual property rights and biodiversity control. Sui generic system, farmers' rights and biodiversity conservation. Sustainability science and community resilience.

Ethnic Politics in Southeast Asia

Historical development and concepts of ethnicity, colonial regime, nation-state, and ethnic groups in Southeast Asia, transnational ethnic groups and migration, ethnic conflicts in Southeast Asia, ethnic identity in the modern world, ethnic groups, state, development, and globalization, ethnicity and agrarian transition, ethnic groups and access to and management of natural resources, ethnic groups and human rights, religious change in ethnic society, ethnic groups and commoditization, ethnicity in multicultural society, ethnic groups/indigenous peoples and social movement

Research Methodology in Social Sciences

Philosophy and methodology in social sciences, debates in qualitative and quantitative research, problematization and formulating research questions, ethical issues in social science research, literature review, paradigms-theories and conceptualization, methods in qualitative and quantitative research, data collection, doing fieldwork, data processing and analysis, research proposal and research write-up

SOCIAL SCIENCES THEORIES

This course studies how various schools of social sciences construct their theories. Emphasis is on the process of conceptualization at various levels of abstraction as well as the

philosophical foundation and inner logic of each school. Included are debates on the similarities and differences between different theories in the social sciences and natural sciences

SELECTED TOPICS ON WOMEN'S AND GENDER STUDIES

Directed study of a selected topic on women's and gender studies, theoretical and concept formulation for research and thesis problem identification

WOMEN AND DIVERSE GENDER'S HEALTH, WELL-BEING AND SEXUALITY

Political discourses on health, well-being and sexuality of women and diverse gender produced by states and their institutions, scientific, medical science and market-constructed discourses, feminist anti-mainstream discourse on health, well-being and sexuality, roles and responsibilities of women and diverse gender on health, well-being and sexuality to themselves and others in family and community, women's and gendered rights and access to health, well-being and sexuality services provided by the state, the women's and gendered deconstruction of knowledge concerning health, well-being and sexuality in a country or cross-country in modern ASEAN countries

GENDER IN MEDIA, LANGUAGE AND LITERATURE

Cultural construction of gender, construction of meaning, representation, signs, interpretation, and deconstruction, feminist literary criticism, women and diverse gender in Thai and ASEAN literature

Development in Gender Perspectives

Analysis and critiques of liberal and neo-liberalism, globalization and patriarchy, critical studies of development of development from different feminist and gender perspectives, critiques of concepts on Women in Development (WID), Women and Development (WAD), Gender and Development (GAD), critique of postmodern feminism, poststructural feminism, critique of Third-World feminism and postcolonial feminism, critique of development policies from feminist and gender and development perspectives, case studies in Thailand and Southeast Asian countries

CRITICAL INTERDISCIPLINARY WOMEN'S STUDIES

Introduction to critical interdisciplinary women's studies with an emphasis on feminist intersectionality theory - which uses gender, class, ethnicity, and other relevant factors as units of analysis and the bases for research design.

Gender and Society

Basic concepts of sex and gender, analysis of gender in life contexts: gender and family, gender and culture, gender and media, gender and environment, gender and economy, gender and politics, gender and law, gender and reproductive health, case studies in Thai society and integration of gender perspectives into students' projects.

SEMINAR: SPECIAL ISSUES ON DEVELOPMENT STUDIES

Seminar on local and regional issues related to Development Studies. Particularly, the issues of resource management, health related problems, trans-border trade and migration, and problems related to ethnic and gender relations

SELECTED TOPICS ON DEVELOPMENT STUDIES

Directed study of a selected topic on sustainable development. Theoretical and concept formulation for research and problem identification relating to thesis.

OPERATIONALIZATION IN DEVELOPMENT RESEARCH

Learning and exchange from the experience in actual research operation of different research approaches and methods. Case studies using a number of selected thesis and research monograph. Emphases on the operationalization of field research, research proposal writing, field data collecting, data processing and analysis. Presentation of research findings includes thesis writing, research synopsis, and bibliographical format in academic writing

Land relations in Southeast Asia

Changing land relations in Southeast Asia, access and exclusion in land relations, dispossession 1: land grabbing, dispossession 2: Hydropower, agrarian transformation, land tenure and control, political ecology of land, ethnicity and indigeneity and land, urban land issues, peri-urban land issues, transnational infrastructure and land, human security and land, natural disasters and dispossession, regionalisation of land issues, overview and summary

PHILOSOPHY AND CONSTRUCTION OF KNOWLEDGE IN SOCIAL SCIENCE

The study in the paradigmatic development of philosophy as the foundation of knowledge in social sciences, particularly the ontology of social reality, theories of knowledge and social explanation, from positivism, phenomenology, hermeneutic and post-modernism with a focus on the construction of knowledge. Debates on ideology and power as seen in the complex relationships between theory, society and practice, including the epistemology of indigenous knowledge.

Faculty of Law

Introduction to Law

General characteristics of law: legislative process, various categories of law; interpretation of law; law and peace; law and morality; law enforcement and acceptance; law and the security of the citizen; legal rights; prescriptions; principal laws being enforced in Thailand.

Faculty of Sciences

Integrated Mathematical Sciences

Computer science in everyday life, history of computing, internet, statistics in everyday life, statistics for solving the problems in everyday life, probability for describing the phenomena, simulation, examples of mathematical models, matrix operations and its applications, optimization, data representation, artificial intelligence and machine learning, sorting and searching, statistics for decision making.

Advanced Geochemistry

Geochemical exploration, isotopic geochemistry, geochemical thermodynamics, petrogenesis and distribution of elements, phase diagrams and applications, geochemistry of mineral deposits and laboratory practice on relevant topics

Petroleum Systems

Nature and origin of petroleum, maturation, migration, traps and seals, reservoir characterization, petroleum drilling and production, sedimentary basins of petroleum systems, sedimentary processes and structures, facies sequence and models, carbonate reservoirs and seismic-stratigraphic facies model

ADVANCED SEDIMENTOLOGY

Processes of clastic and chemical sedimentation, and diagenesis; sedimentary environments and facies; detailed hand specimens and thin section examination of selected sedimentary suites, particularly with respect to mineralogy and texture.

ADVANCED GEOLOGY OF THAILAND

Advanced study of the geology of Thailand. Regional distribution of major stratigraphic units; the Precambrian, the Palaeozoic, the Mesozoic and the Cenozoic. Discussion on data and evidence supporting and contradicting current hypotheses on geologic and tectonic evolution of Thailand.

Computer Programming Languages

This course is intended to introduce a currently used programming language. The contents will cover a basic concept of the language, system and utility programs, basic components of the language, statements, subprograms, files and applications.

Introduction to Computer

Computer system. Data processing. Number system and data representation. Structure flowchart and pseudocode. Computer programming language and data communication.

Information Technology and Modern Life

Computers in everyday life, Data processing and information management, Office automation software for modern life and Internet and webpage construction.

Scientific Reading and Writing in Chemistry

Scientific literature survey, scientific literature reading, scientific literature citation and relevant aiding tools, writing thesis proposals, writing thesis, writing scientific article, scientific work presentation and ethics in scientific publication and citation

Chemistry Laboratory 1

Chemistry laboratory techniques, reactions of copper and its compounds, limiting agent: synthesis of calcium oxalate, synthesis of potassium alum from aluminum foils, chemical bonds and molecular structure, chemical equilibria and reversible reactions, heat of reactions, galvanic and concentration cells, electrolysis, determination of molar mass by freezing point depressing, acid-base equilibria and buffers, acid-base titration, titration curves, chemical kinetics: iodination of acetone, and special experiments.

Chemistry 1

Introduction and chemical stoichiometry, atomic structures, chemical bonding in various compounds, chemical equilibrium, chemical thermodynamics, electrochemistry, solutions and colloids, acid-bases and chemical kinetics.

Wildlife Conservation

Biodiversity and extinction, habitat conservation, species conservation and related experiments

AQUATIC INSECTS

The knowledge of aquatic insects in various aspects such as in taxonomy, phylogeny, morphology, ecology and distribution as well as collecting and rearing techniques.

Insect Ecology

Population of insects, and theories and evidence of population growth and regulation from field and laboratory populations.

Systematics of Helminths

General systematic of helminthes, specimens preparation methods for investigation and nomenclature, classification and identification; Phylum Platyhelminthes: Class Monogenea, effects of helminthes on hosts: Fish, molecular techniques for systematics, class Cestoda and intermediate hosts, class Trematoda and intermediate hosts, evolution and phylogeny of helminths, phylum Nematoda: class Aphasmidia, Phasmidia, phylum Acanthocephala, scanning electron microscopy for, helminths, advances publication in various journal, manuscript preparation and related experiments

Biology for Nursing Students

Introduction and scientific method, cell structure and function, cellular respiration, animal tissue, molecular genetics and biotechnology, diversity of living things, organ systems of animals, development of embryos, behavior, ecology and population ecology.

Biology Laboratory 1

Microscope, cell structure and functions, cellular respiration, cell divisions, genetics, evolution and biological diversity, plant tissues, animal tissues, behavior and population ecology.

Learning Through Activities 1

Students' developmental activities for promotion of moral, ethics and personality as well as teamwork skills with public awareness mindset, self- and social-responsibility. Grading will be given on satisfactory or unsatisfactory basis.

Mathematics and Science in Civilization

Mathematics and civilization, calendar systems and calendar eras, science and civilization.

Integrated Mathematical Sciences

Computer science in everyday life, history of computing, internet, statistics in everyday life, statistics for solving the problems in everyday life, probability for describing the phenomena, simulation, examples of mathematical models, matrix operations and its applications, optimization, data representation, artificial intelligence and machine learning, sorting and searching, statistics for decision making.

Groundwater Modelling Techniques

Types of groundwater models, mechanics of groundwater flow, finite difference method, finite element method, sensitivity analysis and model calibration, advanced topics and applications and laboratory practice on related topics

Calculus 1

Derivatives and applications, integration and applications, and first-order differential equations and some applications.

Calculus for Software Technology

Vectors, derivative of functions of one variable and applications, indefinite and definite integrals and applications, functions of several variables and partial derivatives.

Calculus for Engineering 1

Introduction to vector, derivatives of functions of one variable and applications and indefinite and definite integrals and applications.

General Mathematics 1

Matrices and systems of linear equations, linear programming, functions and graphs, limits and continuity of functions, the derivative, graph sketching and optimization.

Calculus for Engineering 3

Vector calculus, introduction to functions of complex variable, infinite series, Fourier series.

Discrete Mathematics

Basic background. General counting methods. Elementary graph theory. Trees and sorting. Networks. Boolean algebra.

Applied Differential Equation for Engineers

Second and higher order ordinary differential equations, system of first order linear and nonlinear differential equations, Laplace transforms and applications, series solution method, partial differential equations.

Physics for Engineering and Agro-Industry Students 1

Structure and domain of physics. Newton's laws of motion, motion of objects, work and energy, motion of rigid bodies. Properties of matter. Hydrostatics and hydrodynamics. Vibrations and waves. Nature of sound wave. Temperature and heat. Thermodynamics and kinetic theory.

THEORY OF SOLIDS 1

Crystal structures and diffraction, thermal properties, free electron in metals, energy band theory, transport phenomena of electrons in bands, semiconductor crystals.

STATISTICAL MECHANICS

Ensemble theory and relation with fluctuation theory. Response to external perturbations. Non-equilibrium statistical mechanics. Stochastic process in physics. Selected applications to superconductivity, liquid helium, magnetism and nuclear matter.

SELECTED TOPICS IN PLASMA AND BEAM PHYSICS

Lecture series on topics of current interest including development and experimental techniques in plasma and beam physics.

SELECTED TOPICS IN OPTICAL PROBLEMS

Presentation of selected topics from current interest of optical science research.

Probability and Statistics

Basic concept of probability, discrete and continuous probability distributions, joint probability distributions, expectation and variance, probability models, inference for proportion, Chi-square and F-distributions, inference for variance, goodness-of-fit-test and tests for independence and homogeneity.

Elementary Statistics

Review of basic statistical knowledge. Probability and probability distribution. Estimation and test of hypothesis concerning parameters of populations by using Z-test, t-test, x2 test and F-test. Application of Chi-square. Analysis of variance. Regression and correlation.

Elementary Statistics for Social Sciences 1

Statistical methodology, data analysis, random variables and probability distributions, probability distribution of discrete random variables, probability distribution of continuous random variables, analysis of time series data, sampling techniques.

Elementary Statistics for Social Sciences 2

Basic principles of statistical inference, inference about population proportions, inference about population means, inference about population variances, analysis of variance, inference of regression and correlation coefficient, Chi-squared test and non-parametric test.

FUEL COMBUSTION AND EMISSIONS

Fuel sources and consumption, fossil fuels and their properties, combustion processes, pulverized coal systems, fuel-burning systems, and emissions from combustion and emission controls.

Geophysical Processes of the Earth

Introduction of the solar system and Earth dynamics, seismology and the internal structure of the earth, gravity and the earth's figure, geomagnetism and paleomagnetism, earth's age, thermal and electrical properties

Geophysical Signal Analysis

Introduction of signal representation, review of numerical methods and matrices, review of sinusoids and complex numbers, Fourier transform and Z transform, convolution, correlation and filtering, digital image processing, inverse problems in geophysics

Seismic Prospecting

Introduction to mechanical waves, seismic theory, geometry of seismic waves, characteristics of seismic events, reflection field methods and equipment, refraction field methods and equipment, seismic data processing, seismic interpretation, Three-Dimensional seismic

Borehole Geophysics

Principles of well logs, basic properties of rock, nature of porosity and permeability, theory and basics of resistivity, radioactivity, and acoustic tools, special logging tools, well logging interpretation, Gassman's Equation and AVO, fracture analysis, Vertical Seismic Profiles (VSP), pressure prediction

Mathematics and Physics for Geophysicists

Geometry and coordinate system, differential and integral calculus, vector calculus, multivariable calculus, mechanical waves, electrical and magnetic theory, electromagnetic waves

Environmental Impact Assessment

Sustainable development, methods for environmental and social impact assessment, case studies of EIA for various developmental projects

STANDARD AND REGULATIONS IN ENVIRONMENTAL LAW

Overview of international and national standard and regulations in environmental law. Roles of government in environmental risk assessment and protection.

ENVIRONMENTAL RISK ASSESSMENT

Definitions, types and nature of environmental risks, principle method /techniques and stages of risk identification and estimation, method for risk assessment, monitoring of risk assessment, risk and rational in decision-making process, management of environmental risks and relevant policies, case studies

Parasitology

Introduction of parasitology, morphology and taxonomy of helminthes, Phylum Platyhelminthes, taxonomy of Monogenea, taxonomy of Trematoda, taxonomy of Cestoda, fish: second intermediate host of helmniths, snails: intermediate host of helminths, Phylum Acanthocephala in aquatic and terrestrial habitats, Phylum Nematoda: phasmids and aphasmids, presentation of journals, molecular techniques for parasitology, parasitic protozoa: freshwater and terrestrial resources and medical parasitology.

Molecular Microbiology and Immunology Technology

Overview of current topics on molecular microbiology and immunology for detection of microorganisms, detection using PCR-based techniques, detection using nucleic acid hybridization techniques, detection using protein hybridization techniques, fluorescence activated cell sorting and Flow cytometry techniques, preparation and applications of monoclonal antibody for rapid test kit development, medical applications of molecular microbiology and immunology methods and application of molecular microbiology and immunology methods for food industries

ADVANCED MICROBIAL PATHOGENESIS

Transmission of the bacterial diseases in humans, mechanisms and pathogenesis of the bacterial infectious diseases, techniques and detection methods for bacterial pathogens, response of humans to infectious diseases, transmission of the bacterial diseases in animals, mechanisms and pathogenesis of the microbes in animals, molecular biology of the infectious in humans and animals, transmission of the fungal diseases, mechanisms, pathogenesis and molecular biology of the fungal infections, protection and control of fungal diseases, molecular biology of the viral infectious diseases in humans and animals, mechanisms and pathogenesis of the viral infectious diseases in organisms, protection and control of viral diseases.

Advanced Taxonomy of Slime Molds, Pseudofungi and Lower Fungi

Principles of taxonomy of slime molds, pseudofungi and lower fungi, taxonomy of slime molds and importance of slime molds, taxonomy of pseudofungi and their importance,

taxonomy of lower fungi and their importance, Indentification of slime molds, pseudofungi and lower fungi using molecular methods, and related experiments

Biochemistry for Nursing Students

Cell and cell organelles, chemistry and metabolism of biomolecules; carbohydrates, lipids, proteins and nucleic acid including enzymes and coenzymes, metabolic integration and control, hormone and metabolism, chemistry of nucleic acids, nucleic acids and proteins syntheses, gene expression and controls, recombinant DNA technology, biochemistry of blood and urine, nutrition, toxicants and biochemistry of cancer.

Anatomy for Nursing Students

Human body and Cytology, Epithelium, Connective tissue, Membrane & Integument, Skeletal System, Muscular System, Cardiovascular System, Respiratory System and Lymphatic System, Digestive System, Urinary System, Male Reproductive System, Female Reproductive System, Nervous System, Endocrine System and Special Sense Organs.

Algorthms for Information Systems and Network Engineering

Data structure and algorithm review. Binary trees. Multiway trees. Graphs. Problem solving using search. Inform search. Adversarial search. Data compression. Synchronization.

Information Systems and Network Engineering Laboratory 2

Singly linked list. Doubly linked list. Queue simulation. Binary search trees. Binary tree application. Graph introduction. Shortest path. Minimal spanning trees. Algorithms application.

Web Programming Language

Principle of web application, Web application workflow, Languages for web programming, Database-driven website, Authentication and session, Testing and debugging.

Faculty of Engineering

Communication Technology in a Changing World

The history of information and Communication Technology (ICT). Digital communication. Network topologies. Social networks. Semiotics in cyberspace. Technology adoption. The future of ICT. ICT in politics. The law and cyberspace. ICT and the changing world. Technical challenges. Ethics and privacy.

Basic Computer Programming for Information Systems and Network Engineering

Introduction to computers and programming for information systems and network engineering. Structural programming. Control structures. Functions. Arrays. Pointers.

Computer Networks Laboratory

Introduction to computer networks laboratory. Transmission media. Network equipment. Network simulation and monitoring tools. Network access layer. Network layer and routing. Transport layer. Application layer. Wireless computer networks. Basic network security.

Computer Networks

Introduction to computer networks. Network access. Network layer and routing. Transport layer. Application layer. Basic network security. Basic network design and management.

Object-Oriented Programming

Object-oriented concepts. Classes and objects. Function overloading. Operator overloading. Inheritance. Override. Polymorphism. Advanced topics in object-oriented programming. Project development using object-oriented programming.

Learning through Activities 1

To prepare student to be a well-disciplined student, with physical well-being, positive mental health, morality, ethics and social consciousness. Prepare student to be able to live a sufficient and safety life, as well as be loyal to faculty and university.

Telecommunication in Thailand

Telecommunication evolution in Thailand, telecommunication policies and related laws, telecommunication economics, basic telephone and mobile telephone, radio broadcasting, television broadcasting, fiber optic communication, submarine cable network in Thailand, wireless communication network microwave communication, satellite communication, internet protocol communication and next generation telecommunication.

Faculty of Agriculture

General Agriculture

The basic course in about agriculture for nonagricultural students who are interested in agriculture but having no agricultural background. It includes concept and attitude of agricultural occupation, general principle of crop production and animal raising with special emphasis on agricultural problems encountered in Thailand and ways of improvement.

Principles of Agricultural Extension

Principles and Method of Agricultural Extension. The development of economics and community.

Landscape, Environment, Behaviors, and Minds

Theories about landscape, nature, environment, and human behaviors; learning and analyzing data about human health and behaviors; importance and definitions of landscape aesthetics; landscape and stress management; landscape, cognitive ability, and success; landscape and social behaviors; using landscape in daily life for self-improvement; strategies for supporting environmentally-friendly behaviors.

Faculty of Nursing

Adult and Gerontological Nursing Practice 1

Practice in utilizing the nursing process for health promotion and illness prevention in adults and the elderly. Nursing care of adults and the elderly with chronic illnesses and their families according to their physical, psychological, emotional, social and spiritual health problems and needs.

Adult and Gerontological Nursing Practicum 1

Practicing holistic nursing care for adults and older adults with acute and chronic health problems in various body systems receiving medical treatments, including health promotion/disease prevention, treatment, and rehabilitation using the nursing process, related concepts and evidences with concerning to patient's rights, patient safety, rational use of medicines, nursing ethics, and cultural diversity.

Adult Nursing 1

Concepts and principles of health promotion and risk prevention for adults, concepts and principles of holistic nursing for adults with chronic illnesses and family, factors related to and resulting from chronic illnesses in adults, issues and trends in chronic illness and adult nursing.

Nursing Research

Significance of research, types of nursing research, research process, preparation of research proposal and research report, and analysis and utilization of research findings in nursing.

Psychiatric Nursing

Concepts and principles of psychiatric nursing, Therapeutic psychiatric nursing, utilization of the nursing process in providing care for patients with acute and chronic psychiatric problems, emergency psychiatric nursing, psychosocial and spiritual rehabilitation for patients and family, facilitating home care for psychiatric patients, ethical issues and laws related to psychiatric nursing.

Psychiatric and Mental Health Nursing

Mental health basic concepts and principles of psychiatric nursing. Selected theory concepts and their application in mental health promotion and psychiatric nursing. Screening system and differential diagnosis of psychiatric disorders. Therapeutic tools in psychiatric nursing. Treatments for person with psychiatric problem and mental health. Nursing care for person

with psychiatric problem and mental health. Ethical and legal issues related to psychiatric nursing

Pediatric and Adolescent Nursing Practicum 2

Practicing nursing care for newborns with health problems, and nursing care for children and adolescences with acute, critical, and chronic health problems using the nursing process, related concepts and evidences with concerning to patient's rights, patient safety, rational use of medicines, nursing ethics, and cultural diversity.

Pediatric and Adolescent Nursing Practicum 1

Practicing nursing care for children and adolescences with normal health status including assessment of growth, nutritional status, and development, and promotion of development, nutritional status, health, and immunity using the nursing process, related concepts and evidences with concerning to child's rights, safety, nursing ethics, and cultural diversity.

Pediatric Nursing Practice 2

Practice in utilizing the nursing process in providing nursing care for children, during critical, acute and chronic disorders of various systemic organs as well as children with special needs and family according to physical, psychological, social, spiritual health problems and needs.

Pediatric Nursing Practice 1

Practice in health promotion and illness prevention in children from newborns to adolescents by utilizing the nursing process according to their physical, psychological, social, spiritual health problems and needs.

Pediatric and Adolescent Nursing

Developmental psychology. Pediatric and adolescent health promotion including developmental, nutritional, and immunity promotion. Health problem trend. Impacts of health status on children and their family. Nursing care for children with abnormality in various systems and other illnesses, and nursing care for children during end of life using the nursing process, related concepts and evidences, as well as respect of children rights, nursing ethics, and cultural diversity.

Community Nursing

Concepts and principles of public health and community health nursing. Health related plans and policies. Health system and community health care system. Public health innovation. Concepts and principles of implementation in epidemiology. Community health nursing process. Concepts, theories, principles and roles of nurses in provision of services in family health care, school health, occupational health, and environmental health.

Maternal-Newborn Nursing and Midwifery Practice 3

Practice of utilizing nursing process in providing nursing care of postpartal women with and without complications, providing care for rooming in newborns, giving self-care and newborn care instruction for postpartal women and families, promoting attachment between family members and newborns, performing postpartal visits for postpartal women and families, and giving family planning services for postpartal women and other clients.

Maternal-Newborn Nursing and Midwifery Practice 2

Practice of utilizing nursing process in nursing care of women with normal, risk and abnormal labor and delivery; screening risk condition of pregnant women and fetus; practice of conducting normal delivery, performing episiotomy and perineorrhaphy, assisting abnormal labor and delivery, assisting women in labor and delivery with abnormal labor and delivery, performing neonatal care, promoting initial breast feeding and bonding between mothers and neonates.

Maternal-Newborn Nursing and Midwifery Practice 1

Practice of examination and diagnosis of pregnancy, calculation and assessment of gestational age and expected date of confinement, and performing obstetric abdominal examination. Risk condition screening of pregnant women and fetuses, and referral for medical care. Utilization of nursing process in nursing care for normal and risk pregnant women, including practice of childbirth preparation; fetal assessment, and both individual and group instruction of self-care during pregnancy for normal pregnant women and families.

Maternal-Newborn Nursing and Midwifery 2

Anatomy and physiology of female reproductive organs in obstetrics. Process of labor and factors related to labor time and progression of normal labor process. Pain during all labor stages and pharmacological pain management. Physical and psychosocial changes of women and families during normal labor and their impacts. Health assessment and nursing care of women and families during all stages of normal labor. Mechanism of normal labor. Principles for conducting normal delivery, episiotomy and perrineorrhaphy. Health assessment and nursing care for neonates, both normal and having risk conditions and/or complications. Physical and psychosocial changes of women and families during normal postpartum period and their impacts. Health assessment and nursing care of postpartum women and families, promotion of breast-feeding, and promotion of attachment and bonding between newborn, mother, and family. Including nursing care of women and families with postterm pregnancy, dead fetus in utero, and termination of pregnancy.

Gerontological Nursing

Concepts and theories of aging, developmental, physical, psychological, social, and spiritual changes in the elderly. Health promotion and illness prevention in the elderly. Strategies of behavioral modification in the elderly. Common health problems in the elderly. Principles of caring for the elderly with acute, critical, chronic illnesses and in the terminal stage for the elderly and their families. Health care systems for the elderly.

Fundamentals of Nursing Skills Practice

Practice of fundamental nursing skills using nursing principles and nursing process, based upon clients' needs with moral and good attitudes towards profession, in care and support, health promotion, disease and complication prevention, including rehabilitation.

Fundamental Nursing Laboratory

Practicing fundamental nursing in laboratory regarding communication and building relationship with clients and health care team, health education, nursing care for client safety, rational and safe administration of medicines, nursing care for response to client's needs using the nursing process with concerning client's rights and cultural diversity, order taking, admitting and discharging patient, and nursing report and documentation.

Fundamental Nursing

Principles of art and science in nursing. Terminology and abbreviations in nursing. Communication and building relationship with clients and health care team. Health education. Nursing care for client safety. Rational and safe administration of medicines. Nursing care for response to client's needs using the nursing process with concerning client's rights and cultural diversity.

Primary Medical Care Practice

Practice of patient screening by history taking and physical examination, diagnosis, primary medical care, counseling, and patient referral.

Community Nursing

Evolution in public health and community health nursing, principles and strategies of public health, roles of community health nurses and primary health care services, roles and services of community health nurses in improving family and community health as well as services for family, school, environmental and occupational health and the community nursing process.

Primary Medical Care Practice

Practice of patient screening by history taking and physical examination, diagnosis, primary medical care, counseling, and patient referral.

Fundamental Nursing

Principles of art and science in nursing. Terminology and abbreviations in nursing. Communication and building relationship with clients and health care team. Health education. Nursing care for client safety. Rational and safe administration of medicines. Nursing care for response to client's needs using the nursing process with concerning client's rights and cultural diversity.

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Maternal-Newborn Nursing and Midwifery

Anatomy and physiology of female reproductive organs in obstetrics. Process of labor and factors related to labor time and progression of normal labor process. Pain during all labor stages and pharmacological pain management. Physical and psychosocial changes of women and families during normal labor and their impacts. Health assessment and nursing care of women and families during all stages of normal labor. Mechanism of normal labor. Principles for conducting normal delivery, episiotomy and perrineorrhaphy. Health assessment and nursing care for neonates, both normal and having risk conditions and/or complications. Physical and psychosocial changes of women and families during normal postpartum period

and their impacts. Health assessment and nursing care of postpartum women and families, promotion of breast-feeding, and promotion of attachment and bonding between newborn, mother, and family. Including nursing care of women and families with postterm pregnancy, dead fetus in utero, and termination of pregnancy.

Pediatric and Adolescent Nursing

Developmental psychology. Pediatric and adolescent health promotion including developmental, nutritional, and immunity promotion. Health problem trend. Impacts of health status on children and their family. Nursing care for children with abnormality in various systems and other illnesses, and nursing care for children during end of life using the nursing process, related concepts and evidences, as well as respect of children rights, nursing ethics, and cultural diversity.

Pediatric Nursing Practice

Practice in health promotion and illness prevention in children from newborns to adolescents by utilizing the nursing process according to their physical, psychological, social, spiritual health problems and needs.

Pediatric Nursing Practice 2

Practice in utilizing the nursing process in providing nursing care for children, during critical, acute and chronic disorders of various systemic organs as well as children with special needs and family according to physical, psychological, social, spiritual health problems and needs.

Pediatric and Adolescent Nursing Practicum 1

Practicing nursing care for children and adolescences with normal health status including assessment of growth, nutritional status, and development, and promotion of development, nutritional status, health, and immunity using the nursing process, related concepts and evidences with concerning to child's rights, safety, nursing ethics, and cultural diversity.

Pediatric and Adolescent Nursing Practicum 2

Practicing nursing care for newborns with health problems, and nursing care for children and adolescences with acute, critical, and chronic health problems using the nursing process, related concepts and evidences with concerning to patient's rights, patient safety, rational use of medicines, nursing ethics, and cultural diversity.

Psychiatric and Mental Health Nursing

Mental health basic concepts and principles of psychiatric nursing. Selected theory concepts and their application in mental health promotion and psychiatric nursing. Screening system and differential diagnosis of psychiatric disorders. Therapeutic tools in psychiatric nursing. Treatments for person with psychiatric problem and mental health. Nursing care for person with psychiatric problem and mental health. Ethical and legal issues related to psychiatric nursing.

Psychiatric Nursing

Concepts and principles of psychiatric nursing, Therapeutic psychiatric nursing, utilization of the nursing process in providing care for patients with acute and chronic psychiatric problems, emergency psychiatric nursing, psychosocial and spiritual rehabilitation for patients and family, facilitating home care for psychiatric patients, ethical issues and laws related to psychiatric nursing.

Nursing Research

Significance of research, types of nursing research, research process, preparation of research proposal and research report, and analysis and utilization of research findings in nursing.

Adult Nursing 1

Concepts and principles of health promotion and risk prevention for adults, concepts and principles of holistic nursing for adults with chronic illnesses and family, factors related to and resulting from chronic illnesses in adults, issues and trends in chronic illness and adult nursing.

Adult Nursing 2

Concepts and principles of holistic nursing care for adult patients with acute, emergency and critical illnesses as well as their families, related factors and impact of acute and critical illnesses in adult patients. Issues and trends in acute illness and adult nursing, ethical and legal issues in adult nursing.

Adult and Gerontological Nursing Practicum 1

Practicing holistic nursing care for adults and older adults with acute and chronic health problems in various body systems receiving medical treatments, including health promotion/disease prevention, treatment, and rehabilitation using the nursing process, related concepts and evidences with concerning to patient's rights, patient safety, rational use of medicines, nursing ethics, and cultural diversity.

Adult and Gerontological Nursing Practice 1

Practice in utilizing the nursing process for health promotion and illness prevention in adults and the elderly. Nursing care of adults and the elderly with chronic illnesses and their families according to their physical, psychological, emotional, social and spiritual health problems and needs.

Adult and Gerontological Nursing Practice 2

Practice in utilizing the nursing process for health promotion and illness prevention in adults and the elders. Nursing care of adults and the elders with acute illnesses and their families concerning their physical, psychological emotional, social and spiritual health problems and needs.

Health Promotion and Disease Prevention

Concepts of health promotion and disease prevention. Theories related to health behavioral modification. Factors affecting health behaviors. Health risk behavior assessment. Nurse'roles and competencies in health promotion. Nursing guidelines to promote health of individual, group, family, and community at all levels of health care services.

Emergency and Critical Nursing Practice

Practice the utilization of nursing process in providing care for emergency and critical patient of all ages in medical, surgical and pediatric intensive care unit as well as in emergency room by covering physical, psychological, emotional and spiritual aspects.

Selected Topics in Nursing 2

Study of a selected topic in nursing according to learner's interest with an approval of instructor and grading will be given on satisfactory or unsatisfactory basis.

Faculty of Economics

Economics for Everyday Life

Basic economic concepts and application for everyday life concerning production, consumption, markets, national income, public finance, money and banking, inflation and deflation, employment, international trade and finance, and economic development and environment.

Principles of Economics 1

Basic concepts in economics. Elementary price theory. Theory of consumer behavior. Production theory and factors of production. Microeconomic policy.

Principles of Economics 2

National income and national product. Income determination. Money and price level. Macroeconomic policy. International economics.

Learning through Activities 1

To promote students' morals, ethics, acknowledgement of art and culture, local wisdom, environmental preservation as well as community-based economy through activities.

Learning through Activities 2

To promote students' public contribution, personality development, environmental preservation, as well as sufficiency economy through classroom activities.

Learning through Activities 3

To prepare students to the labor market, personality development, as well as community enterprise through classroom activities.

Principles of Economics

Basic concepts of microeconomics and macroeconomics. Market structures, demand, supply and equilibrium. Elasticity of demand and supply. Social welfare, market efficiency and microeconomics policies. Economy and national income. Economic growth and aggregated indicators. Monetary and fiscal policies. Open economy and current macroeconomics issues.

History of Economic Thought

A survey of economic thoughts from ancient days through contemporary economics. Biblical times, Greek and Roman, English-French-German. Mercantilism, Physiocrats and their

doctrine. Philosophers, disciples, influence and criticism of Classical Economics, Marginal utility Economics. Ideal an scientific of Socialism, Keynesian Economics, Business cycletheorist, price theorist, the old and new Welfare Economics.

Introduction to Mathematical Economics

This course aims at furnishing the students of understand, as an introductory course, quantitative techniques of economics both in mathematical contexts and as an application to economic problems. It covers the nature of mathematical economics, economic models, types of economic functions, static (or equilibrium) analysis, comparative statics analysis. Maximal and minimal, differentials, dynamic analysis, matrix algebra, difference and differential equations.

Microeconomic Theory 1

Consumer behavior, demand, supply, market price, price elasticities, classical utility and consumer demand, indifferent-curve analysis and modern utility theory. Theory of the firm: firm and its decisions. Theory of production, choices of inputs and outputs, cost function and basic concepts of linear programming.

Microeconomic Theory 2

Price determination and policy in different forms of market. Competitive pricing, general equilibrium and economic welfare, monopoly pricing, price discrimination, pricing in imperfect competition and prices of factor of production.

Public Finance

Revenue and expenditure activities of government. It deals with budgets, taxes, government expenditures and public debts. Effects of budgets on the economy, particularly the effects on the achievements of the major economic objectives; growth, stability, equity and efficiency.

Econometrics 1

A review of matrices and statistics. Basic knowledge of econometric models and techniques. The ordinary least squares (OLS) estimators. Testing the assumptions of ordinary least squares estimators. Generalized least squares (GLS) estimators. Dummy dependent variable models and non linear estimators.

Macroeconomic Theory 1

National income concepts, Static and dynamic theories of determination of national income and employment and of business fluctuations.

Macroeconomic Theory 2

Fundamentals of Growth Economics. Problems of controlling economic activity Monetary and fiscal policies for promoting economic. Stability and growth.

International Political Economy

Political economy between the Middle East, US. and Europe. The ongoing wars: Seizure of natural resources. Strategic, economic and political alliances. Analysis of integrated impacts of the international political economy on global and Thai economies; applied strategies.

ASEAN Economy in the Global Economic Context

Introduction of the structure of the integration of the countries in the region. Structure of ASEAN and challenges of ASEAN Economic Community (AEC). Economic structure of ASEAN's member countries and ASEAN. Linkages of logistic, commercial and financial interests of the countries of ASEAN countries and others. Roles of ASEAN integration in trade and investment aspects. Context of normative and legal issues and problems of ASEAN in economic, trade, financial, social, political, and cultural aspects related to Thailand's roles in ASEAN platform. Obstacles and challenges of ASEAN integration and ASEAN economic policy in the future. Case study of current issues of ASEAN countries.

ICT Economics and Telecommunications Policy

Economic, sociological and psychological aspects of consumer behavior, in reference to the latest trend in telecommunication, information and communication markets and technologies. Business orientations in such a rapidly changing area as telecommunication services and ICT. The goal of this course is to acquire theoretical foundations and some application abilities for analyzing consumer's behavior in the face of the emergence and diffusion of new services such as ICT and innovation as well as introducing telecommunication policies and regulations.

Money and Banking

The nature and function of money and finance; the role of money, kinds of money, monetary standards, debt, credit and finance instruments, finance, intermediaries, Commercial banking system and policy. The role of central bank, central banking system of the U.S.A., U.K. and Thailand. Instruments of monetary policy. Monetary policy and fiscal policy. Money market and capital market. Credit market in Thailand.

Transportation Economics

Transportation and economy, scope of transportation economy, transport location, transportation efficiency, land rent and transportation, transportation consideration, importance of transportation.

International Economics

This course is intended to provide general concepts and theories of international trade, and related problems. Pure and monetary aspect of international theories. International migration of factors of production: labor and capital movement and the effect of factor migration. Economic integration among developing countries.

Econometrics 2

Basic econometric tools. Econometrics for time series, cross sectional and panel data. Econometrics for other analyses.

Theory of Economic Development

Concepts and theories related to the problems of economic growth in both developed and developing countries. A general survey of economic development theories from the classical era up to present and the comparison and evaluation of those theories.

Seminar in Current Economic Topics

Thai and world economic structures. The connectivity between domestic and global economic activities. Economic problems and policies. Future economic trend. Case study in economics.

Research Methods in Economics

Basic procedures and methods of research in economic are considered from the standpoint of their applicability to problem solving and discovering of new scientific facts and generalizations in economic. Definition of the problem, statement of hypothesis, research design, data collection methods and data analysis constitute the major topics. Attention is given to proper style and preparation research reports in economics.

Research Exercise in Current Economics Issues

An individual research exercise on current economics issues under general guidance and supervision of instructor.

The Economics of European Economic Integration

Theoretical analysis of economic integration and review of relevant economic policies such as trade, agricultural, industrial, monetary and fiscal policies of the European Union. Impact of the integration on external relations with other countries.

Economic Theory and Entrepreneurship

General concepts of economic theory and entrepreneurship. Behavior and characteristics of entrepreneurs. Creation of new ideas in doing business for potential entrepreneurs. Entrepreneurial opportunities in small and medium enterprises (SMEs). Case studies of entrepreneurial success in progress.

Technical Analysis for Investment

Dow theory. Basic concept of trends. Major reversal patterns. Moving averages. Relative strength index. Moving average convergence and divergence. Stochastics. Oscillator. Momentum.

Labor Economics

Introduction to labor economics, labor supply, labor demand, labor market equilibrium, wage structure, labor mobility, labor union, unemployment, labor policies and special topics in labor economics.

Economics of Water Resources

The importance of water resources to the economy, an allocation of water resources for agricultural, municipal, industrial and environmental purposes, Roles of price mechanism and social institutions in water allocation, cost-benefit analysis, advantages in water resource development project, pollution and wastewater management, impacts of climate change on water resource managements, models of demand for surface and groundwater, river basins and watershed management and case studies.

Industrial Economics

Nature and scope of the process of industrialization, the patterns of industrial growth the structure and functioning of industries and industrial relation, location of industries.

Seminar in Current Economic Problems

A general survey of current economic problems affecting economic progress and stability with special emphasis on Thailand.

Cooperative Education

Students are required to work in the organizations related to economics major for a minimum period of 16 weeks as a staff under the supervision of in-charge trainer(s) of the organizations and instructor(s) of the university. Grading will be given on satisfactory or unsatisfactory basis.

Health Economics

Basic concepts in health economics, public goods, externalities and health care services. Demand for and supply of health care, the economic evaluation of health programs. Technical efficiency, economic efficiency and cost of health care services. Resource allocation in health sector and the development of health. Health insurance, health care delivery system and analysis of health problems in Thailand.

Faculty of Architecture

Fundamental Design in Architecture Studio 1

Elements and principles of visual art. Designing based on creativity to communicate ideas and meanings that respond to the objectives. Design studio, drawing, drafting and model making. Designing through knowledge application. Creating design process through the integration with other disciplines.

History of Eastern Creative Arts and Architecture

History of Asian and Southeast Asian arts and architecture. Arts and architecture of Pre-Thai and Siam period. The relationship between Asian arts and architecture. Asian perception of aesthetics. The influences of geographies, climates, culture and tradition affecting Asian arts and architecture design. The development of Asian design by timeline and Asian contemporary design.

Design Communication and Presentation

Principles and skills of idea presentation. Styles of creative and logical communication. Methods of communication in medias, tools and techniques. Examples of various good media communication and global awarded communication mediums.

Creative Design in Architecture Studio 1

Basic processes of creative architectural design, emphasizing on thinking processes, experimental design and leading to architectural space design. Meaning of space. Relationship between space, human and natural environment. Feelings of human in architecture. Understanding of the function and utilization. Spaces utilization based on basic principles and philosophy of architectural design. Rhythm, size, shape, form and balance.

Perception of Architectural Space

The meaning of perception. The importance of perception through multisensory experiences. Perception in architectural space. The difference of the ideas of perception between the eastern and western world. The value of perception of architectural space through multiple senses. The conditions of society, cultures, geography and climate that affect the value of perception. The perception of tangible and abstract aspects in architectural space. The example of spatial perception application in architecture.

Materials and Construction 1

Histories, properties and applications of basic materials. The construction of materials in wood, brick, stone, concrete, metal and non-metal. Construction methodology. Materials structure for small sized buildings. Material and construction drawing and symbols. Material plants fieldtrip.

Creative Design in Architecture Studio 3

Practice on using computer techniques and technologies for architectural designs. Studying the use of 2D and 3D software. Developing creative thinking process through computer as a tool of design. Developing experimental space design through computer technique. Creating the computer simulator on human feeling and atmosphere in architecture. Using computer to present architectural design work. Model making with new tools such as laser cutting machine and 3D printer.

Theory and Philosophy of Postmodern Arts and Architecture

History of the western arts and architecture by timeline since postmodern era. The different notions between modern and postmodern period. The transformation and changes from modern to post modern era. Theory and philosophy in creative design which reflect social and cultural influences since postmodern period. The development of ideas and styles of postmodern architecture. The processes of transformation from concept, theories and philosophies into postmodern architecture. The criticism and comparison of different philosophies from well-known architects. Trends of creative ideas in arts and architecture in present day and future.

Applied Building and Energy System

Building design implementation with the energy concern. Energy system in science and sustainable technology. Electric instrument, telecommunications system, water supply treatment and soil, waste management, vent pipe system in variety of contexts. Design for green architecture. Energy saving material testing to reduce energy consumption. Estimation in sustainable building that relate to the energy saving efficiency. The legislation standard and LEED standard (Leadership in Energy and Environmental Design) for green architecture design and building. Excursion for design innovation approaches and testing materials science for building energy consumption.

Architectural Structure 2

Designing principles of structural systems in medium and big size buildings. Designing principles of structural systems for timber. Designing principles of structural systems for steel. Designing principles of structural systems for concrete and reinforced concrete.

Structural systems for floor slabs. Structural systems for roofs. Vertical load-bearing systems. Building foundations. Pavement structures and earth structures.

Sustainable Urban Architecture and Communities

History, principles and theories of urban and settlement. Studying and analyzing the shape, figure and ground of urban morphology. The factors of selection of human settlement and city evolution. Concepts and methods of sustainable urbanism relating urban design and planning. Architectural design and city conservation and revitalization methods. Analysis and case studies in housing estate and urban living quality development.

International College of Digital Innovation

Big Data for Business

Introduction to big data. Business problems and data science solutions. Basic tools for data mining. Predictive modelling. Clustering data. Decision analytic thinking. Visualizing model performance. Evidence and probabilities. Text mining.

Introduction to Internet of Things

Introduction to Internet of Things (IoT). IoT and Machine to Machine (M2M). Network and communication aspects. Challenges in IoT. Domain specific applications of IoT. Developing IoT.

Communication and Networking in Online Society

Introduction to social networks. Graph theory and social networks datasets. Game theory and social networks. Behavior of social networks. Diffusion in networks. Privacy, anonymity and authentication on social networks. Introduction to online social network applications. How social networks affect the way of our living? Connection between social networks and economic development.